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A Study of School District #100 Fourth and Fifth Grade Computer Literacy Curriculum

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Loyola University Chicago

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A STUDY OF SCHOOL DISTRICT # 100

FOURTH AND FIFTH GRADE

COMPUTER LITERACY CURRICULUM

by

Charles S. Saunders

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of Loyola University of Chicago in Partial Fulfillment

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VITA

The author, Charles Spencer Saunders, is the adopted son of Ernest William Saunders and Verina (Rogers) Saunders. He was born November 11, 1953, in Flushing, New York.

His elementary education was obtained in the public schools of Evanston, Illinois. His secondary education was obtained at Evanston Township High School, Evanston, Illinois, and the American Community School, Inc., Athens, Greece.

In August, 1972, Mr. Saunders entered the University of Wisconsin - Stout, receiving the degree of Bachelor of Science in Industrial Education in 1978.

Mr. Saunders has been teaching 7th and 8th Grade Industrial Arts at School District #100 for the past eleven years. In 1986, he taught 4th and 5th Grade Computer Literacy at the three upper grade centers of School District #100.

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INTRODUCTION

In 1984-85, School District #100 organized a
committee of ten staff members, of which I was not a
member, to write the district's first Curriculum Guide
for the Computer Literacy Program. The guide contained
the philosophy and goals, how to maintain computer
equipment, ideas for lessons, a list of programs,
reading material and a glossary of terms.

In 1986, I was engaged to teach the Fourth and
Fifth Grade Computer Literacy classes. The portion of
the curriculum guide containing the classroom material
that had been created during the first two years was
given to me to review during the summer. I began
teaching the Computer Literacy classes using this
classroom material. In the course of this experience,
it became apparent that there was a need to develop a
curriculum in order to improve the effectiveness of the
Computer Literacy Program.

It was necessary to have a curriculum that would
meet the needs of the students being taught, both the
slow or uninterested, as well as the quick or highly
motivated students. I discussed with some of the
Fourth and Fifth Grade teachers, their ideas on

updating and expanding the curriculum and on incorporating activities appropriate for these grade levels. With their suggestions I created the Fourth and Fifth Grade Computer Literacy Curriculum contained within. As with any curriculum, this is intended to be a tool for a teacher who adjusts it to correspond to the level of the class and who adds to it as experience dictates.

Following the curriculum is a study critiquing the old and the new on the bases of form and content and an evaluation of students' scores under the old and new curricula.

BASIC CONSIDERATIONS FOR REVISIONS

In September of 1986, I began teaching the Fourth and Fifth Grade students Computer Literacy. There was a need for daily lesson plans for the teacher, quizzes, student worksheets, teacher's copy of the student worksheets, and supplemental worksheets relating to the skills covered that day. It was important to identify the skills to be taught and the order in which they should be taught. There was a need for consistency in the curriculum itself and in the curriculum used throughout the district.

The classroom material suggested that each student do his/her own typing of the programs and/or assignments. This leaves one student at each computer with nothing to do but to wait for his/her turn on the computer and to possibly become a discipline problem. Additionally, because of the limitations of 30-minute class periods and the time required for the students to perform this process, this requirement proved tedious and unmotivating. As the year progressed a different teaching method was tried: having the students do the hands-on work in pairs. While the students shared the typing of programs and the completion of worksheets, it

was stressed that the quizzes, which reviewed the skills taught while using the computer, were the major elements by which the teacher would evaluate each student's achievements. This made it important for the students to study/review the worksheets given to them.

Another problem was that the room in which the computer classes were set up did not allow the privacy for students to take quizzes. With the cooperation and flexibility of the Fourth and Fifth Grade teachers, I began giving the students a quiz for 10 minutes in their regular classroom before taking the groups to the computer room. This process resulted in two benefits to the computer curriculum. First, the class began with better behavior because the students had to work individually on the quiz in the structure of the regular classroom setting, and second, the computers were not present to distract the students from concentrating on the quiz. This organization of the teaching activities helped a great deal in providing the structure for the students to participate and demonstrate mastery in the activities taught, while helping the instructor get some individual work product in the form of worksheets or quizzes from each student.

Finally, it was important to have enough daily

material in each lesson plan to meet the needs of every student, the high achiever as well as the average achiever. Any extra credit materials for a given day reemphasize the skills stressed that day, although on occasion they touch on the next day's lesson. It was important to have these and all other worksheets labeled properly so the teacher would know what skills each worksheet would be emphasizing and how to score the work.

I believe that this curriculum will be very helpful in teaching Fourth and Fifth Grade students some computer programming skills and also in satisfying the ten daily goals which the school district wanted to be accomplished and which are incorporated in each curriculum.

DISTRICT 100

FOURTH GRADE

COMPUTER

CURRICULUM

CHARLES S. SAUNDERS

SUMMER OF 1987

OBJECTIVES FOR THE FOURTH
GRADE COMPUTER CLASSES

DAY 1: THE STUDENTS WILL REVIEW AND LEARN THE NAMES OF THE PARTS AND
OPERATING PROCEDURES OF A COMMODORE COMPUTER. THE STUDENTS WILL
LEARN HOW TO USE THE CLR-HOME AND SHIFT/CLR-HOME COMMANDS AND BE
PREPARED FOR A QUIZ ON DAY 2.

DAY 2: THE STUDENTS WILL LEARN WHAT A RESERVED WORD AND A PROGRAM ARE. THE
STUDENTS WILL LEARN THE TERMS: "REM", "NEW", "PRINT", "RUN", AND LINE
NUMBER; AND BE PREPARED FOR A QUIZ ON DAY 3.

DAY 3: THE STUDENTS WILL LEARN THE TERMS: "LIST", "END", DISK DRIVE, MEMORY
AND CPU; AND BE PREPARED FOR A QUIZ ON DAY 4.

DAY 4: THE STUDENTS WILL LEARN AND PRACTICE PROGRAMMING SKILLS BY ENTERING
SOME PROGRAMS GIVEN TO THEM AND CREATING SOME PROGRAMS OF THEIR OWN.
THE STUDENTS WILL BE PREPARED FOR A TEST ON DAY 5.

DAY 5: THE STUDENTS WILL REVIEW WITH THE TEACHER THE COMPUTER PROGRAMMING
SKILLS AND TAKE A TEST. THE STUDENTS WILL BE GIVEN THE INSTRUCTIONS
FOR THE GRAPHICS PROGRAMS THAT THE STUDENTS WILL BE LEARNING DURING
THE NEXT WEEK.

DAY 6: THE STUDENTS WILL LEARN THE TERMS NECESSARY TO CREATE GRAPHICS
PROGRAMS, LEARN HOW TO USE THE CONTROL KEYS TO ENTER COLOR COMMANDS,
AND BE PREPARED FOR A QUIZ ON DAY 7.

DAY 7: THE STUDENTS WILL WORK ON A GRAPHICS PROGRAM CALLED HELLO AND BE
PREPARED FOR A TEST ON DAY 10. OPTIONAL: THE STUDENTS WILL LEARN HOW
TO USE A DISK DRIVE.

DAY 8: THE STUDENTS WILL WORK ON A GRAPHICS PROGRAM CALLED CLOWN AND BE
PREPARED FOR A TEST ON DAY 10. OPTIONAL: THE STUDENTS WILL LEARN HOW
TO USE A DISK DRIVE.

DAY 9: THE STUDENTS WILL WORK ON A GRAPHICS PROGRAM CALLED PUPPY AND BE
PREPARED FOR A TEST ON DAY 10. OPTIONAL: THE STUDENTS WILL LEARN HOW
TO USE A DISK DRIVE.

DAY 10: THE STUDENTS WILL REVIEW WITH THE TEACHER THE COMPUTER PROGRAMMING
SKILLS AND TAKE A TEST.

B.OBJECTIVES

DAILY GOALS

DAY	TERMS	RESERVED WORDS OR COMMANDS	STUDENT ACTIVITIES
1	COMPUTER MONITOR KEYBOARD CURSOR BASIC	CLR-HOME SHIFT/CLR-HOME	TURN COMPUTER ON/OFF MOVE CURSOR HOME ERASE SCREEN LEARN WHERE KEYS ARE
2	RESERVED WORD PROGRAM LINE NUMBER SYNTAX ERROR	NEW REM PRINT RUN	QUIZ ENTER PRINT STATEMENTS RUN A PROGRAM
3	DISK DRIVE MEMORY CPU	LIST END	QUIZ ENTER A SCRAMBLED PROGRAM LIST A PROGRAM RUN A PROGRAM
4	NONE	NONE	QUIZ RECOGNIZE THE DIFFERENCE BETWEEN A PROGRAM AND THE OUTPUT OF A PROGRAM
5	NONE	NONE	TEST

C.DAILY.GOALS

DAY	TERMS	RESERVED WORDS OR COMMANDS	STUDENT ACTIVITIES
6	CONTROL KEYS FOR COLOR GRAPHICS	REVERSE ON REVERSE OFF	LEARN HOW TO USE THE CONTROL KEYS FOR COLOR GRAPHICS LEARN HOW TO DUPLICATE A LINE OF PROGRAMMING
7	NONE	NONE	QUIZ ENTER GRAPHICS PROGRAMS
8	POKE COMMANDS	POKE	ENTER GRAPHICS PROGRAMS
9	NONE	NONE	ENTER GRAPHICS PROGRAMS
10	NONE	NONE	TEST

C.DAILY.GOALS

READ THIS FIRST ! !

THE FIRST FIVE DAYS OF THE FOURTH GRADE COMPUTER CURRICULUM ARE ON SIDE ONE OF THIS DISK. THE FILES ON THE DISK ARE CATALOGUED IN THE ORDER IN WHICH THEY ARE TO BE USED. THERE IS A TEACHER'S LESSON PLAN FOR EACH DAY, ALONG WITH THE NECESSARY QUIZZES AND HANDOUTS FOR THE STUDENTS WITH A TEACHER'S VERSION OF THE SAME QUIZZES AND HANDOUTS WITH A FEW ADDITIONAL NOTES. FOR VARIETY, THERE MAY BE ONE OR TWO VERSIONS OF EACH QUIZ TO BE GIVEN TO THE STUDENTS AS OUTLINED IN THE LESSON PLANS.

AFTER THIS PAGE IN THIS MANUAL, THE FILES THAT ARE PRINTED IN THE DRAFT MODE (LIGHT) ARE FOR THE TEACHER, AND THE FILES THAT ARE PRINTED IN THE NEAR LETTER QUALITY MODE (DARK) ARE FOR THE STUDENTS.

THE DISTRICT'S COMPUTER COMMITTEE WOULD APPRECIATE HAVING CHANGES, IMPROVEMENTS AND/OR ADDITIONS TO THIS CURRICULUM DONE IN SUCH A WAY THAT THE INFORMATION STORED ON THIS DISK IS UPDATED TO BE CONSISTENT WITH THE MATERIAL BEING TAUGHT TO THE STUDENTS. BY WORKING WITH THE DISTRICT'S COMPUTER COMMITTEE THIS GOAL CAN BE ACHIEVED.

THE MATERIAL FOR DAYS SIX THROUGH TEN CAN BE FOUND ON SIDE TWO OF THE DISK.

D.READ.ME.FIRST

<u>LESSON PLAN</u>

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GRADE 4 - DAY 1
COMPUTER LITERACY
TEACHER'S LESSON PLAN
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INSTRUCTIONAL AIDS:	TOOLS, EQUIPMENT AND MATERIALS:
COPIES OF THE NECESSARY HANDOUTS	CHALK, ERASER AND PENCILS

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC

<u>OBJECTIVE FOR THE DAY</u>:

THE STUDENTS WILL REVIEW AND LEARN THE NAMES OF THE PARTS AND OPERATING
PROCEDURES OF A COMMODORE COMPUTER. THE STUDENTS WILL LEARN HOW TO USE THE
CLR-HOME AND SHIFT/CLR-HOME COMMANDS AND BE PREPARED FOR A QUIZ ON DAY 2.

<u>INTRODUCTION</u>:

MOVE THE CLASS TO THE COMPUTER ROOM AND INTRODUCE YOURSELF.

<u>PRESENTATION</u>:

DISTRIBUTE COPIES OF:

STUDENT HANDOUT #1 (G4.DO1.SH1.KB.S)
WORKSHEET #1   (G4.DO1.W1.SC)

HAVE THE STUDENTS COMPLETE THE STUDENT HANDOUT #1 BY WRITING IN THE CORRECT
CHARACTERS FOUND ON THE COMMODORE KEYBOARD. HAVE THE STUDENTS START IN THE
UPPER LEFT HAND CORNER.
READING FROM THE TEACHER'S COPY OF WORKSHEET #1, READ THE DEFINITIONS IN ITEMS
#1-7 AND EMPHASIZE THAT THE STUDENTS SHOULD STUDY THESE DEFINITIONS SOME TIME
<u>BEFORE</u> THE NEXT CLASS MEETING BECAUSE THERE WILL BE A QUIZ ON THE SEVEN
DEFINITIONS.

CONTINUE READING FROM THE TEACHER'S COPY OF WORKSHEET #1. YOU CAN MENTION THAT
THE LANGUAGE USED IN THIS CLASS IS "BASIC" BECAUSE THE TERM "BASIC" APPEARS ON
THE SCREEN WHEN YOU FIRST TURN THE COMPUTER ON. THE PURPOSE BEHIND TYPING IN
THE PHRASE "CURSOR, GO HOME !" IS TWO-FOLD. ONE, IT'S TO EMPHASIZE THAT THE
COMPUTER DOES NOT SPEAK IN ENGLISH AND TWO, IT'S A GOOD SENTENCE TO STRESS THE
USE OF TWO HANDS WHEN TYPING! FOR THIS LESSON IT IS RECOMMENDED THAT YOU KEEP
THE STUDENTS WORKING AT THE SAME TASK SO THAT THEY CAN LISTEN TO YOUR
INSTRUCTIONS AS ONE LARGE GROUP.

G4.DO1.LP.TC

LESSON PLAN
CONTINUED
PAGE 2

GRADE 4 - DAY 1
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING TODAY'S CLASS MEETING.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF FIVE POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

ADDITIONAL TOPIC:

IF THE STUDENTS FINISH WITH WORKSHEET #1, YOU COULD DISCUSS WITH THEM THE ERROR
MESSAGE (SYNTAX ERROR) AND ASK THE QUESTIONS:

1. WHY DOES THE MESSAGE APPEAR? (COMPUTER LANGUAGE VS. ENGLISH)

2. WHAT COULD BE CHANGED TO ELIMINATE THE ERROR? (THE USE OF THE RESERVED
WORD "PRINT" WITH QUOTE MARKS AROUND THE PHRASE WILL ELIMINATE THE ERROR. SOME
STUDENTS MAY KNOW THIS FROM OUTSIDE EXPERIENCE. THIS WILL BE COVERED IN
SUBSEQUENT LESSONS.)

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G4.D01.LP.TC

GRADE 4 - DAY 1
COMPUTER LITERACY
STUDENT HANDOUT #1
KEYBOARD
STUDENT'S COPY

NAME _____

SECTION _____

G4.D01.SH1.KB.S

GRADE 4 - DAY 1
COMPUTER LITERACY
STUDENT HANDOUT #1
KEYBOARD
TEACHER'S COPY

NAME _____.

SECTION _____

G4.D01.SH1.KB.T

GRADE 4 - DAY 1
COMPUTER LITERACY
WORKSHEET 1
STUDENT'S COPY

NAME _____

SECTION _____

DEFINITIONS:
1. A <u>COMPUTER</u> IS A MACHINE WHICH PERFORMS TASKS AT A HIGH SPEED WITH GREAT ACCURACY.

2. THE <u>MONITOR</u> IS A T.V.-LIKE UNIT CONNECTED TO PART OF THE COMPUTER SYSTEM.

3. THE <u>KEYBOARD</u> IS A DEVICE WITH KEYS USED TO INPUT INFORMATION INTO THE COMPUTER SYSTEM.

4. THE <u>CURSOR</u> IS THE LITTLE SQUARE THAT MOVES ALONG THE SCREEN SHOWING WHERE THE NEXT LETTER YOU TYPE WILL GO.

5. THE NAME OF THE COMPUTER LANGUAGE USED IN THIS CLASS IS "BASIC".

6. THE <u>CLR-HOME KEY</u>, WHEN USED BY ITSELF, ONLY SENDS THE CURSOR TO THE UPPER LEFT HAND CORNER OF THE SCREEN.

7. THE <u>SHIFT KEY AND THE CLR-HOME KEY</u>, WHEN USED TOGETHER, CLEARS THE SCREEN AND SENDS THE CURSOR TO THE UPPER LEFT HAND CORNER OF THE SCREEN.

<u>HOW TO GET STARTED</u>:

LISTEN TO THE TEACHER'S INSTRUCTIONS.

<u>TYPING</u>:

TYPE IN THE FOLLOWING PHRASE: CURSOR, GO HOME !

PRESS THE RETURN KEY ONCE. (DO NOT WORRY ABOUT THE MESSAGE.)

THE CURSOR'S HOME IS IN THE UPPER LEFT HAND CORNER OF THE SCREEN. FIND THE KEY MARKED CLR-HOME AND WATCH THE SCREEN AS YOU PRESS IT. THE CURSOR JUMPS TO THE HOME POSITION.

<u>ERASING THE SCREEN</u>:

LISTEN TO THE TEACHER'S INSTRUCTIONS.

IT TAKES TWO KEYS HELD DOWN TOGETHER TO ERASE THE SCREEN. HOLD DOWN ONE OF THE SHIFT KEYS AND PRESS THE CLR-HOME KEY AND WATCH THE SCREEN. THE SCREEN IS ERASED AND THE CURSOR GOES TO THE HOME POSITION.

<u>TYPING SOME MORE</u>:

TYPE IN THE FOLLOWING PHRASE:
HELLO, MY NAME IS <PUT YOUR NAME HERE>.
PRESS THE RETURN KEY ONCE. (DO NOT WORRY ABOUT THE MESSAGE.)

TAKING TURNS, TYPE IN PHRASES TELLING ME WHAT SCHOOL YOU ATTEND, WHO YOUR HOMEROOM TEACHER IS, ETC...

SHOW YOUR PHRASES TO THE TEACHER <u>BEFORE</u> ERASING THE SCREEN.
TURN OFF THE COMPUTER. THANK YOU. STUDY FOR THE QUIZ, TOMORROW !

G4.D01.W1.SC

GRADE 4 - DAY 1
COMPUTER LITERACY
WORKSHEET 1
TEACHER'S COPY

NAME _____

SECTION _____

DEFINITIONS:
1. A COMPUTER IS A MACHINE WHICH PERFORMS TASKS AT A HIGH SPEED WITH GREAT
   ACCURACY.
2. THE MONITOR IS A T.V.-LIKE UNIT CONNECTED TO PART OF THE COMPUTER SYSTEM.
3. THE KEYBOARD IS A DEVICE WITH KEYS USED TO INPUT INFORMATION INTO THE
   COMPUTER SYSTEM.
4. THE CURSOR IS THE LITTLE SQUARE THAT MOVES ALONG THE SCREEN SHOWING WHERE
   THE NEXT LETTER YOU TYPE WILL GO.
5. THE NAME OF THE COMPUTER LANGUAGE USED IN THIS CLASS IS "BASIC".
6. THE CLR-HOME KEY, WHEN USED BY ITSELF, ONLY SENDS THE CURSOR TO THE UPPER
   LEFT HAND CORNER OF THE SCREEN.
7. THE SHIFT KEY AND THE CLR-HOME KEY, WHEN USED TOGETHER, CLEARS THE SCREEN
   AND SENDS THE CURSOR TO THE UPPER LEFT HAND CORNER OF THE SCREEN.

HOW TO GET STARTED:
FOLLOWING THE TEACHER'S INSTRUCTIONS, TURN YOUR COMPUTER AND MONITOR ON . YOU
WILL SEE A MESSAGE ON THE SCREEN. THE LAST WORD IS "READY". BELOW "READY" IS A
FLASHING SQUARE. THIS SQUARE IS CALLED THE "CURSOR". WHEN YOU SEE IT
FLASHING, IT MEANS THE COMPUTER IS READY FOR YOU TO TYPE SOMETHING IN.

TYPING:
THE STUDENT SITTING ON THE LEFT, TYPE IN THE FOLLOWING PHRASE:
CURSOR, GO HOME !
PRESS THE RETURN KEY ONCE. (DO NOT WORRY ABOUT THE MESSAGE.)

THE STUDENT SITTING ON THE RIGHT, TYPE IN THE SAME PHRASE.
PRESS THE RETURN KEY ONCE. (DO NOT WORRY ABOUT THE MESSAGE.)

THE CURSOR'S HOME IS IN THE UPPER LEFT HAND CORNER OF THE SCREEN. FIND THE KEY
MARKED CLR-HOME AND WATCH THE SCREEN AS YOU PRESS IT. THE CURSOR JUMPS TO THE
HOME POSITION.

GIVING BOTH STUDENTS A CHANCE, TYPE IN SOME LETTERS AT RANDOM. YOU WILL NOTICE
THAT YOU ARE WRITING OVER WHAT IS ALREADY ON THE SCREEN. THIS IS A MESS.
LET'S GET A NICE CLEAN SCREEN.

ERASING THE SCREEN:
IT TAKES TWO KEYS HELD DOWN TOGETHER TO ERASE THE SCREEN. HOLD DOWN ONE OF THE
SHIFT KEYS AND PRESS THE CLR-HOME KEY AND WATCH THE SCREEN. THE SCREEN IS
ERASED AND THE CURSOR GOES TO THE HOME POSITION.

TYPING SOME MORE:

THE STUDENT SITTING ON THE LEFT, TYPE IN THE PHRASE:
HELLO, MY NAME IS <PUT YOUR NAME HERE>.
PRESS THE RETURN KEY ONCE. (DO NOT WORRY ABOUT THE MESSAGE.)

THE STUDENT SITTING ON THE RIGHT, TYPE IN THE SAME PHRASE WITH YOUR NAME.
PRESS THE RETURN KEY ONCE. (DO NOT WORRY ABOUT THE MESSAGE.)

TAKING TURNS, TYPE IN PHRASES TELLING ME WHAT SCHOOL YOU ATTEND, WHO YOUR
HOMEROOM TEACHER IS, ETC...

SHOW YOUR PHRASES TO THE TEACHER BEFORE ERASING THE SCREEN.
TURN OFF THE COMPUTER. THANK YOU. STUDY FOR THE QUIZ, TOMORROW !

G4.D01.W1.TC

<u>LESSON PLAN</u>

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GRADE 4 - DAY 2
COMPUTER LITERACY
TEACHER'S LESSON PLAN
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INSTRUCTIONAL AIDS:	TOOLS, EQUIPMENT AND MATERIALS:
COPIES OF THE NECESSARY HANDOUTS AND QUIZ 1 - DAY 1	CHALK, ERASER AND PENCILS

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT, STUDENT EVALUATION, ADDITIONAL TOPIC

<u>OBJECTIVE FOR THE DAY</u>:

THE STUDENTS WILL LEARN WHAT A RESERVED WORD AND A PROGRAM ARE. THE STUDENTS WILL LEARN THE TERMS: "REM", "NEW", "PRINT", "RUN", AND LINE NUMBER; AND BE PREPARED FOR A QUIZ ON DAY 3.

<u>INTRODUCTION</u>:

REVIEW WITH THE STUDENTS THE MATERIAL COVERED AT THE PREVIOUS CLASS AND GIVE A QUIZ IN THE HOMEROOM.

<u>PRESENTATION</u>:

DISTRIBUTE COPIES OF:

WORKSHEET #2 (2 PAGES) (G4.D02.W2.SC)

READING FROM THE TEACHER'S COPY OF WORKSHEET #2, READ THE DEFINITIONS IN ITEMS #1-7 AND EMPHASIZE THAT THE STUDENTS SHOULD STUDY THESE DEFINITIONS SOME TIME BEFORE THE NEXT CLASS MEETING BECAUSE THERE WILL BE A QUIZ ON THE SEVEN DEFINITIONS.

WHEN TALKING ABOUT THE NAME OF THE COMPUTER LANGUAGE USED IN THIS CLASS MENTION THAT ALL COMMANDS ARE <u>NOT</u> THE SAME FOR ANY COMPUTER.

CONTINUE READING FROM THE TEACHER'S COPY OF WORKSHEET #2. MAKE SURE THAT THE USE OF < > BRACKETS IS VERY CLEARLY UNDERSTOOD BY ALL THE STUDENTS. EXPLAIN THIS IN A LARGE GROUP AND IN SMALL GROUPS.

G4.D02.LP.TC

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GRADE 4 - DAY 2
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC
```

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING TODAY'S CLASS MEETING.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING INDEPENDENTLY ON A QUIZ.
THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' QUIZZES WILL BE EVALUATED GIVING ONE POINT FOR EACH CORRECT
ANSWER.
THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF FIVE POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

ADDITIONAL TOPIC:

IF THE STUDENTS FINISH WITH WORKSHEET #2, YOU COULD LET THEM PROGRAM OTHER
SENTENCES, DISCUSS WITH THEM THE COMPUTER'S ABILITY TO CREATE COLOR GRAPHICS OR
SEE HOW MANY OF THEM CAN MAKE BARS OF DIFFERENT COLORS ON THE SCREEN.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G4.D02.LP.TC

NAME _____

SECTION _____

BASIC   COMPUTER   CURSOR   CLR-HOME

        KEYBOARD   MONITOR   SHIFT/CLR-HOME

USING THE WORDS ABOVE, WRITE THE CORRECT WORD MENTIONED IN YESTERDAY'S
LESSON BY THE APPROPRIATE DEFINITION:

1. _____ - A MACHINE WHICH PERFORMS TASKS AT A HIGH
                                     RATE OF SPEED WITH GREAT ACCURACY.

2. _____ - A T.V.-LIKE UNIT CONNECTED TO PART OF THE
                                     COMPUTER SYSTEM.

3. _____ - A DEVICE WITH KEYS USED TO INPUT
                                     INFORMATION INTO THE COMPUTER SYSTEM.

4. _____ - THE LITTLE SQUARE THAT MOVES ALONG THE
                                     SCREEN SHOWING WHERE THE NEXT LETTER YOU
                                     TYPE GOES.

5. _____ - USING THIS KEY; ONLY SENDS THE CURSOR TO
                                     THE UPPER LEFT CORNER OF SCREEN.

6. _____ - THE NAME OF THE COMPUTER LANGUAGE USED IN
                                     THIS CLASS.

7. _____ - USING THESE TWO KEYS; CLEARS THE SCREEN
                                     AND SENDS CURSOR TO UPPER LEFT CORNER.

BASIC   COMPUTER   CURSOR   CLR-HOME

       KEYBOARD   MONITOR   SHIFT/CLR-HOME

USING THE WORDS ABOVE, WRITE THE CORRECT WORD MENTIONED IN YESTERDAY'S
LESSON BY THE APPROPRIATE DEFINITION:

1.   _____COMPUTER_____   - A MACHINE WHICH PERFORMS TASKS AT A HIGH
                                    RATE OF SPEED WITH GREAT ACCURACY.

2.   _____MONITOR_____   - A T.V.-LIKE UNIT CONNECTED TO PART OF THE
                                    COMPUTER SYSTEM.

3.   _____KEYBOARD_____   - A DEVICE WITH KEYS USED TO INPUT
                                    INFORMATION INTO THE COMPUTER SYSTEM.

4.   _____CURSOR_____   - THE LITTLE SQUARE THAT MOVES ALONG THE
                                    SCREEN SHOWING WHERE THE NEXT LETTER YOU
                                    TYPE GOES.

5.   _____CLR-HOME_____   - USING THIS KEY; ONLY SENDS THE CURSOR TO
                                    THE UPPER LEFT CORNER OF SCREEN.

6.   _____BASIC_____   - THE NAME OF THE COMPUTER LANGUAGE USED IN
                                    THIS CLASS.

7.   _____SHIFT/CLR-HOME___   - USING THESE TWO KEYS; CLEARS THE SCREEN
                                    AND SENDS CURSOR TO UPPER LEFT CORNER.

GRADE 4 - DAY 2
COMPUTER LITERACY
QUIZ 1A - DAY 1
STUDENT'S COPY

NAME _____

SECTION _____

BASIC   COMPUTER   CURSOR   CLR-HOME

KEYBOARD   MONITOR   SHIFT/CLR-HOME

USING THE WORDS ABOVE, WRITE THE CORRECT WORD MENTIONED IN YESTERDAY'S
LESSON BY THE APPROPRIATE DEFINITION:

1. _____ - USING THESE TWO KEYS; CLEARS THE SCREEN
                                   AND SENDS CURSOR TO UPPER LEFT CORNER.

2. _____ - THE NAME OF THE COMPUTER LANGUAGE USED IN
                                   THIS CLASS.

3. _____ - USING THIS KEY; ONLY SENDS THE CURSOR TO
                                   THE UPPER LEFT CORNER OF SCREEN.

4. _____ - THE LITTLE SQUARE THAT MOVES ALONG THE
                                   SCREEN SHOWING WHERE THE NEXT LETTER YOU
                                   TYPE GOES.

5. _____ - A DEVICE WITH KEYS USED TO INPUT
                                   INFORMATION INTO THE COMPUTER SYSTEM.

6. _____ - A T.V.-LIKE UNIT CONNECTED TO PART OF THE
                                   COMPUTER SYSTEM.

7. _____ - A MACHINE WHICH PERFORMS TASKS AT A HIGH
                                   RATE OF SPEED WITH GREAT ACCURACY.

G4.D02.Q1A.SC

GRADE 4 - DAY 2
COMPUTER LITERACY
QUIZ 1A - DAY 1
TEACHER'S COPY

22
NAME _____

SECTION _____

BASIC   COMPUTER   CURSOR   CLR-HOME

     KEYBOARD   MONITOR   SHIFT/CLR-HOME

USING THE WORDS ABOVE, WRITE THE CORRECT WORD MENTIONED IN YESTERDAY'S
LESSON BY THE APPROPRIATE DEFINITION:

1. _____SHIFT/CLR-HOME_____ - USING THESE TWO KEYS; CLEARS THE SCREEN
                                AND SENDS CURSOR TO UPPER LEFT CORNER.

2. _____BASIC_____ - THE NAME OF THE COMPUTER LANGUAGE USED IN
                          THIS CLASS.

3. _____CLR-HOME_____ - USING THIS KEY; ONLY SENDS THE CURSOR TO
                          THE UPPER LEFT CORNER OF SCREEN.

4. _____CURSOR_____ - THE LITTLE SQUARE THAT MOVES ALONG THE
                        SCREEN SHOWING WHERE THE NEXT LETTER YOU
                        TYPE GOES.

5. _____KEYBOARD_____ - A DEVICE WITH KEYS USED TO INPUT
                          INFORMATION INTO THE COMPUTER SYSTEM.

6. _____MONITOR_____ - A T.V.-LIKE UNIT CONNECTED TO PART OF THE
                         COMPUTER SYSTEM.

7. _____COMPUTER_____ - A MACHINE WHICH PERFORMS TASKS AT A HIGH
                          RATE OF SPEED WITH GREAT ACCURACY.

DEFINITIONS:
1. A <u>RESERVED WORD</u> IS A WORD THAT HAS A SPECIAL MEANING AND MAKES A DIRECT
   STATEMENT TO THE COMPUTER. SOME RESERVED WORDS ARE USED INSIDE PROGRAMS,
   OTHERS ARE USED OUTSIDE PROGRAMS.

2. A <u>PROGRAM</u> IS A LIST OF INSTRUCTIONS FOR THE COMPUTER TO FOLLOW. ALL YOUR
   INSTRUCTIONS FOR THE COMPUTER MUST BE NUMBERED SO THE COMPUTER KNOWS IN WHAT
   ORDER TO DO THINGS.

3. THE RESERVED WORD <u>"REM"</u> COMES FROM THE WORD "REMarks". IT ALLOWS YOU TO
   WRITE A COMMENT, WITHOUT EFFECTING THE PROGRAM.

4. THE RESERVED WORD <u>"NEW"</u> ALLOWS FOR A NEW PROGRAM TO BE ENTERED INTO THE
   COMPUTER AND ERASES ANY PREVIOUS PROGRAMS IN THE COMPUTER'S MEMORY. IF YOU
   DO NOT TYPE IN "NEW" (AND PRESS THE RETURN KEY), YOU COULD END UP WITH A
   PROGRAM CONSISTING OF A COLLECTION OF OLD AND NEW PROGRAM STATEMENTS.

5. THE RESERVED WORD <u>"PRINT"</u> TELLS THE COMPUTER TO PRINT THE NUMBERS OR THE
   CHARACTERS YOU WANT IN YOUR PROGRAM.

6. THE RESERVED WORD <u>"RUN"</u> EXECUTES (OR CARRIES OUT) THE PROGRAM CURRENTLY IN
   MEMORY. THE COMPUTER ACTUALLY DOES EXACTLY WHAT YOU TOLD IT TO DO IN YOUR
   PROGRAM, RESULTING IN OUTPUT.

7. A <u>LINE NUMBER</u> IS A NUMBER THAT APPEARS AT THE BEGINNING OF EACH LINE OF A
   PROGRAM. THE COMPUTER CARRIES OUT YOUR INSTRUCTIONS STARTING WITH THE
   SMALLEST LINE NUMBER. IT IS RECOMMENDED THAT YOU NUMBER THE LINES BY 10'S,
   SUCH AS 10,20,30,ETC... . THIS ALLOWS YOU TO ADD LINES TO YOUR PROGRAM
   WHICH YOU MAY HAVE OMITTED. A LINE NUMBER CAN BE ANY NUMBER BETWEEN 1 AND
   9999 AS LONG AS IT IS A WHOLE NUMBER.

<u>HOW TO ENTER A LINE</u>:

WHEN WE SAY "ENTER" WE WILL ALWAYS MEAN TO DO THESE TWO THINGS:
    1)   TYPE A LINE OF PROGRAMMING,
    2)   THEN PRESS THE "RETURN" KEY

CLEAR THE SCREEN AND ENTER THESE LINES:

    10   PRINT   "HI"
    20   END

(THE " MARKS ARE QUOTATION MARKS. TO MAKE " MARKS, HOLD DOWN THE "SHIFT" KEY
AND PRESS THE KEY WHICH HAS THE 2 AND THE " ON IT.)

(DID YOU REMEMBER TO PRESS THE "RETURN" KEY AT THE END OF EACH LINE?)

NOW LINE NUMBERS 10 AND 20 ARE IN THE COMPUTER'S MEMORY. THEY WILL STAY IN
MEMORY UNTIL YOU ENTER THE "NEW" COMMAND OR UNTIL YOU TURN OFF THE COMPUTER.

GRADE 4 - DAY 2
COMPUTER LITERACY
WORKSHEET 2 - PAGE 2
STUDENT'S COPY

24

NAME _____

SECTION _____

COMMAND THE COMPUTER:

TRY THIS. ENTER THE LINE:

MY NAME IS <YOUR NAME>

AND PRESS THE "RETURN" KEY.

THE COMPUTER PRINTED

        ?SYNTAX ERROR
        READY

WHEN THE COMPUTER PRINTS "?SYNTAX ERROR", IT MEANS THE COMPUTER DID NOT
UNDERSTAND YOU. THE COMPUTER UNDERSTANDS ONLY ABOUT 70 WORDS. THESE WORDS ARE
KNOWN AS COMMANDS OR RESERVED WORDS. YOU NEED TO LEARN WHICH WORDS THE
COMPUTER UNDERSTANDS. THREE OF THESE RESERVED WORDS ARE: "NEW", "PRINT" AND
"RUN".

1.   CLEAR THE SCREEN.

2.   ENTER THIS SIMPLE PROGRAM:

```
     10    PRINT   "THIS IS A STATEMENT"
     20    PRINT   "TWO OR MORE STATEMENTS"
     30    PRINT   "MAKE A SIMPLE PROGRAM!"
     40    END
```

3.   ENTER THE RESERVED WORD: RUN

4.   RAISE YOUR HAND TO HAVE YOUR PROGRAM CHECKED.

1.   ENTER THE RESERVED WORD: NEW

2.   ENTER THIS SIMPLE PROGRAM:

```
     10    PRINT   "HELLO, MY NAME IS <YOUR NAME>"
     20    PRINT   "HI AGAIN, MY NAME IS <YOUR PARTNER'S NAME>"
     30    PRINT   "WE GO TO <NAME OF SCHOOL> SCHOOL"
     40    END
```

3.   ENTER THE RESERVED WORD: RUN

4.   RAISE YOUR HAND TO HAVE YOUR PROGRAM CHECKED.

DEFINITIONS:
1. A RESERVED WORD IS A WORD THAT HAS A SPECIAL MEANING AND MAKES A DIRECT
   STATEMENT TO THE COMPUTER. SOME RESERVED WORDS ARE USED INSIDE PROGRAMS,
   OTHERS ARE USED OUTSIDE PROGRAMS.
2. A PROGRAM IS A LIST OF INSTRUCTIONS FOR THE COMPUTER TO FOLLOW. ALL YOUR
   INSTRUCTIONS FOR THE COMPUTER MUST BE NUMBERED SO THE COMPUTER KNOWS IN WHAT
   ORDER TO DO THINGS.
3. THE RESERVED WORD "REM" COMES FROM THE WORD "REMarks". IT ALLOWS YOU TO
   WRITE A COMMENT, WITHOUT EFFECTING THE PROGRAM.
4. THE RESERVED WORD "NEW" ALLOWS FOR A NEW PROGRAM TO BE ENTERED INTO THE
   COMPUTER AND ERASES ANY PREVIOUS PROGRAMS IN THE COMPUTER'S MEMORY. IF YOU
   DO NOT TYPE IN "NEW" (AND PRESS THE RETURN KEY), YOU COULD END UP WITH A
   PROGRAM CONSISTING OF A COLLECTION OF OLD AND NEW PROGRAM STATEMENTS.
5. THE RESERVED WORD "PRINT" TELLS THE COMPUTER TO PRINT THE NUMBERS OR THE
   CHARACTERS YOU WANT IN YOUR PROGRAM.
6. THE RESERVED WORD "RUN" EXECUTES (OR CARRIES OUT) THE PROGRAM CURRENTLY IN
   MEMORY. THE COMPUTER ACTUALLY DOES EXACTLY WHAT YOU TOLD IT TO DO IN YOUR
   PROGRAM, RESULTING IN OUTPUT.
7. A LINE NUMBER IS A NUMBER THAT APPEARS AT THE BEGINNING OF EACH LINE OF A
   PROGRAM. THE COMPUTER CARRIES OUT YOUR INSTRUCTIONS STARTING WITH THE
   SMALLEST LINE NUMBER. IT IS RECOMMENDED THAT YOU NUMBER THE LINES BY 10'S,
   SUCH AS 10,20,30,ETC... . THIS ALLOWS YOU TO ADD LINES TO YOUR PROGRAM
   WHICH YOU MAY HAVE OMITTED. A LINE NUMBER CAN BE ANY NUMBER BETWEEN 1 AND
   9999 AS LONG AS IT IS A WHOLE NUMBER.

HOW TO ENTER A LINE:

WHEN WE SAY "ENTER" WE WILL ALWAYS MEAN TO DO THESE TWO THINGS:
     1)   TYPE A LINE OF PROGRAMMING,
     2)   THEN PRESS THE "RETURN" KEY

CLEAR THE SCREEN AND HAVE EACH STUDENT ENTER A LINE:

     10   PRINT   "HI"   (LINE NUMBER, RESERVED WORD, DATA)
     20   END   (LINE NUMBER, RESERVED WORD)

(THE " MARKS ARE QUOTATION MARKS. TO MAKE " MARKS, HOLD DOWN THE "SHIFT" KEY
AND PRESS THE KEY WHICH HAS THE 2 AND THE " ON IT.)

(DID YOU REMEMBER TO PRESS THE "RETURN" KEY AT THE END OF EACH LINE?)

EXPLAIN THAT THE RETURN KEY MUST BE PRESSED TO ENTER INFORMATION INTO THE
COMPUTER'S MEMORY.

NOW LINE NUMBERS 10 AND 20 ARE IN THE COMPUTER'S MEMORY. THEY WILL STAY IN
MEMORY UNTIL YOU ENTER THE "NEW" COMMAND OR UNTIL YOU TURN OFF THE COMPUTER.

ENTER THE RESERVED WORD "RUN" AND SEE WHAT HAPPENS.

GRADE 4 - DAY 2
COMPUTER LITERACY
WORKSHEET 2 - PAGE 2
TEACHER'S COPY

26

NAME _____

SECTION _____

COMMAND THE COMPUTER:

TRY THIS. ENTER THE LINE: (EXPLAIN WHAT IS MEANT BY THE USE OF THE < >
BRACKETS; INFORMATION AS TO WHAT KEYS TO USE OR DATA THAT NEEDS TO BE PUT IN)

MY NAME IS <YOUR NAME>   (HAVE BOTH STUDENTS DO THIS.)

AND PRESS THE "RETURN" KEY.

THE COMPUTER PRINTED

        ?SYNTAX ERROR
        READY

WHEN THE COMPUTER PRINTS "?SYNTAX ERROR", IT MEANS THE COMPUTER DID NOT
UNDERSTAND YOU. THE COMPUTER UNDERSTANDS ONLY ABOUT 70 WORDS. THESE WORDS ARE
KNOWN AS COMMANDS OR RESERVED WORDS. YOU NEED TO LEARN WHICH WORDS THE
COMPUTER UNDERSTANDS. THREE OF THESE RESERVED WORDS ARE: "NEW", "PRINT" AND
"RUN".

1.   CLEAR THE SCREEN.

2.   ENTER THIS SIMPLE PROGRAM: (BOTH STUDENTS SHOULD TAKE TURNS.)

     10   PRINT   "THIS IS A STATEMENT"
     20   PRINT   "TWO OR MORE STATEMENTS"
     30   PRINT   "MAKE A SIMPLE PROGRAM!"
     40   END

3.   ENTER THE RESERVED WORD: RUN

4.   RAISE YOUR HAND TO HAVE YOUR PROGRAM CHECKED.

1.   ENTER THE RESERVED WORD: NEW

2.   ENTER THIS SIMPLE PROGRAM:

     10   PRINT   "HELLO, MY NAME IS <YOUR NAME>"
     20   PRINT   "HI AGAIN, MY NAME IS <YOUR PARTNER'S NAME>"
     30   PRINT   "WE GO TO <NAME OF SCHOOL> SCHOOL"
     40   END

3.   ENTER THE RESERVED WORD: RUN

4.   RAISE YOUR HAND TO HAVE YOUR PROGRAM CHECKED.

LESSON PLAN

```
GRADE 4 - DAY 3
COMPUTER LITERACY
TEACHER'S LESSON PLAN
```

INSTRUCTIONAL AIDS:	TOOLS, EQUIPMENT AND MATERIALS:
COPIES OF THE NECESSARY HANDOUTS QUIZ 2 - DAY 2	CHALK, ERASER AND PENCILS

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT, STUDENT EVALUATION, ADDITIONAL TOPIC

OBJECTIVE FOR THE DAY:

THE STUDENTS WILL LEARN THE TERMS: "LIST", "END", DISK DRIVE, MEMORY AND CPU; AND BE PREPARED FOR A QUIZ ON DAY 4.

INTRODUCTION:

REVIEW WITH THE STUDENTS THE MATERIAL COVERED AT THE PREVIOUS CLASS AND GIVE A QUIZ IN THE HOMEROOM.

PRESENTATION:

DISTRIBUTE COPIES OF:

WORKSHEET #3 (G4.D03.W3.SC)

READING FROM THE TEACHER'S COPY OF WORKSHEET #3, READ THE DEFINITIONS IN ITEMS #1-3 AND EMPHASIZE THAT THE STUDENTS SHOULD STUDY THESE DEFINITIONS SOME TIME BEFORE THE NEXT CLASS MEETING BECAUSE THERE WILL BE A QUIZ ON THE THREE DEFINITIONS. MAKE SURE TO DEFINE WHAT THE LETTERS "CPU" STAND FOR. (CENTRAL PROCESSING UNIT)

CONTINUE READING FROM THE TEACHER'S COPY OF WORKSHEET #3.
HAVE THE STUDENTS ENTER THE APPROPRIATE PROGRAM:

PROGRAM "A" IS FOR IRVING SCHOOL   PROGRAM "D" IS FOR EMERSON SCHOOL
PROGRAM "B" IS FOR HIAWATHA SCHOOL   PROGRAM "E" IS FOR KOMENSKY SCHOOL
PROGRAM "C" IS FOR PERSHING SCHOOL

EMPHASIZE THAT THE PROGRAM SHOULD BE ENTERED JUST AS IT IS ON THE WORKSHEET AND THAT THE LINE NUMBERS ARE OUT OF ORDER TO DEMONSTRATE A POINT. HAVE THE STUDENTS RAISE THEIR HANDS WHEN THEY HAVE THE PROGRAM ENTERED SO YOU CAN CHECK IT. MAKE IT A POINT TO MENTION THE LANGUAGE USED TO COMMUNICATE WITH THE COMPUTER SOME TIME DURING THE LESSON. (BASIC)

G4.D03.LP.TC

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┌─────────────────────────────────────────────────────────────────────┐
│ GRADE 4 - DAY 3                                                       │
│ COMPUTER LITERACY                                                     │
│ TEACHER'S LESSON PLAN                                                 │
│                                                                       │
│ OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,  │
│ STUDENT EVALUATION, ADDITIONAL TOPIC                                  │
└─────────────────────────────────────────────────────────────────────┘
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SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING TODAY'S CLASS MEETING.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING INDEPENDENTLY ON A QUIZ.
THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' QUIZZES WILL BE EVALUATED GIVING ONE POINT FOR EACH CORRECT
ANSWER.
THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF FIVE POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

ADDITIONAL TOPIC:

WHEN THE STUDENTS FINISH WITH WORKSHEET #3, THEY SHOULD HAVE A SENTENCE THAT
SAYS: <NAME OF SCHOOL>SCHOOLISTHEBEST. TRY TO EXPLAIN TO THE STUDENTS THAT THE
FIVE WORDS SHOULD BE SEPARATE AND THAT IF YOU USE A PRINT STATEMENT TO PRINT A
LETTER, HOW COULD YOU PRINT A BLANK SPACE? THE THREE LINE NUMBERS WHERE A
PRINT STATEMENT ARE NEEDED ARE BETWEEN 160-170, 180-190 AND 210-220.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G4.D03.LP.TC

NAME _____

SECTION _____

RESERVED WORD   LINE NUMBER   NEW   PRINT

PROGRAM   RUN   SYNTAX ERROR

USING THE WORDS ABOVE, WRITE THE CORRECT WORD MENTIONED IN YESTERDAY'S
LESSON BY THE APPROPRIATE DEFINITION:

1. _____ - THE MESSAGE THE COMPUTER PRINTS WHEN IT
DOES NOT UNDERSTAND YOU.

2. _____ - A LIST OF INSTRUCTIONS (STATEMENTS) FOR
THE COMPUTER TO FOLLOW.

3. _____ - A WORD THAT HAS A SPECIAL MEANING AND
MAKES A DIRECT STATEMENT TO THE COMPUTER.

4. _____ - THIS WORD IS USED IN A PROGRAM TO TELL
THE COMPUTER TO WRITE CHARACTERS.

5. _____ - IT MUST APPEAR AT THE BEGINNING OF EACH
LINE OF A PROGRAM. THE COMPUTER STARTS AT
THE SMALLEST ONE.

6. _____ - THE COMMAND THAT EXECUTES (OR CARRIES
OUT) THE PROGRAM CURRENTLY IN THE
COMPUTER'S MEMORY.

7. _____ - THE COMMAND THAT ERASES THE PROGRAM
CURRENTLY IN THE COMPUTER'S MEMORY.

NAME _____

SECTION _____

RESERVED WORD   LINE NUMBER   NEW   PRINT

PROGRAM   RUN   SYNTAX ERROR

USING THE WORDS ABOVE, WRITE THE CORRECT WORD MENTIONED IN YESTERDAY'S
LESSON BY THE APPROPRIATE DEFINITION:

1. ____SYNTAX ERROR____   - THE MESSAGE THE COMPUTER PRINTS WHEN IT
DOES NOT UNDERSTAND YOU.

2. ____PROGRAM____   - A LIST OF INSTRUCTIONS (STATEMENTS) FOR
THE COMPUTER TO FOLLOW.

3. ____RESERVED WORD____   - A WORD THAT HAS A SPECIAL MEANING AND
MAKES A DIRECT STATEMENT TO THE COMPUTER.

4. ____PRINT____   - THIS WORD IS USED IN A PROGRAM TO TELL
THE COMPUTER TO WRITE CHARACTERS.

5. ____LINE NUMBER____   - IT MUST APPEAR AT THE BEGINNING OF EACH
LINE OF A PROGRAM. THE COMPUTER STARTS AT
THE SMALLEST ONE.

6. ____RUN____   - THE COMMAND THAT EXECUTES (OR CARRIES
OUT) THE PROGRAM CURRENTLY IN THE
COMPUTER'S MEMORY.

7. ____NEW____   - THE COMMAND THAT ERASES THE PROGRAM
CURRENTLY IN THE COMPUTER'S MEMORY.

GRADE 4 - DAY 3
COMPUTER LITERACY
QUIZ 2A - DAY 2
STUDENT'S COPY

NAME _____   31

SECTION _____

RESERVED WORD   LINE NUMBER   NEW   PRINT

PROGRAM   RUN   SYNTAX ERROR

USING THE WORDS ABOVE, WRITE THE CORRECT WORD MENTIONED IN YESTERDAY'S
LESSON BY THE APPROPRIATE DEFINITION:

1. _____   - THE COMMAND THAT ERASES THE PROGRAM
                               CURRENTLY IN THE COMPUTER'S MEMORY.

2. _____   - THE COMMAND THAT EXECUTES (OR CARRIES
                               OUT) THE PROGRAM CURRENTLY IN THE
                               COMPUTER'S MEMORY.

3. _____   - IT MUST APPEAR AT THE BEGINNING OF EACH
                               LINE OF A PROGRAM. THE COMPUTER STARTS AT
                               THE SMALLEST ONE.

4. _____   - THIS WORD IS USED IN A PROGRAM TO TELL
                               THE COMPUTER TO WRITE CHARACTERS.

5. _____   - A WORD THAT HAS A SPECIAL MEANING AND
                               MAKES A DIRECT STATEMENT TO THE COMPUTER.

6. _____   - A LIST OF INSTRUCTIONS (STATEMENTS) FOR
                               THE COMPUTER TO FOLLOW.

7. _____   - THE MESSAGE THE COMPUTER PRINTS WHEN IT
                               DOES NOT UNDERSTAND YOU.

GRADE 4 - DAY 3
COMPUTER LITERACY
QUIZ 2A - DAY 2
TEACHER'S COPY

NAME _____

SECTION _____

32

RESERVED WORD   LINE NUMBER   NEW   PRINT

                    PROGRAM   RUN   SYNTAX ERROR

USING THE WORDS ABOVE, WRITE THE CORRECT WORD MENTIONED IN YESTERDAY'S
LESSON BY THE APPROPRIATE DEFINITION:

1. _____NEW_____   - THE COMMAND THAT ERASES THE PROGRAM
                                      CURRENTLY IN THE COMPUTER'S MEMORY.

2. _____RUN_____   - THE COMMAND THAT EXECUTES (OR CARRIES
                                      OUT) THE PROGRAM CURRENTLY IN THE
                                      COMPUTER'S MEMORY.

3. _____LINE NUMBER_____   - IT MUST APPEAR AT THE BEGINNING OF EACH
                                      LINE OF A PROGRAM. THE COMPUTER STARTS AT
                                      THE SMALLEST ONE.

4. _____PRINT_____   - THIS WORD IS USED IN A PROGRAM TO TELL
                                      THE COMPUTER TO WRITE CHARACTERS.

5. ____RESERVED WORD_____   - A WORD THAT HAS A SPECIAL MEANING AND
                                      MAKES A DIRECT STATEMENT TO THE COMPUTER.

6. _____PROGRAM_____   - A LIST OF INSTRUCTIONS (STATEMENTS) FOR
                                      THE COMPUTER TO FOLLOW.

7. _____SYNTAX ERROR_____   - THE MESSAGE THE COMPUTER PRINTS WHEN IT
                                      DOES NOT UNDERSTAND YOU.

GRADE 4 - DAY 3
COMPUTER LITERACY
WORKSHEET 3
STUDENT'S COPY

NAME _____

SECTION _____

33

DEFINITIONS:
1. THE RESERVED WORD "LIST" SHOWS YOU THE PROGRAM THAT IS CURRENTLY IN THE COMPUTER'S MEMORY.

2. THE RESERVED WORD "END" IS USED IN THE LAST LINE OF A PROGRAM.

3. THE FIVE MAIN PARTS OF A MICROCOMPUTER ARE:

KEYBOARD   MONITOR   DISK DRIVE

          MEMORY   CPU

GET THE PROGRAM IN THE PROPER ORDER:

1. ENTER THE APPROPRIATE PROGRAM FOLLOWING THE TEACHER'S INSTRUCTIONS:

PROGRAM A:		PROGRAM B:		PROGRAM C:		PROGRAM D:		PROGRAM E:	
60	PRINT "G"	50	PRINT"A"	20	PRINT"E"	30	PRINT"E"	40	PRINT"E"
40	PRINT "I"	30	PRINT"A"	80	PRINT"G"	10	PRINT"E"	70	PRINT"K"
10	PRINT "I"	80	PRINT"A"	50	PRINT"H"	20	PRINT"M"	10	PRINT"K"
70	END	10	PRINT"H"	60	PRINT"I"	80	END	30	PRINT"M"
50	PRINT "N"	90	END	90	END	70	PRINT"N"	90	END
20	PRINT "R"	70	PRINT"H"	70	PRINT"N"	60	PRINT"O"	50	PRINT"N"
30	PRINT "V"	20	PRINT"I"	10	PRINT"P"	40	PRINT"R"	20	PRINT"O"
		60	PRINT"T"	30	PRINT"R"	50	PRINT"S"	60	PRINT"S"
		40	PRINT"W"	40	PRINT"S"			80	PRINT"Y"

2. ENTER THE RESERVED WORD THAT WILL EXECUTE THE PROGRAM THAT IS CURRENTLY IN THE COMPUTER'S MEMORY.

   WRITE THE OUTPUT: _____

3. ENTER THE RESERVED WORD THAT WILL SHOW YOU THE PROGRAM THAT IS CURRENTLY IN THE COMPUTER'S MEMORY.

4. DO NOT ENTER THE RESERVED WORD: NEW

5. ENTER THE FOLLOWING PROGRAM, EXECUTE IT, AND SHOW THE PROGRAM TO THE TEACHER IN ITS PROPER ORDER:

```
220   PRINT"B"
120   PRINT"C"
230   PRINT"E"
210   PRINT"E"
130   PRINT"H"
200   PRINT"H"
170   PRINT"I"
160   PRINT"L"
260         END
140   PRINT"O"
150   PRINT"O"
240   PRINT"S"
110   PRINT"S"
180   PRINT"S"
250   PRINT"T"
190   PRINT"T"
```

GRADE 4 - DAY 3
COMPUTER LITERACY
WORKSHEET 3
TEACHER'S COPY

34

NAME _____

SECTION _____

DEFINITIONS:
1. THE RESERVED WORD "LIST" SHOWS YOU THE PROGRAM THAT IS CURRENTLY IN THE COMPUTER'S MEMORY.
2. THE RESERVED WORD "END" IS USED IN THE LAST LINE OF A PROGRAM.
3. THE FIVE MAIN PARTS OF A MICROCOMPUTER ARE:

KEYBOARD   MONITOR   DISK DRIVE

        MEMORY   CPU

GET THE PROGRAM IN THE PROPER ORDER:

1. ENTER THE APPROPRIATE PROGRAM FOLLOWING THE TEACHER'S INSTRUCTIONS:

PROGRAM A:		PROGRAM B:		PROGRAM C:		PROGRAM D:		PROGRAM E:	
60	PRINT "G"	50	PRINT"A"	20	PRINT"E"	30	PRINT"E"	40	PRINT"E"
40	PRINT "I"	30	PRINT"A"	80	PRINT"G"	10	PRINT"E"	70	PRINT"K"
10	PRINT "I"	80	PRINT"A"	50	PRINT"H"	20	PRINT"M"	10	PRINT"K"
70	END	10	PRINT"H"	60	PRINT"I"	80	END	30	PRINT"M"
50	PRINT "N"	90	END	90	END	70	PRINT"N"	90	END
20	PRINT "R"	70	PRINT"H"	70	PRINT"N"	60	PRINT"O"	50	PRINT"N"
30	PRINT "V"	20	PRINT"I"	10	PRINT"P"	40	PRINT"R"	20	PRINT"O"
		60	PRINT"T"	30	PRINT"R"	50	PRINT"S"	60	PRINT"S"
		40	PRINT"W"	40	PRINT"S"			80	PRINT"Y"

2. ENTER THE RESERVED WORD THAT WILL EXECUTE THE PROGRAM THAT IS CURRENTLY IN THE COMPUTER'S MEMORY.

   WRITE THE OUTPUT: _____

3. ENTER THE RESERVED WORD THAT WILL SHOW YOU THE PROGRAM THAT IS CURRENTLY IN THE COMPUTER'S MEMORY.

4. DO NOT ENTER THE RESERVED WORD: NEW

5. ENTER THE FOLLOWING PROGRAM, EXECUTE IT, AND SHOW THE PROGRAM TO THE TEACHER IN ITS PROPER ORDER:

```
220    PRINT"B"
120    PRINT"C"
230    PRINT"E"
210    PRINT"E"
130    PRINT"H"
200    PRINT"H"
170    PRINT"I"
160    PRINT"L"
260        END
140    PRINT"O"
150    PRINT"O"
240    PRINT"S"
110    PRINT"S"
180    PRINT"S"
250    PRINT"T"
190    PRINT"T"
```

ADDITIONAL TOPIC: (ADD THREE PRINT STATEMENTS AT 165, 185 AND 215)

LESSON PLAN

```
,--------------------------------------------------------------------,
: ,----------------------------------------------------------------, :
: : GRADE 4 - DAY 4                                                : :
: : COMPUTER LITERACY                                              : :
: : TEACHER'S LESSON PLAN                                          : :
: :--------------------------------------------------------------- : :
: :                                                                : :
: : INSTRUCTIONAL AIDS:         : TOOLS, EQUIPMENT AND MATERIALS:  : :
: :                             :                                  : :
: :  COPIES OF THE NECESSARY HANDOUTS AND : CHALK, ERASER AND PENCILS : :
: :  QUIZ 3 - DAY 3             :                                  : :
: :                             :                                  : :
: :                             :                                  : :
: :                             :                                  : :
: :---------------------------------------------------------------- : :
: : OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT, : :
: : STUDENT EVALUATION, ADDITIONAL TOPIC                           : :
: :                                                                : :
: '----------------------------------------------------------------' :
'--------------------------------------------------------------------'
```

OBJECTIVE FOR THE DAY:

THE STUDENTS WILL LEARN AND PRACTICE PROGRAMMING SKILLS BY ENTERING SOME
PROGRAMS GIVEN TO THEM AND CREATING SOME PROGRAMS OF THEIR OWN. THE STUDENTS
WILL BE PREPARED FOR A TEST ON DAY 5.

INTRODUCTION:

REVIEW WITH THE STUDENTS THE MATERIAL COVERED AT THE PREVIOUS CLASS AND GIVE A
QUIZ IN THE HOMEROOM.

PRESENTATION:

DISTRIBUTE COPIES OF:

WORKSHEET #4 (G4.D04.W4.SC)

THIS LESSON IS DIVIDED INTO TWO PARTS. THE STUDENTS WORKING ON A SPECIFIC
COMPUTER WILL BE DOING TWO DIFFERENT ACTIVITIES. WHILE ONE STUDENT IS DOING
PROGRAMMING, THE OTHER STUDENT SHOULD BE WRITING THE OUTPUT TO THAT PROGRAM ON
HIS/HER WORKSHEET. BEFORE THE STUDENTS EXECUTE THE PROGRAM, THE TEACHER SHOULD
BE CALLED BY THE STUDENTS RAISING THEIR HANDS TO HAVE THEIR PROGRAM AND WRITTEN
OUTPUT CHECKED.

AGAIN, REMIND THE STUDENTS WHAT THE < > BRACKETS MEAN WHEN THEY SEE THEM ON
THEIR WORKSHEETS. THIS IS THE FIRST DAY THAT THEY WILL HAVE SEEN THE RESERVED
WORD: REM, SO MAKE IT CLEAR TO THE STUDENTS WHAT IT IS.

G4.D04.LP.TC

```
 _____
|                                                              |
|GRADE 4 - DAY 4                                               |
|COMPUTER LITERACY                                             |
|TEACHER'S LESSON PLAN                                         |
|_____|
|                                                              |
|OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT, |
|STUDENT EVALUATION, ADDITIONAL TOPIC                          |
|_____|
```

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING TODAY'S CLASS MEETING.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING INDEPENDENTLY ON A QUIZ.
THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' QUIZZES WILL BE EVALUATED GIVING ONE POINT FOR EACH CORRECT
ANSWER.
THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF FIVE POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

ADDITIONAL TOPIC:

IF THE STUDENTS FINISH WITH WORKSHEET #4, YOU COULD DISCUSS WITH THEM THE
POSSIBLE TYPES OF QUESTIONS TO EXPECT ON THE TEST TOMORROW OR WORK ON COLOR
GRAPHICS PROGRAMMING.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G4.D04.LP.TC

WRITE THE CORRECT WORD MENTIONED IN YESTERDAY'S
LESSON BY THE APPROPRIATE DEFINITION:

1.   _____   - THE COMMAND THAT SHOWS YOU THE PROGRAM
                                       THAT IS CURRENTLY IN THE COMPUTER'S
                                       MEMORY.

2.   _____   - THE WORD THAT IS FOUND IN THE LAST LINE
                                       OF A PROGRAM.

NAME THE FIVE MAIN PARTS OF A MICROCOMPUTER THAT WE HAVE DISCUSSED
DURING THIS MINI-COURSE.

3.   _____

4.   _____

5.   _____

6.   _____

7.   _____

GRADE 4 - DAY 4
COMPUTER LITERACY
QUIZ 3 - DAY 3
TEACHER'S COPY

NAME _____   38

SECTION _____

WRITE THE CORRECT WORD MENTIONED IN YESTERDAY'S
LESSON BY THE APPROPRIATE DEFINITION:

1.   _____LIST_____   - THE COMMAND THAT SHOWS YOU THE PROGRAM
                                         THAT IS CURRENTLY IN THE COMPUTER'S
                                         MEMORY.

2.   _____END_____   - THE WORD THAT IS FOUND IN THE LAST LINE
                                         OF A PROGRAM.

NAME THE FIVE MAIN PARTS OF A MICROCOMPUTER THAT WE HAVE DISCUSSED
DURING THIS MINI-COURSE.

3.   ____KEYBOARD_____

4.   ____MONITOR_____

5.   ____DISK DRIVE_____

6.   ____MEMORY_____

7.   ____CPU (CENTRAL PROCESSING UNIT)_

GRADE 4 - DAY 4
COMPUTER LITERACY
WORKSHEET 4
STUDENT'S COPY

NAME _____

SECTION _____

39

1. ENTER THE PROGRAM OR WRITE THE OUTPUT FOR THE PROGRAM BELOW, FOLLOWING THE
   TEACHER'S INSTRUCTIONS:

PROGRAM: (LEFT)   OUTPUT: (RIGHT)

10   REM   NAME AND ADDRESS PROGRAM   _____

20   PRINT "<SHIFT/CLR-HOME>"   _____

30   PRINT "<FIRST AND LAST NAME>"   _____

40   PRINT "<YOUR HOME ADDRESS>"   _____

50   PRINT "<CITY, STATE, ZIPCODE>"   _____

60   END   _____

2. ENTER THE PROGRAM OR WRITE THE OUTPUT FOR THE PROGRAM BELOW, FOLLOWING THE
   TEACHER'S INSTRUCTIONS:

PROGRAM: (RIGHT)   OUTPUT: (LEFT)

10   REM   NAME AND ADDRESS PROGRAM   _____

20   PRINT "<SHIFT/CLR-HOME>"   _____

30   PRINT "<FIRST AND LAST NAME>"   _____

40   PRINT "<YOUR HOME ADDRESS>"   _____

50   PRINT "<CITY, STATE, ZIPCODE>"   _____

60   END   _____

G4.D04.W4.SC

GRADE 4 - DAY 4
COMPUTER LITERACY
WORKSHEET 4 - PAGE 2
STUDENT'S COPY

NAME _____   40

SECTION _____

3. ENTER THE PROGRAM OR WRITE THE PROGRAM FOR THE OUTPUT BELOW, FOLLOWING THE TEACHER'S INSTRUCTIONS:

PROGRAM: (LEFT)   OUTPUT: (RIGHT)

_____

_____

_____   COMMODORE COMPUTERS

_____   1200 WILSON DRIVE

_____   WEST CHESTER, PA.   19380

_____

4. ENTER THE PROGRAM OR WRITE THE PROGRAM FOR THE OUTPUT BELOW, FOLLOWING THE TEACHER'S INSTRUCTIONS:

PROGRAM: (RIGHT)   OUTPUT: (LEFT)

_____

_____

_____   APPLE COMPUTERS, INC

_____   20525 MARIANI AVENUE

_____   CUPERTINO, CA.   95014

_____

G4.D04.W4.SC

GRADE 4 - DAY 4
COMPUTER LITERACY
WORKSHEET 4
TEACHER'S COPY

41

NAME _____

SECTION _____

1. ENTER THE PROGRAM OR WRITE THE OUTPUT FOR THE PROGRAM BELOW, FOLLOWING THE TEACHER'S INSTRUCTIONS:

PROGRAM: (LEFT)   OUTPUT: (RIGHT)

10   REM   NAME AND ADDRESS PROGRAM   THIS LINE SHOULD BE BLANK_____

20   PRINT "<SHIFT/CLR-HOME>"   THIS LINE SHOULD BE BLANK_____

30   PRINT "<FIRST AND LAST NAME>"   FIRST AND LAST NAME_____

40   PRINT "<YOUR HOME ADDRESS>"   HOME ADDRESS_____

50   PRINT "<CITY, STATE, ZIPCODE>"   CITY, STATE, ZIPCODE_____

60   END   THIS LINE SHOULD BE BLANK_____

2. ENTER THE PROGRAM OR WRITE THE OUTPUT FOR THE PROGRAM BELOW, FOLLOWING THE TEACHER'S INSTRUCTIONS:

PROGRAM: (RIGHT)   OUTPUT: (LEFT)

10   REM   NAME AND ADDRESS PROGRAM   THIS LINE SHOULD BE BLANK_____

20   PRINT "<SHIFT/CLR-HOME>"   THIS LINE SHOULD BE BLANK_____

30   PRINT "<FIRST AND LAST NAME>"   FIRST AND LAST NAME_____

40   PRINT "<YOUR HOME ADDRESS>"   HOME ADDRESS_____

50   PRINT "<CITY, STATE, ZIPCODE>"   CITY, STATE, ZIPCODE_____

60   END   THIS LINE SHOULD BE BLANK_____

GRADE 4 - DAY 4
COMPUTER LITERACY
WORKSHEET 4 - PAGE 2
TEACHER'S COPY

42

NAME _____

SECTION _____

3. ENTER THE PROGRAM OR WRITE THE PROGRAM FOR THE OUTPUT BELOW, FOLLOWING THE
   TEACHER'S INSTRUCTIONS:

PROGRAM: (LEFT)   OUTPUT: (RIGHT)

 10 REM NAME AND ADDRESS PROGRAM

 20 PRINT "<SHIFT/CLR-HOME>"

 30 PRINT "COMMODORE COMPUTERS"   COMMODORE COMPUTERS

 40 PRINT "1200 WILSON DRIVE"   1200 WILSON DRIVE

 50 ? "WEST CHESTER, PA. 19380"   WEST CHESTER, PA.   19380

 60 END

4. ENTER THE PROGRAM OR WRITE THE PROGRAM FOR THE OUTPUT BELOW, FOLLOWING THE
   TEACHER'S INSTRUCTIONS:

PROGRAM: (RIGHT)   OUTPUT: (LEFT)

 10 REM NAME AND ADDRESS PROGRAM

 20 PRINT "<SHIFT/CLR-HOME>"

 30 PRINT "APPLE COMPUTERS, INC"   APPLE COMPUTERS, INC

 40 PRINT "20525 MARIANI AVENUE"   20525 MARIANI AVENUE

 50 PRINT "CUPERTINO, CA.   95014"   CUPERTINO, CA.   95014

 60 END

LESSON PLAN

```
;-----------------------------------------------------------------------;
;GRADE 4 - DAY 5                                                        ;
;COMPUTER LITERACY                                                      ;
;TEACHER'S LESSON PLAN                                                  ;
;-----------------------------------------------------------------------;
;INSTRUCTIONAL AIDS:              ;TOOLS, EQUIPMENT AND MATERIALS:       ;
;                                 ;                                      ;
; COPIES OF THE NECESSARY HANDOUTS; PENCILS                              ;
; COPIES OF THE TEST - 2 PAGES    ;                                      ;
; TEST 1 - DAY 5                  ;                                      ;
;                                 ;                                      ;
;-----------------------------------------------------------------------;
;OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,    ;
;STUDENT EVALUATION, ADDITIONAL TOPIC                                   ;
;-----------------------------------------------------------------------;
```

OBJECTIVE FOR THE DAY:

THE STUDENTS WILL REVIEW WITH THE TEACHER THE COMPUTER PROGRAMMING SKILLS AND
TAKE A TEST. THE STUDENTS WILL BE GIVEN THE INSTRUCTIONS FOR THE GRAPHICS
PROGRAMS THAT THE STUDENTS WILL BE LEARNING DURING THE NEXT WEEK.

INTRODUCTION:

REVIEW WITH THE STUDENTS THE MATERIAL COVERED AT THE PREVIOUS CLASSES AND GIVE
A TEST IN THE HOMEROOM.

PRESENTATION:

DISTRIBUTE COPIES OF:

TEST #1 (G4.D05.T1.SC)

ADMINISTER THE TEST.
INSTRUCTIONS FOR THE MATCHING SECTION:
"THERE ARE 12 DEFINITIONS AND 12 WORDS. WRITE THE LETTER A - L ON THE LINE
NEXT TO THE CORRECT DEFINITION. EACH LINE IS WORTH ONE POINT."
INSTRUCTIONS FOR THE TRUE AND FALSE SECTION:
"THERE ARE 6 TRUE OR FALSE QUESTIONS. WRITE A "T" OR A "F" ON THE LINE NEXT TO
THE PROBLEM NUMBER. EACH LINE IS WORTH ONE POINT."
INSTRUCTIONS FOR PAGE TWO OF THE TEST:
"THE FIRST PROBLEM IS WORTH 17 POINTS. YOU HAVE BEEN GIVEN THE OUTPUT TO A
PROGRAM. YOU ARE TO WRITE OUT THE ENTIRE PROGRAM. THE POINTS FOR EACH LINE
ARE: 3,4,4,4,4 AND 2. THE SECOND PROBLEM IS WORTH 15 POINTS. YOU HAVE BEEN
GIVEN A PROGRAM. YOU ARE TO WRITE THE OUTPUT ONLY. THE POINTS FOR EACH LINE
ARE: 2,2,3,3,3 AND 2."

WHEN THE STUDENTS TURN IN THEIR TESTS, DISTRIBUTE COPIES OF:

STUDENT HANDOUT #2 (G4.D06.SH2.CC)
STUDENT HANDOUT #3 (G4.D06.SH3.PC)

G4.D05.LP.TC

LESSON PLAN
CONTINUED
PAGE 2

```
GRADE 4 - DAY 5
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC
```

SUMMARY:

IF THERE IS TIME AVAILABLE, YOU COULD GO OVER THE TEST.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING INDEPENDENTLY ON A TEST.

STUDENT EVALUATION:

THE STUDENTS' TESTS WILL BE EVALUATED GIVING THE APPROPRIATE POINT VALUE FOR
EACH CORRECT ANSWER.

ADDITIONAL TOPIC:

TALK ABOUT THE TOPIC FOR DAY 6 WHICH IS THE USE OF THE COLOR GRAPHICS COMMANDS.
MENTION THE USE OF THE KEY MARKED "CTRL" AND THE NUMBERS 1 THROUGH 9. REMIND
THEM TO REVIEW THE STUDENT HANDOUT #1 REGARDING THE KEYBOARD AND THE TWO NEW
STUDENT HANDOUTS GIVEN TO THEM AFTER THE TEST.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G4.D05.LP.TC

GRADE 4 - DAY 5
COMPUTER LITERACY
TEST #1 - DAY 5
STUDENT'S COPY

NAME _____

SECTION _____

45

MATCHING: LISTEN TO THE TEACHER'S INSTRUCTIONS.

_____ 1. THE NAME OF THE COMPUTER LANGUAGE USED
        IN THIS CLASS.

_____ 2. FIVE MAIN PARTS OF A MICROCOMPUTER
        USED IN THIS MINI-COURSE.

_____ 3.

_____ 4.

_____ 5.

_____ 6.

_____ 7. THE KEY YOU MUST PRESS TO ENTER
        INFORMATION INTO THE COMPUTER'S MEMORY.

_____ 8. THE COMMAND THAT SHOWS YOU THE PROGRAM
        THAT IS IN THE COMPUTER'S MEMORY.

_____ 9. THE COMMAND THAT EXECUTES (OR CARRIES OUT)
        THE PROGRAM IN THE COMPUTER'S MEMORY.

_____10. THE COMMAND THAT ERASES THE PROGRAM
        IN THE COMPUTER'S MEMORY.

_____11. IT MUST APPEAR AT THE BEGINNING OF EACH
        LINE OF A PROGRAM.

_____12. A MACHINE WHICH PERFORMS TASKS AT A HIGH
        RATE OF SPEED WITH GREAT ACCURACY.

A.   DISK DRIVE

B.   COMPUTER

C.   BASIC

D.   MONITOR

E.   RETURN

F.   RUN

G.   MEMORY

H.   LINE NUMBER

I.   LIST

J.   KEYBOARD

K.   NEW

L.   CPU

TRUE OR FALSE: LISTEN TO THE TEACHER'S INSTRUCTIONS.

_____13. PRESSING ONLY THE CLR-HOME KEY CLEARS THE SCREEN AND SENDS THE CURSOR
        TO THE UPPER LEFT CORNER.

_____14. A PROGRAM IS A LIST OF INSTRUCTIONS (STATEMENTS) FOR THE COMPUTER TO
        FOLLOW.

_____15. THE WORD THAT IS FOUND IN THE LAST LINE OF A PROGRAM IS: "STOP".

_____16. THE MESSAGE THE COMPUTER PRINTS WHEN IT DOES NOT UNDERSTAND YOU IS:
        "?SYNTAX ERROR".

_____17. THE LITTLE SQUARE THAT MOVES ALONG THE SCREEN SHOWING WHERE THE NEXT
        LETTER YOU TYPE GOES IS CALLED THE CURSOR.

_____18. ALL COMMANDS ARE THE SAME FOR ANY COMPUTER.

G4.D05.T1.SC

GRADE 4 - DAY 5
COMPUTER LITERACY
TEST #1 - DAY 5
STUDENT'S COPY - PAGE 2

46

NAME _____

SECTION _____

PROGRAMMING: LISTEN TO THE TEACHER'S INSTRUCTIONS.

19-35. WRITE THE <u>ENTIRE PROGRAM</u> FROM THE FOLLOWING OUTPUT:

COMMODORE COMPUTERS

1200 WILSON DRIVE

WEST CHESTER, PA.   19380

36-50. WRITE THE OUTPUT <u>ONLY</u> FROM THE FOLLOWING PROGRAM:

```
10 REM NAME AND ADDRESS PROGRAM

20 PRINT "<SHIFT/CLR-HOME>"

30 PRINT "APPLE COMPUTERS, INC"

40 PRINT "20525 MARIANI AVENUE"

50 PRINT "CUPERTINO, CA.    95014"

60 END
```

GRADE 4 - DAY 5
COMPUTER LITERACY
TEST #1 - DAY 5
TEACHER'S COPY

NAME _____

SECTION _____

47

MATCHING: LISTEN TO THE TEACHER'S INSTRUCTIONS.

_C_ 1. THE NAME OF THE COMPUTER LANGUAGE USED
    IN THIS CLASS.

_J_ 2. FIVE MAIN PARTS OF A MICROCOMPUTER
    USED IN THIS MINI-COURSE.

_D_ 3.

_A_ 4.

_G_ 5.

_L_ 6.

_E_ 7. THE KEY YOU MUST PRESS TO ENTER
    INFORMATION INTO THE COMPUTER'S MEMORY.

_I_ 8. THE COMMAND THAT SHOWS YOU THE PROGRAM
    THAT IS IN THE COMPUTER'S MEMORY.

_F_ 9. THE COMMAND THAT EXECUTES (OR CARRIES OUT)
    THE PROGRAM IN THE COMPUTER'S MEMORY.

_K_ 10. THE COMMAND THAT ERASES THE PROGRAM
    IN THE COMPUTER'S MEMORY.

_H_ 11. IT MUST APPEAR AT THE BEGINNING OF EACH
    LINE OF A PROGRAM.

_B_ 12. A MACHINE WHICH PERFORMS TASKS AT A HIGH
    RATE OF SPEED WITH GREAT ACCURACY.

A.   DISK DRIVE

B.   COMPUTER

C.   BASIC

D.   MONITOR

E.   RETURN

F.   RUN

G.   MEMORY

H.   LINE NUMBER

I.   LIST

J.   KEYBOARD

K.   NEW

L.   CPU

TRUE OR FALSE: LISTEN TO THE TEACHER'S INSTRUCTIONS.

_F_ 13. PRESSING ONLY THE CLR-HOME KEY CLEARS THE SCREEN AND SENDS THE CURSOR
    TO THE UPPER LEFT CORNER.

_T_ 14. A PROGRAM IS A LIST OF INSTRUCTIONS (STATEMENTS) FOR THE COMPUTER TO
    FOLLOW.

_F_ 15. THE WORD THAT IS FOUND IN THE LAST LINE OF A PROGRAM IS: "STOP".

_T_ 16. THE MESSAGE THE COMPUTER PRINTS WHEN IT DOES NOT UNDERSTAND YOU IS:
    "?SYNTAX ERROR".

_T_ 17. THE LITTLE SQUARE THAT MOVES ALONG THE SCREEN SHOWING WHERE THE NEXT
    LETTER YOU TYPE GOES IS CALLED THE CURSOR.

_F_ 18. ALL COMMANDS ARE THE SAME FOR ANY COMPUTER.

GRADE 4 - DAY 5
COMPUTER LITERACY
TEST #1 - DAY 5
TEACHER'S COPY - PAGE 2

NAME _____

SECTION _____

48

PROGRAMMING: LISTEN TO THE TEACHER'S INSTRUCTIONS.

19-35. WRITE THE ENTIRE PROGRAM FROM THE FOLLOWING OUTPUT:

10 REM NAME OF PROGRAM   (3 PTS)

20 ? "<SHIFT/CLR-HOME>"   (4 PTS)

COMMODORE COMPUTERS

30 ? "COMMODORE COMPUTERS" (4 PTS)

1200 WILSON DRIVE

40 ? "1200 WILSON DRIVE"   (4 PTS)

WEST CHESTER, PA.   19380

50 ?"WEST CHESTER,PA.19380"(4 PTS)

60 END   (2 PTS)

TOTAL: (17 PTS)

36-50. WRITE THE OUTPUT ONLY FROM THE FOLLOWING PROGRAM:

(2 PTS) THIS LINE IS BLANK   10 REM NAME AND ADDRESS PROGRAM

(2 PTS) THIS LINE IS BLANK   20 PRINT "<SHIFT/CLR-HOME>"

(3 PTS) APPLE COMPUTERS, INC   30 PRINT "APPLE COMPUTERS, INC"

(3 PTS) 20525 MARIANI AVENUE   40 PRINT "20525 MARIANI AVENUE"

(3 PTS) CUPERTINO, CA. 95014   50 PRINT "CUPERTINO, CA.   95014"

(2 PTS) THIS LINE IS BLANK   60 END

TOTAL: (15 PTS)

SUGGESTED GRADING:

A = 45 TO 50 PTS
B = 40 TO 44 PTS
C = 35 TO 39 PTS
D = 30 TO 34 PTS
F = 0 TO 29 PTS

<u>LESSON PLAN</u>

```
,----------------------------------------------------------------------,
| ,------------------------------------------------------------------, |
| GRADE 4 - DAY 6                                                       |
| COMPUTER LITERACY                                                     |
| TEACHER'S LESSON PLAN                                                 |
| ,------------------------------------------------------------------, |
| INSTRUCTIONAL AIDS:              | TOOLS, EQUIPMENT AND MATERIALS:    |
|                                  |                                    |
|  COPIES OF THE NECESSARY HANDOUTS|  CHALK, ERASER AND PENCILS         |
|                                  |                                    |
|                                  |                                    |
|                                  |                                    |
| ,------------------------------------------------------------------, |
| OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,  |
| STUDENT EVALUATION, ADDITIONAL TOPIC                                  |
| ,------------------------------------------------------------------, |
'----------------------------------------------------------------------'
```

<u>OBJECTIVE FOR THE DAY</u>:

THE STUDENTS WILL LEARN THE TERMS NECESSARY TO CREATE GRAPHICS PROGRAMS, LEARN HOW TO USE THE CONTROL KEYS TO ENTER COLOR COMMANDS, AND BE PREPARED FOR A QUIZ ON DAY 7.

<u>INTRODUCTION</u>:

MOVE THE CLASS TO THE COMPUTER ROOM AND PROCEED WITH THE LESSON FOR THE DAY.

<u>PRESENTATION</u>:

DISTRIBUTE COPIES OF:

STUDENT HANDOUT #2 (G4.D06.SH2.CC)
STUDENT HANDOUT #3 (G4.D06.SH3.PC)
WORKSHEET #6

CREATING A COLOR BAR:

THE PURPOSE OF THIS SECTION OF THE WORKSHEET IS TO GIVE THE STUDENTS AN OPPORTUNITY TO BECOME FAMILIAR WITH THE LOCATION AND USE OF THE CONTROL KEYS. WHEN THE STUDENTS COMPLETE THIS SECTION THEY SHOULD HAVE EIGHT COLOR BARS ON THE SCREEN FOR YOU TO CHECK.

COLOR GRAPHICS PROGRAMMING:

THE PURPOSE OF THIS SECTION OF THE WORKSHEET IS TO GIVE THE STUDENTS AN OPPORTUNITY TO BECOME FAMILIAR WITH HOW TO USE THE PREVIOUSLY LEARNED COMMANDS WITH A PROGRAM. WHEN YOU GET TO LINES 40 - 60, IN SMALL GROUPS SHOW THE STUDENTS HOW TO COPY LINES BY USING LINE 30 AND DUPLICATING IT THREE TIMES. WHEN THE STUDENTS COMPLETE THIS SECTION, THEY SHOULD HAVE A PROGRAM THAT WILL HAVE AN OUTPUT OF: BACKGROUND IN ORANGE, AND EIGHT COLOR BARS.

G4.D06.LP.TC

LESSON PLAN
CONTINUED
CONTINUED
PAGE 2

GRADE 4 - DAY 6
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING TODAY'S CLASS MEETING.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF FIVE POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

ADDITIONAL TOPIC:

EMPHASIZE THE COMMANDS LEARNED TODAY, SO THE STUDENTS WILL BE READY FOR THE
QUIZ AT THE NEXT CLASS MEETING.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G4.D06.LP.TC

GRADE 4 - DAY 6
COMPUTER LITERACY
STUDENT HANDOUT #2
COLOR CODES

51

NAME _____

SECTION _____

PRESS	COLOR	DISPLAY
CTRL 1	BLACK	
CTRL 2	WHITE	
CTRL 3	RED	
CTRL 4	CYAN	
CTRL 5	PURPLE	
CTRL 6	GREEN	
CTRL 7	BLUE	
CTRL 8	YELLOW	
CTRL 9	REVERSE ON	
CTRL Ø	REVERSE OFF	

G4.D06.SH2.CC

GRADE 4 - DAY 6
COMPUTER LITERACY
STUDENT HANDOUT #3
POKE COLOR CODES

NAME _____

SECTION _____

NUMBER: COLOR:

        0   BLACK

        1   WHITE

        2   RED

        3   CYAN   (DARK BLUE)

        4   PURPLE

        5   GREEN

        6   BLUE

        7   YELLOW

CREATING A COLOR BAR:

1. CLEAR THE SCREEN BY ENTERING THE <SHIFT/CLR-HOME> COMMAND. FIND THE KEY
    WITH LETTERS: "CTRL" ON IT. PRESS THIS BUTTON AND HOLD IT DOWN WHILE
    PRESSING THE KEY WITH THE NUMBER 9 ON IT. AGAIN, WHILE HOLDING THE "CTRL"
    KEY DOWN, PRESS THE KEY WITH THE NUMBER 1 ON IT. THEN PRESS THE SPACE BAR
    FIVE TIMES.

2. REPEAT THE STEPS ABOVE FOR THE NUMBERS 2 THROUGH 8. TAKE TURNS ENTERING
    INFORMATION INTO THE COMPUTER. THE TEACHER WILL BE AVAILABLE TO ASSIST
    YOU.

3. RAISE YOUR HAND TO HAVE YOUR WORK CHECKED.

COLOR GRAPHICS PROGRAMMING:

1. CLEAR THE SCREEN AND CLEAR MEMORY BY ENTERING THE PROPER COMMANDS.

2. ENTER THE FOLLOWING PROGRAM:

```
10    REM           <PROGRAM NAME>
15    REM        <YOUR NAME AND SECTION>
20    PRINT "<SHIFT/CLR-HOME>"
25    POKE  53280,8 : POKE  53281,8
30    PRINT
```

3. RAISE YOUR HAND FOR THE TEACHER'S ASSISTANCE.

```
40
50
60
```

4. ENTER "RUN" AFTER COMPLETING EACH OF THE FOLLOWING LINES OF PROGRAMMING:

```
70    PRINT "<C9><C1><5 SPACES><C0>"

80    PRINT "<C9><C2><5 SPACES><C0>"

90    PRINT "<C9><C3><5 SPACES><C0>"

100   PRINT "<C9><C4><5 SPACES><C0>"

110   PRINT "<C9><C5><5 SPACES><C0>"

120   PRINT "<C9><C6><5 SPACES><C0>"

130   PRINT "<C9><C7><5 SPACES><C0>"

140   PRINT "<C9><C8><5 SPACES><C0>"

150   END
```


G4.D06.W6.SC

GRADE 4 - DAY 6
COMPUTER LITERACY
WORKSHEET 6
TEACHER'S COPY

NAME _____

SECTION _____

54

CREATING A COLOR BAR:

1. CLEAR THE SCREEN BY ENTERING THE <SHIFT/CLR-HOME> COMMAND. FIND THE KEY
   WITH LETTERS: "CTRL" ON IT. PRESS THIS BUTTON AND HOLD IT DOWN WHILE
   PRESSING THE KEY WITH THE NUMBER 9 ON IT. AGAIN, WHILE HOLDING THE "CTRL"
   KEY DOWN, PRESS THE KEY WITH THE NUMBER 1 ON IT. THEN PRESS THE SPACE BAR
   FIVE TIMES.

2. REPEAT THE STEPS ABOVE FOR THE NUMBERS 2 THROUGH 8. TAKE TURNS ENTERING
   INFORMATION INTO THE COMPUTER. THE TEACHER WILL BE AVAILABLE TO ASSIST
   YOU.

3. RAISE YOUR HAND TO HAVE YOUR WORK CHECKED.

COLOR GRAPHICS PROGRAMMING:

1. CLEAR THE SCREEN AND CLEAR MEMORY BY ENTERING THE PROPER COMMANDS.

2. ENTER THE FOLLOWING PROGRAM:

```
10   REM        <PROGRAM NAME>
15   REM     <YOUR NAME AND SECTION>
20   PRINT "<SHIFT/CLR-HOME>"
25   POKE  53280,8 : POKE  53281,8
30   PRINT
```

3. RAISE YOUR HAND FOR THE TEACHER'S ASSISTANCE.

```
40   PRINT        SHOW THE STUDENTS HOW TO DUPLICATE LINES BY COPYING LINE 30
50   PRINT        ONTO LINES 40 - 60.
60   PRINT
```

4. ENTER "RUN" AFTER COMPLETING EACH OF THE FOLLOWING LINES OF PROGRAMMING:

```
70   PRINT "<C9><C1><5 SPACES><C0>"

80   PRINT "<C9><C2><5 SPACES><C0>"

90   PRINT "<C9><C3><5 SPACES><C0>"

100  PRINT "<C9><C4><5 SPACES><C0>"

110  PRINT "<C9><C5><5 SPACES><C0>"

120  PRINT "<C9><C6><5 SPACES><C0>"

130  PRINT "<C9><C7><5 SPACES><C0>"

140  PRINT "<C9><C8><5 SPACES><C0>"

150  END
```

G4.D06.W6.TC

LESSON PLAN

```
GRADE 4 - DAY 7
COMPUTER LITERACY
TEACHER'S LESSON PLAN
```

INSTRUCTIONAL AIDS:	TOOLS, EQUIPMENT AND MATERIALS:
COPIES OF THE NECESSARY HANDOUTS AND QUIZ 4 - DAY 7	CHALK, ERASER AND PENCILS

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT, STUDENT EVALUATION, ADDITIONAL TOPIC

OBJECTIVE FOR THE DAY:

THE STUDENTS WILL WORK ON A GRAPHICS PROGRAM CALLED HELLO AND BE PREPARED FOR A TEST ON DAY 10. OPTIONAL: THE STUDENTS WILL LEARN HOW TO USE A DISK DRIVE.

INTRODUCTION:

REVIEW WITH THE STUDENTS THE MATERIAL COVERED AT THE PREVIOUS CLASS AND GIVE A QUIZ IN THE HOMEROOM.

PRESENTATION:

DISTRIBUTE COPIES OF:

WORKSHEET #7 (G4.D07.W7.SC)

HAVE THE STUDENTS ENTER THE PROGRAM FROM WORKSHEET #7.

REMIND THEM TO CHECK EACH LINE BY EXECUTING THE PROGRAM LINE BY LINE.

BEFORE THE END OF THE CLASS TIME, HAVE THE STUDENTS STOP WORKING AND GUIDE THEM THROUGH THE PROCESS OF SAVING THEIR WORK ON A DISK.

G4.D07.LP.TC

<u>LESSON PLAN</u>
CONTINUED
PAGE 2

```
GRADE 4 - DAY 7
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC
```

<u>SUMMARY</u>:

REVIEW THE MATERIAL DISCUSSED DURING TODAY'S CLASS MEETING.

<u>STUDENT INVOLVEMENT</u>:

THE STUDENTS WILL BE WORKING INDEPENDENTLY ON A QUIZ.
THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

<u>STUDENT EVALUATION</u>:

THE STUDENTS' QUIZZES WILL BE EVALUATED GIVING ONE POINT FOR EACH CORRECT
ANSWER.
THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF FIVE POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

<u>ADDITIONAL TOPIC</u>:

THE STUDENTS COULD WRITE A PROGRAM THAT WILL PRINT THEIR INITIALS.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G4.D07.LP.TC

NAME _____

SECTION _____

INSTRUCTIONS: FILL-IN THE BLANKS WITH THE CORRECT ANSWER/RESPONSE:

1. THE TWO KEYS PRESSED TO TURN ON THE REVERSE COLOR, (RVS ON), ARE:

   THE _____ KEY AND THE NUMBER _____ .

2. THE TWO KEYS PRESSED TO TURN OFF THE REVERSE COLOR, (RVS OFF), ARE:

   THE _____ KEY AND THE NUMBER _____ .

3. WRITE A LINE OF PROGRAMMING THAT WILL MAKE A RED COLOR BAR 5 SPACES LONG, A
   WHITE COLOR BAR 5 SPACES LONG AND A BLUE COLOR BAR 5 SPACES LONG.

SOME OF THE CODES YOU WILL NEED ARE:

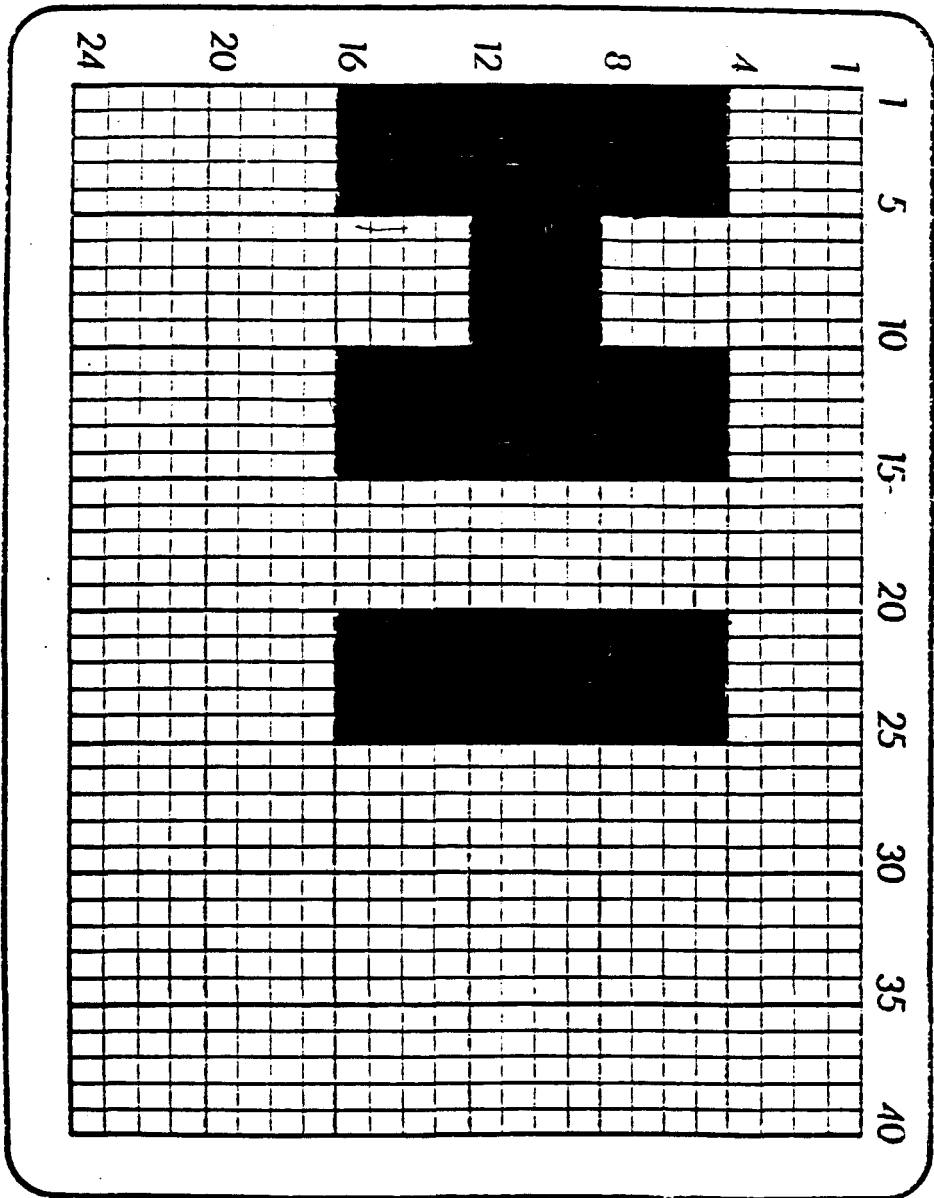<RED> ====> <C3>,   <WHITE> ====> <C2>,   <BLUE> ====> <C7>

_____

_____

NAME _____

SECTION _____

INSTRUCTIONS: FILL-IN THE BLANKS WITH THE CORRECT ANSWER/RESPONSE:

1. THE TWO KEYS PRESSED TO TURN ON THE REVERSE COLOR, (RVS ON), ARE:

    THE _____CONTROL_____ KEY AND THE NUMBER ____9____ .

2. THE TWO KEYS PRESSED TO TURN OFF THE REVERSE COLOR, (RVS OFF), ARE:

    THE _____CONTROL_____ KEY AND THE NUMBER ____0____ .

3. WRITE A LINE OF PROGRAMMING THAT WILL MAKE A RED COLOR BAR 5 SPACES LONG, A
    WHITE COLOR BAR 5 SPACES LONG AND A BLUE COLOR BAR 5 SPACES LONG.

SOME OF THE CODES YOU WILL NEED ARE:

<RED> ====> <C3>,   <WHITE> ====> <C2>,   <BLUE> ====> <C7>

 20 PRINT "<C9><C3><5 SPACES><C2><5 SPACES><C7><5 SPACES><C0>" (10 PTS)

_____

ENTER THE FOLLOWING PROGRAM:

```
10   REM  _____<PROGRAM NAME>_____
15   REM  _____<YOUR NAME AND SECTION>_____
20   PRINT "<SHIFT/CLR-HOME>"
25   POKE  53280,8 : POKE  53281,8
30   FOR X = 1 TO 4
40   PRINT
50   NEXT X
```

TYPE "RUN" AFTER COMPLETING EACH OF THE FOLLOWING LINES OF PROGRAMMING:

```
60   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

70   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

80   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

90   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"


100  PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"

110  PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"

120  PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"

130  PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"


140  PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

150  PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

160  PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

170  PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

180  END
```
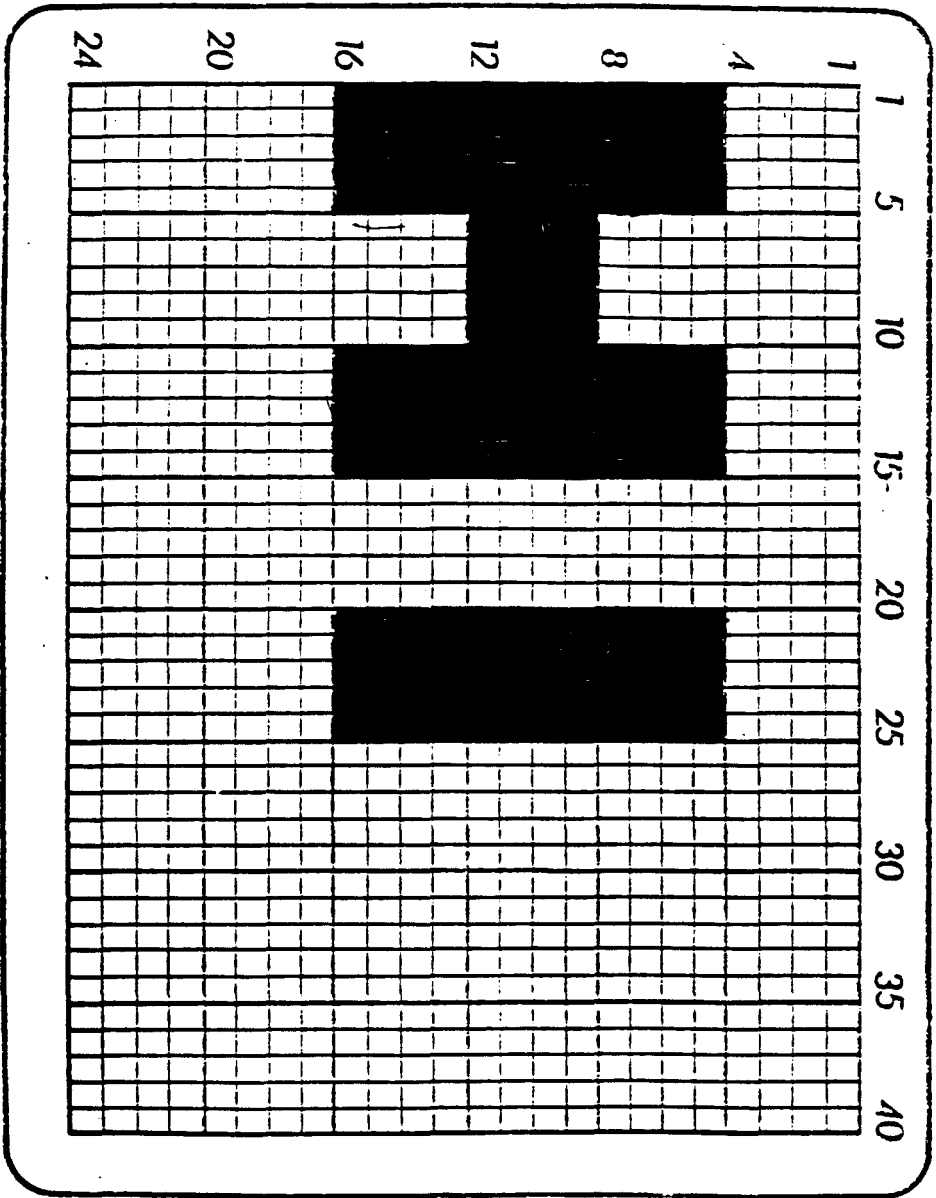
GRADE 4 - DAY 7
COMPUTER LITERACY
WORKSHEET 7
STUDENT'S COPY #2

60

NAME _____

SECTION _____

G4.D07.W7.SC2

ENTER THE FOLLOWING PROGRAM:

```
10    REM _____<HELLO PROGRAM>_____
15    REM _____<YOUR NAME AND SECTION>___
20    PRINT "<SHIFT/CLR-HOME>"
25    POKE  53280,8 : POKE  53281,8
30    FOR X = 1 TO 4
40    PRINT
50    NEXT X
```

TYPE "RUN" AFTER COMPLETING EACH OF THE FOLLOWING LINES OF PROGRAMMING:

```
60    PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
      <5 SPACES><C9><C1><5 SPACES><C0>"

70    PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
      <5 SPACES><C9><C1><5 SPACES><C0>"

80    PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
      <5 SPACES><C9><C1><5 SPACES><C0>"

90    PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
      <5 SPACES><C9><C1><5 SPACES><C0>"


100   PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"

110   PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"

120   PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"

130   PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"


140   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
      <5 SPACES><C9><C1><5 SPACES><C0>"

150   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
      <5 SPACES><C9><C1><5 SPACES><C0>"

160   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
      <5 SPACES><C9><C1><5 SPACES><C0>"

170   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
      <5 SPACES><C9><C1><5 SPACES><C0>"

180   END
```

LINES 60 THROUGH 90 AND 140 THROUGH 170 ARE ALL THE SAME AND CAN BE COPIED
INSTEAD OF TYPED IN INDIVIDUALLY. THE SAME IS TRUE FOR LINES 100 THROUGH 130.
TO COPY A LINE, ENTER THE LINE THE FIRST TIME, THEN CHANGE THE LINE NUMBER AND
PRESS THE RETURN KEY.

G4.D07.W7.TC

GRADE 4 - DAY 7
COMPUTER LITERACY
WORKSHEET 7
TEACHER'S COPY #2

62

NAME _____

SECTION _____

G4.D07.W7.TC2

LESSON PLAN

```
┌─────────────────────────────────────────────────────────────────────┐
│ GRADE 4 - DAY 8                                                       │
│ COMPUTER LITERACY                                                     │
│ TEACHER'S LESSON PLAN                                                 │
├───────────────────────────────────┬───────────────────────────────────┤
│ INSTRUCTIONAL AIDS:               │ TOOLS, EQUIPMENT AND MATERIALS:   │
│                                   │                                   │
│ COPIES OF THE NECESSARY HANDOUTS  │ CHALK, ERASER AND PENCILS         │
│                                   │                                   │
│                                   │                                   │
├───────────────────────────────────┴───────────────────────────────────┤
│ OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,   │
│ STUDENT EVALUATION, ADDITIONAL TOPIC                                   │
└─────────────────────────────────────────────────────────────────────┘
```

OBJECTIVE FOR THE DAY:

THE STUDENTS WILL WORK ON A GRAPHICS PROGRAM CALLED CLOWN AND BE PREPARED FOR A TEST ON DAY 10. OPTIONAL: THE STUDENTS WILL LEARN HOW TO USE A DISK DRIVE.

INTRODUCTION:

MOVE THE CLASS TO THE COMPUTER ROOM AND PROCEED WITH THE LESSON FOR THE DAY.

PRESENTATION:

DISTRIBUTE COPIES OF:

WORKSHEET #8 (G4.D08.W8.SC)

HAVE THE STUDENTS ENTER THE PROGRAM FROM WORKSHEET #8.

REMIND THE STUDENTS TO CHECK EACH LINE BY EXECUTING THE PROGRAM LINE BY LINE.

BEFORE THE END OF THE CLASS TIME, HAVE THE STUDENTS STOP WORKING AND GUIDE THEM THROUGH THE PROCESS OF SAVING THEIR WORK ON A DISK.

G4.D08.LP.TC

LESSON PLAN
CONTINUED
PAGE 2

GRADE 4 - DAY 8
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING THE COURSE AND REMIND THE STUDENTS TO
REVIEW ALL MATERIAL IN PREPARATION FOR A FINAL TEST ON DAY TEN.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF FIVE POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

ADDITIONAL TOPIC:

THE STUDENTS COULD WRITE A PROGRAM THAT WILL PRINT A CLOWN OF THEIR OWN DESIGN.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G4.D08.LP.TC

GRADE 4 - DAY 8
COMPUTER LITERACY
WORKSHEET 8
STUDENT'S COPY

65

NAME _____

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10    REM _____<PROGRAM NAME>_____

15    REM _____<YOUR NAME AND SECTION>___

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,6 : POKE  53281,6

30    FOR X = 1 TO 8

40    PRINT

50    NEXT X

60    PRINT "<17 SPACES><C9><C1><8 SPACES><C0>"

70    PRINT "<17 SPACES><C9><C1><8 SPACES><C0>"

80    PRINT "<15 SPACES><C9><C1><12 SPACES><C0>"

90    PRINT "<16 SPACES><C9><C2><10 SPACES><C0>"

100   PRINT "<16 SPACES><C9><C2><1 SPACE><C1><2 SPACES><C2><4 SPACES><C1>
      <2 SPACES><C2><1 SPACE><C0>"

110   PRINT "<16 SPACES><C9><C2><4 SPACES><C1><2 SPACES><C2><4 SPACES><C0>"

120   PRINT "<16 SPACES><C9><C2><2 SPACES><C1><1 SPACE><C2><4 SPACES><C1>
      <1 SPACE><C2><2 SPACES><C0>"

130   PRINT "<16 SPACES><C9><C2><3 SPACES><C1><4 SPACES><C2><3 SPACES><C0>"

140   PRINT "<16 SPACES><C9><C2><10 SPACES><C0>"

150   END
```
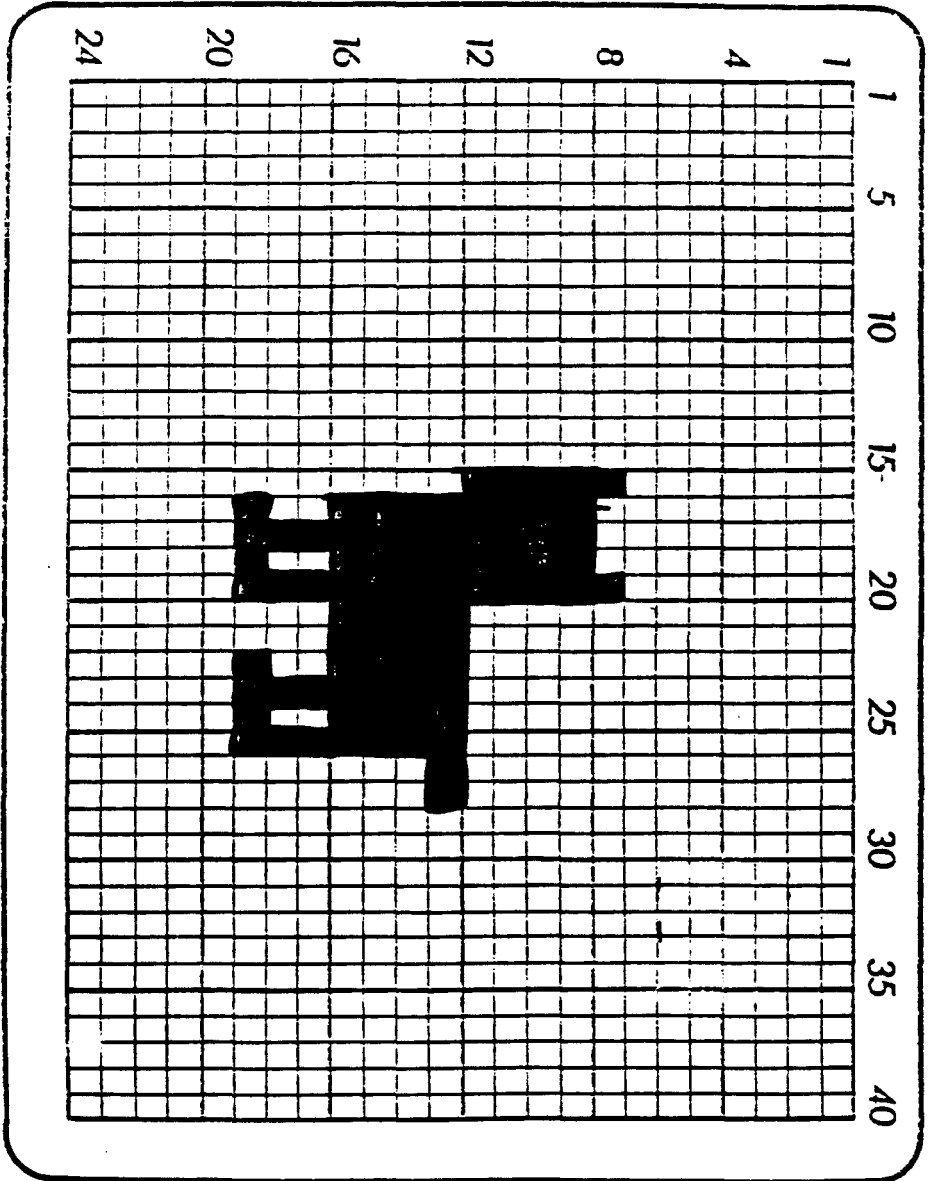
GRADE 4 - DAY 8
COMPUTER LITERACY
WORKSHEET 8
STUDENT'S COPY #2

NAME _____

SECTION _____

GRADE 4 - DAY 8
COMPUTER LITERACY
WORKSHEET 8
TEACHER'S COPY

NAME _____

67

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10   REM   <CLOWN PROGRAM WITH A FACE>

15   REM      <YOUR NAME AND SECTION>

20   PRINT "<SHIFT/CLR-HOME>"

25   POKE  53280,6 : POKE  53281,6

30   FOR X = 1 TO 8

40   PRINT

50   NEXT X

60   PRINT "<17 SPACES><C9><C1><8 SPACES><C0>"

70   PRINT "<17 SPACES><C9><C1><8 SPACES><C0>"

80   PRINT "<15 SPACES><C9><C1><12 SPACES><C0>"

90   PRINT "<16 SPACES><C9><C2><10 SPACES><C0>"

100  PRINT "<16 SPACES><C9><C2><1 SPACE><C1><2 SPACES><C2><4 SPACES><C1>
     <2 SPACES><C2><1 SPACE><C0>"

110  PRINT "<16 SPACES><C9><C2><4 SPACES><C1><2 SPACES><C2><4 SPACES><C0>"

120  PRINT "<16 SPACES><C9><C2><2 SPACES><C1><1 SPACE><C2><4 SPACES><C1>
     <1 SPACE><C2><2 SPACES><C0>"

130  PRINT "<16 SPACES><C9><C2><3 SPACES><C1><4 SPACES><C2><3 SPACES><C0>"

140  PRINT "<16 SPACES><C9><C2><10 SPACES><C0>"

150  END
```

G4.D08.W8.TC

GRADE 4 - DAY 8
COMPUTER LITERACY
WORKSHEET 8
TEACHER'S COPY #2

NAME _____

SECTION _____

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9
STUDENT'S COPY

69

NAME _____

SECTION _____
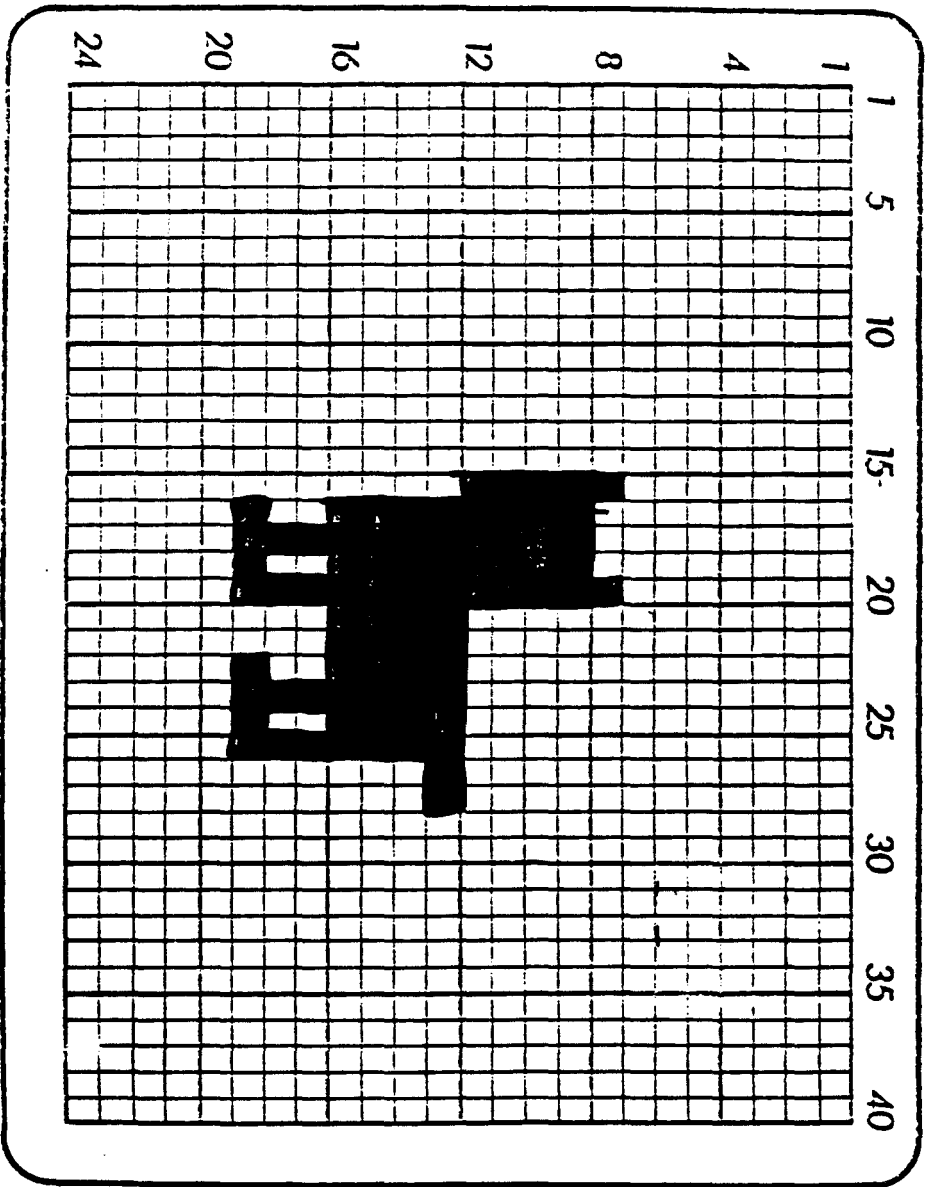
ENTER THE FOLLOWING PROGRAM:

```
10    REM _____<PROGRAM NAME>_____

15    REM _____<YOUR NAME AND SECTION>___

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,6 : POKE  53281,6

30    FOR X = 1 TO 7

40    PRINT

50    NEXT X

60    PRINT "<15 SP><C9><C1><1 SP><C7><3 SP><C1><1 SP><C0>"

70    FOR X = 1 TO 4

80    PRINT "<15 SP><C9><C1><5 SP><C0>"

90    NEXT X

95    PRINT "<16 SP><C9><C1><12 SP><C0>"

100   FOR X = 1 TO 3

110   PRINT "<16 SP><C9><C1><10 SP><C0>"

120   NEXT X

130   PRINT "<17 SP><C9><C1><1 SP><C7><1 SP><C1><1 SP><C7><3 SP><C1>
          <1 SP><C7><1 SP><C1><1 SP><C0>"

140   PRINT "<17 SP><C9><C1><1 SP><C7><1 SP><C1><1 SP><C7><3 SP><C1>
          <1 SP><C7><1 SP><C1><1 SP><C0>"

150   PRINT "<16 SP><C9><C1><4 SP><C7><2 SP><C1><4 SP><C0>"

160   END
```
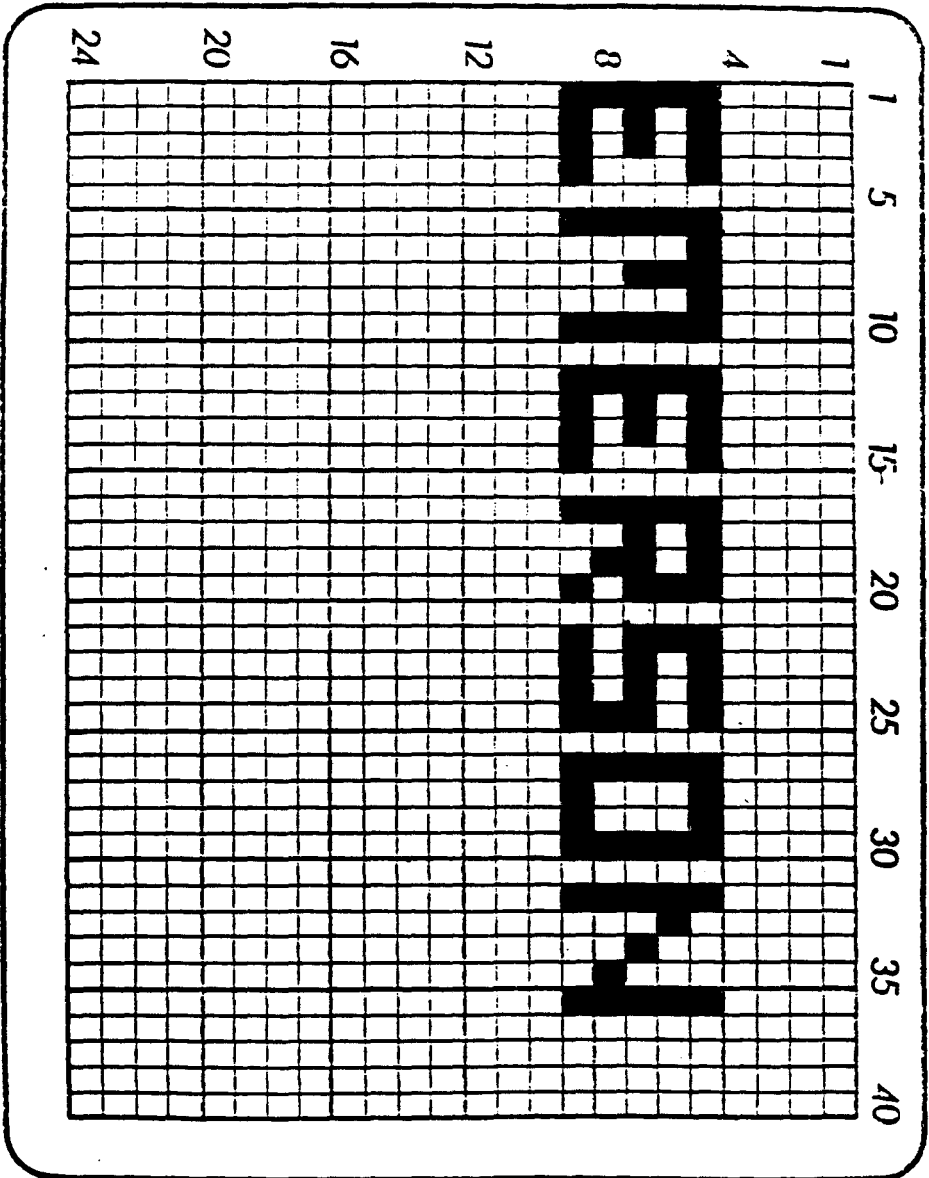
G4.D09.W9.SC

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9
STUDENT'S COPY #2

70

NAME _____

SECTION _____

G4.D09.W9.SC2

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9
TEACHER'S COPY

NAME _____

SECTION _____

71

ENTER THE FOLLOWING PROGRAM:

```
10    REM _____<PUPPY DOG>_____

15    REM ____<YOUR NAME AND SECTION>____

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,6 : POKE  53281,6

30    FOR X = 1 TO 7

40    PRINT

50    NEXT X

60    PRINT "<15 SP><C9><C1><1 SP><C7><3 SP><C1><1 SP><C0>"

70    FOR X = 1 TO 4

80    PRINT "<15 SP><C9><C1><5 SP><C0>"

90    NEXT X

95    PRINT "<16 SP><C9><C1><12 SP><C0>"

100   FOR X = 1 TO 3

110   PRINT "<16 SP><C9><C1><10 SP><C0>"

120   NEXT X

130   PRINT "<17 SP><C9><C1><1 SP><C7><1 SP><C1><1 SP><C7><3 SP><C1>
          <1 SP><C7><1 SP><C1><1 SP><C0>"

140   PRINT "<17 SP><C9><C1><1 SP><C7><1 SP><C1><1 SP><C7><3 SP><C1>
          <1 SP><C7><1 SP><C1><1 SP><C0>"

150   PRINT "<16 SP><C9><C1><4 SP><C7><2 SP><C1><4 SP><C0>"

160   END
```

NAME _____

SECTION _____

G4.D09.W9.TC2

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A FOR EMERSON
STUDENT'S COPY

73

NAME _____

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10    REM         <PROGRAM NAME>

15    REM      <YOUR NAME AND SECTION>

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,2 : POKE  53281,2

30    FOR X = 1 TO 4

40    PRINT

50    NEXT X

60    PRINT "<C9><C7><4 SP><C3><1 SP><C7><5 SP><C3><1 SP><C7><4 SP><C3>
      <1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7>
      <1 SP><C3><3 SP><C7><1 SP><C0>"

70    PRINT "<C9><C7><1 SP><C3><4 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3><2 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
      <1 SP><C7><2 SP><C3><2 SP><C7><1 SP><C0>"

80    PRINT "<C9><C7><3 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3><2 SP><C7><4 SP><C3><1 SP><C7>
      <4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C0>"

90    PRINT "<C9><C7><1 SP><C3><3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><5 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <2 SP><C7><2 SP><C0>"

100   PRINT "<C9><C7><4 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
      <1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
      <4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C0>"

110 END
```
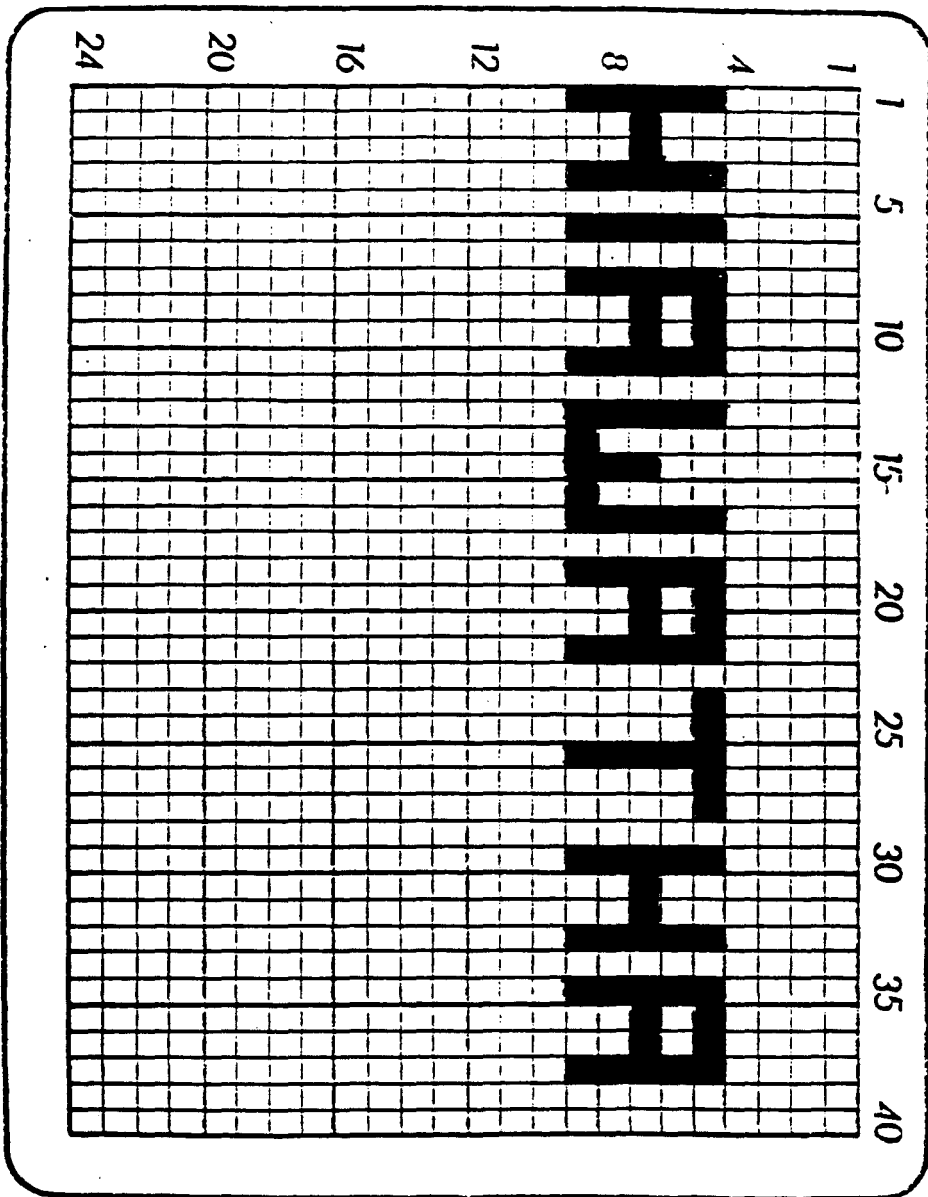
GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A
STUDENT'S COPY #2

NAME _____

SECTION _____

G4.D09.W9A.SC2

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A FOR HIAWATHA
STUDENT'S COPY

75

NAME _____

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10   REM  _____<PROGRAM NAME>_____

15   REM  ____<YOUR NAME AND SECTION>____

20   PRINT "<SHIFT/CLR-HOME>"

25   POKE  53280,2 : POKE  53281,2

30   FOR X = 1 TO 4

40   PRINT

50   NEXT X

60   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7>
     <4 SP><C3><1 SP><C7><5 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
     <1 SP><C7><4 SP><C0>"

70   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><3SP><C7><1 SP><C3>
     <3 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7>
     <1 SP><C0>"

80   PRINT "<C9><C7><4 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><4 SP><C3>
     <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
     <4 SP><C3><3 SP><C7><1 SP><C3><3 SP><C7><4 SP><C3><1 SP><C7><4 SP><C0>"

90   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
     <3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><2 SP><C7><1 SP><C0>"

100  PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><5 SP><C3><1 SP><C7>
     <1 SP><C3><2 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
     <2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C0>"

110 END
```
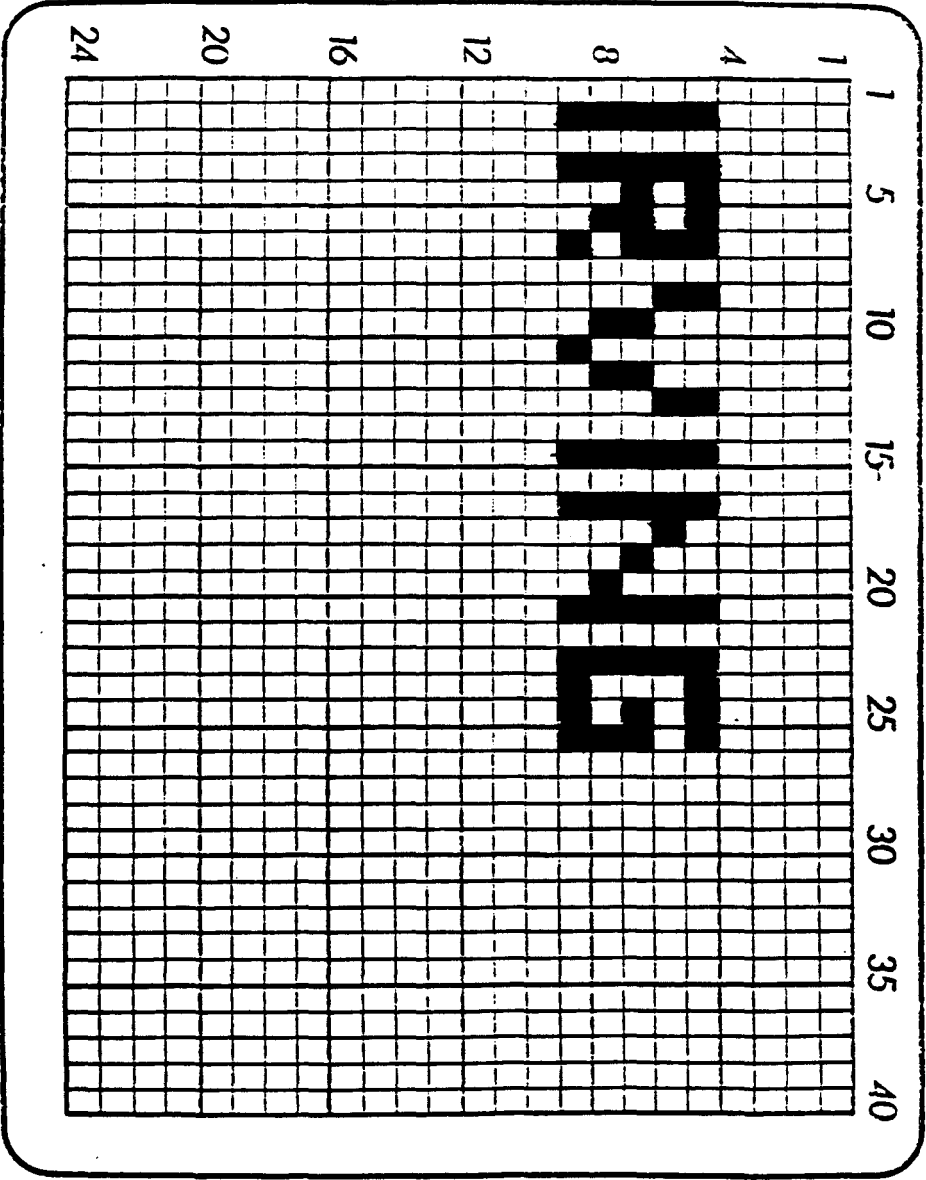
GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A
STUDENT'S COPY #2

NAME _____.

SECTION _____

G4.D09.W9A.SC2

ENTER THE FOLLOWING PROGRAM:

```
10   REM _____<PROGRAM NAME>_____

15   REM _____<YOUR NAME AND SECTION>_____

20   PRINT "<SHIFT/CLR-HOME>"

25   POKE  53280,2 : POKE  53281,2

30   FOR X = 1 TO 4

40   PRINT

50   NEXT X

60   PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1SP><C3>
     <3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
     <1 SP><C3><1 SP><C7><4 SP><C0>"

70   PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1SP><C3>
     <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
     <2 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C0>"

80   PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><4 SP><C3><2 SP><C7><1SP><C3>
     <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><2 SP><C0>"

90   PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1SP><C3>
     <3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><2 SP><C7><2 SP><C3><1 SP><C7><1 SP><C3><1 SP><2 SP><C7>
     <1 SP><C0>"

100  PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1SP><C7>
     <3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
     <1 SP><C3><1 SP><C7><4 SP><C0>"

110 END
```
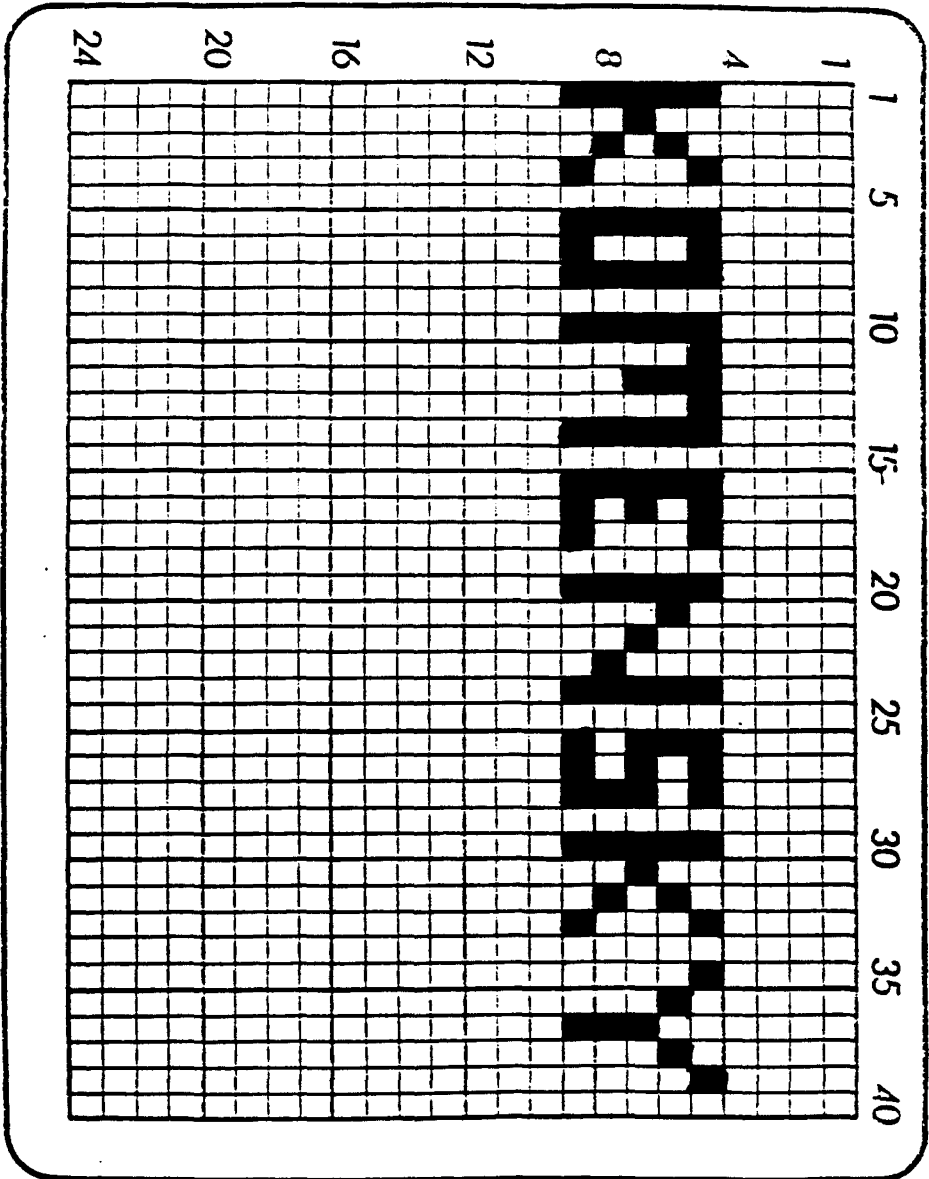
GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A
STUDENT'S COPY #2

78

NAME _____

SECTION _____

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A FOR KOMENSKY
STUDENT'S COPY

79

NAME _____

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10   REM _____<PROGRAM NAME>_____

15   REM ____<YOUR NAME AND SECTION>___

20   PRINT "<SHIFT/CLR-HOME>"

25   POKE  53280,2 : POKE  53281,2

30   FOR X = 1 TO 4

40   PRINT

50   NEXT X

60   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3>
     <1 SP><C7><5 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
     <1 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C0>"

70   PRINT "<C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><2 SP><C3><2 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C0>"

80   PRINT "<C9><C7><2 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C7><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
     <2 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><3 SP><C3><1 SP><C7><2 SP><C3><5 SP><C7><1 SP><C0>"

90   PRINT "<C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><3 SP><C7><1 SP><C3><2 SP><C7><2 SP><C3><3 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C0>"

100  PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3>
     <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7>
     <1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7><1 SP><C3>
     <2 SP><C7><1 SP><C3><3 SP><C7><1 SP><C0>"

110 END
```
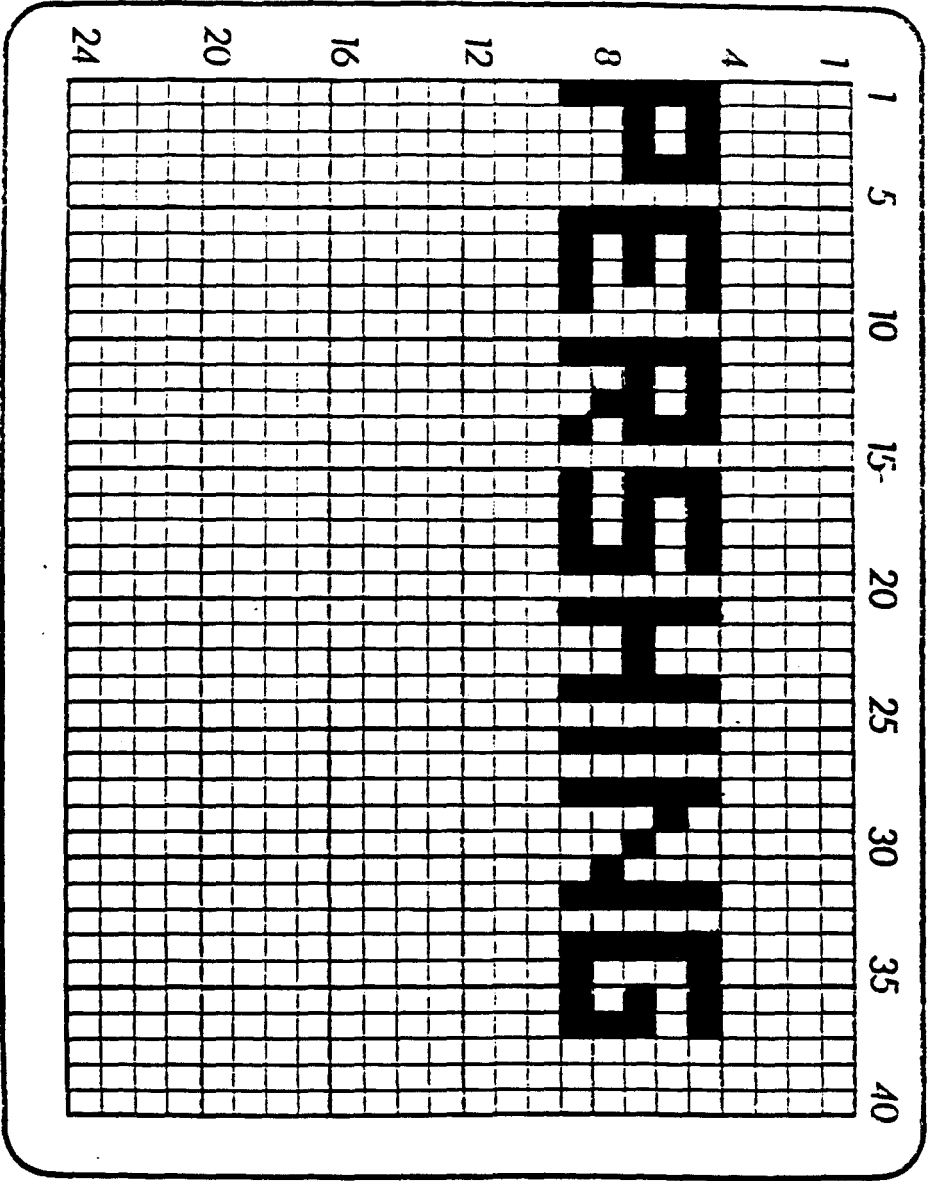
GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A
STUDENT'S COPY #2

80

NAME _____

SECTION _____

G4.D09.W9A.SC2

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A FOR PERSHING
STUDENT'S COPY

81

NAME _____

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10   REM    _____<PROGRAM NAME>_____

15   REM    ____<YOUR NAME AND SECTION>__

20   PRINT "<SHIFT/CLR-HOME>"

25   POKE  53280,2 : POKE  53281,2

30   FOR X = 1 TO 4

40   PRINT

50   NEXT X

60   PRINT "<C9><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3>
     <1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><4 SP><C0>"

70   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <4 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7>
     <1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><2 SP><C3>
     <2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C0>"

80   PRINT "<C9><C7><4 SP><C3><1 SP><C7><3 SP><C3><2 SP><C7><4 SP><C3>
     <1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><2 SP><C0>"

90   PRINT "<C9><C7><1 SP><C3><4 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><5 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><2 SP><C3>
     <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C0>"

100  PRINT "<C9><C7><1 SP><C3><4 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3>
     <2 SP><C7><1 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
     <1 SP><C7><4 SP><C0>"

110 END
```
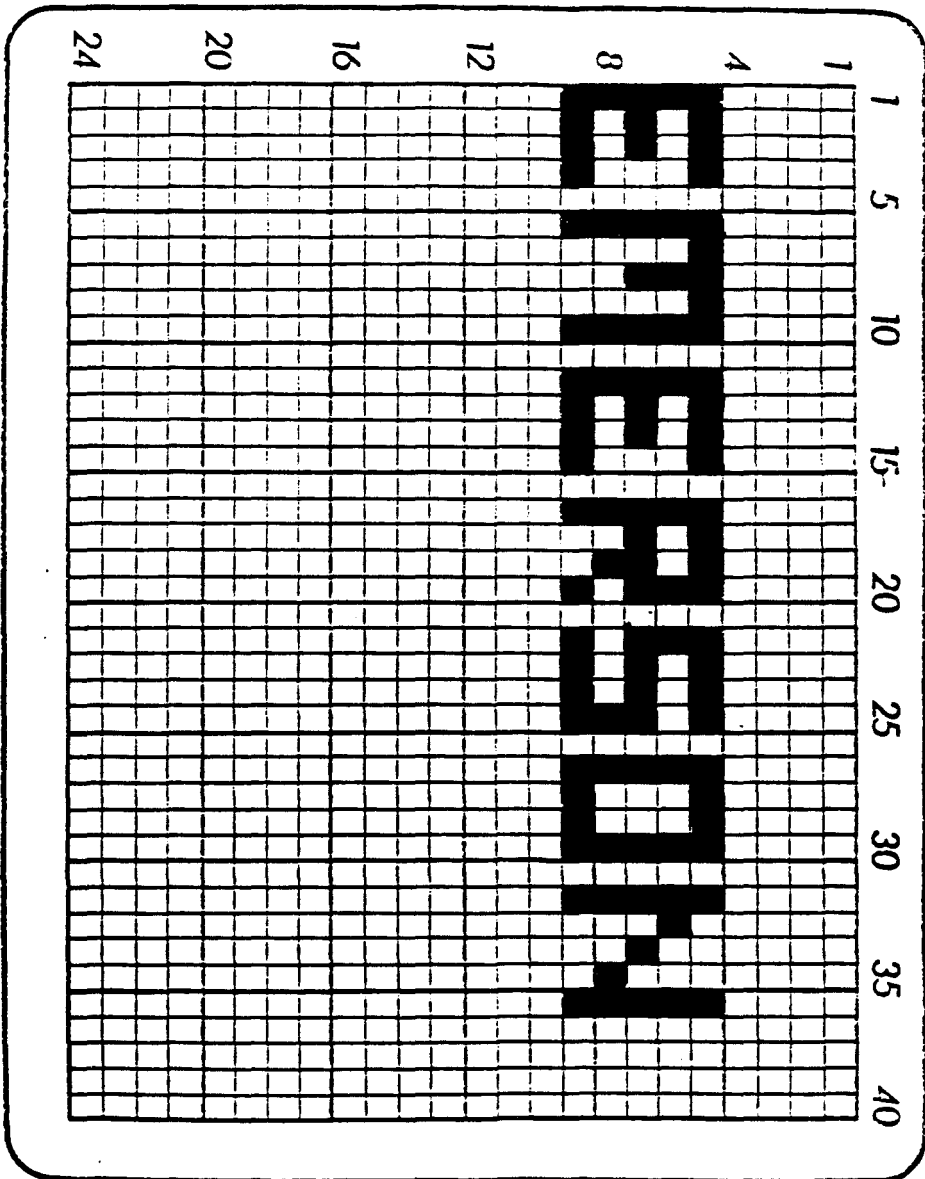
GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A
STUDENT'S COPY #2

NAME _____

SECTION _____

G4.D09.W9A.SC2

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A FOR EMERSON
TEACHER'S COPY

NAME _____

SECTION _____

83

ENTER THE FOLLOWING PROGRAM:

```
10   REM    EMERSON SCHOOL PROGRAM

15   REM       <YOUR NAME AND SECTION>

20   PRINT "<SHIFT/CLR-HOME>"

25   POKE  53280,2 : POKE  53281,2

30   FOR X = 1 TO 4

40   PRINT

50   NEXT X

60   PRINT "<C9><C7><4 SP><C3><1 SP><C7><5 SP><C3><1 SP><C7><4 SP><C3>
     <1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7>
     <1 SP><C3><3 SP><C7><1 SP><C0>"

70   PRINT "<C9><C7><1 SP><C3><4 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3><2 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
     <1 SP><C7><2 SP><C3><2 SP><C7><1 SP><C0>"

80   PRINT "<C9><C7><3 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3><2 SP><C7><4 SP><C3><1 SP><C7>
     <4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C0>"

90   PRINT "<C9><C7><1 SP><C3><3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><5 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <2 SP><C7><2 SP><C0>"

100  PRINT "<C9><C7><4 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
     <1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
     <4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C0>"

110 END
```
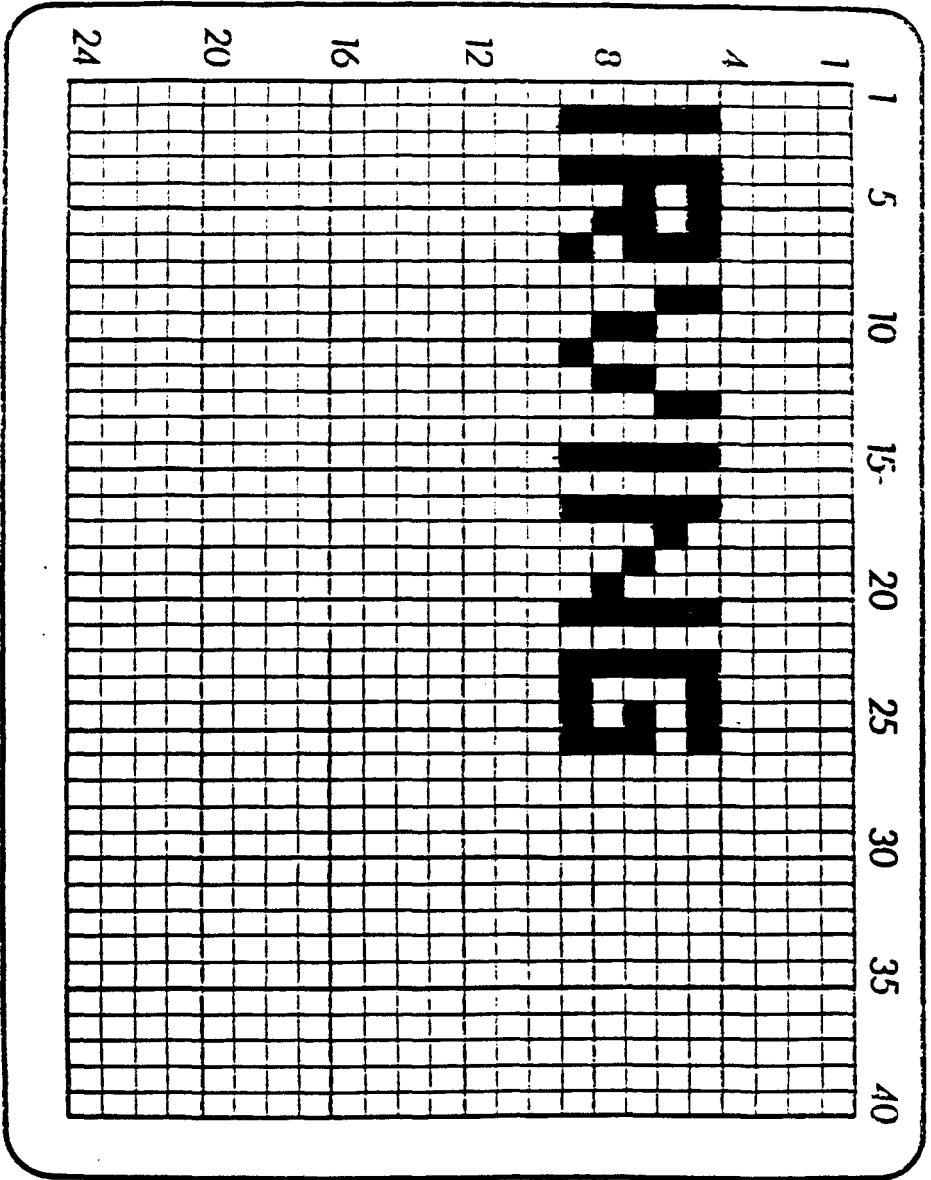
GRADE 4 – DAY 9
COMPUTER LITERACY
WORKSHEET 9A
TEACHER'S COPY #2

NAME _____

SECTION _____

G4.D09.W9A.TC2

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A FOR HIAWATHA
TEACHER'S COPY

85

NAME _____

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10   REM      HIAWATHA SCHOOL PROGRAM

15   REM        <YOUR NAME AND SECTION>

20   PRINT "<SHIFT/CLR-HOME>"

25   POKE  53280,2 : POKE  53281,2

30   FOR X = 1 TO 4

40   PRINT

50   NEXT X

60   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7>
     <4 SP><C3><1 SP><C7><5 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
     <1 SP><C7><4 SP><C0>"

70   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><3SP><C7><1 SP><C3>
     <3 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7>
     <1 SP><C0>"

80   PRINT "<C9><C7><4 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><4 SP><C3>
     <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
     <4 SP><C3><3 SP><C7><1 SP><C3><3 SP><C7><4 SP><C3><1 SP><C7><4 SP><C0>"

90   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
     <3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><2 SP><C7><1 SP><C0>"

100  PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><5 SP><C3><1 SP><C7>
     <1 SP><C3><2 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
     <2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C0>"

110 END
```

G4.D09.W9A.TC.H

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A
TEACHER'S COPY #2

NAME _____

SECTION _____

G4.D09.W9A.TC2

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A FOR IRVING
TEACHER'S COPY

87

NAME _____

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10    REM ____ IRVING SCHOOL PROGRAM ____

15    REM ____ <YOUR NAME AND SECTION> ____

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,2 : POKE  53281,2

30    FOR X = 1 TO 4

40    PRINT

50    NEXT X

60    PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1SP><C3>
      <3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
      <1 SP><C3><1 SP><C7><4 SP><C0>"

70    PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1SP><C3>
      <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <2 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C0>"

80    PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><4 SP><C3><2 SP><C7><1SP><C3>
      <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><2 SP><C0>"

90    PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1SP><C3>
      <3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><2 SP><C7><2 SP><C3><1 SP><C7><1 SP><C3><1 SP><2 SP><C7>
      <1 SP><C0>"

100   PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1SP><C7>
      <3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
      <1 SP><C3><1 SP><C7><4 SP><C0>"

110 END
```

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A
TEACHER'S COPY #2

88

NAME _____

SECTION _____

G4.D09.W9A.TC2

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A FOR KOMENSKY
TEACHER'S COPY

NAME _____

SECTION _____

89

ENTER THE FOLLOWING PROGRAM:
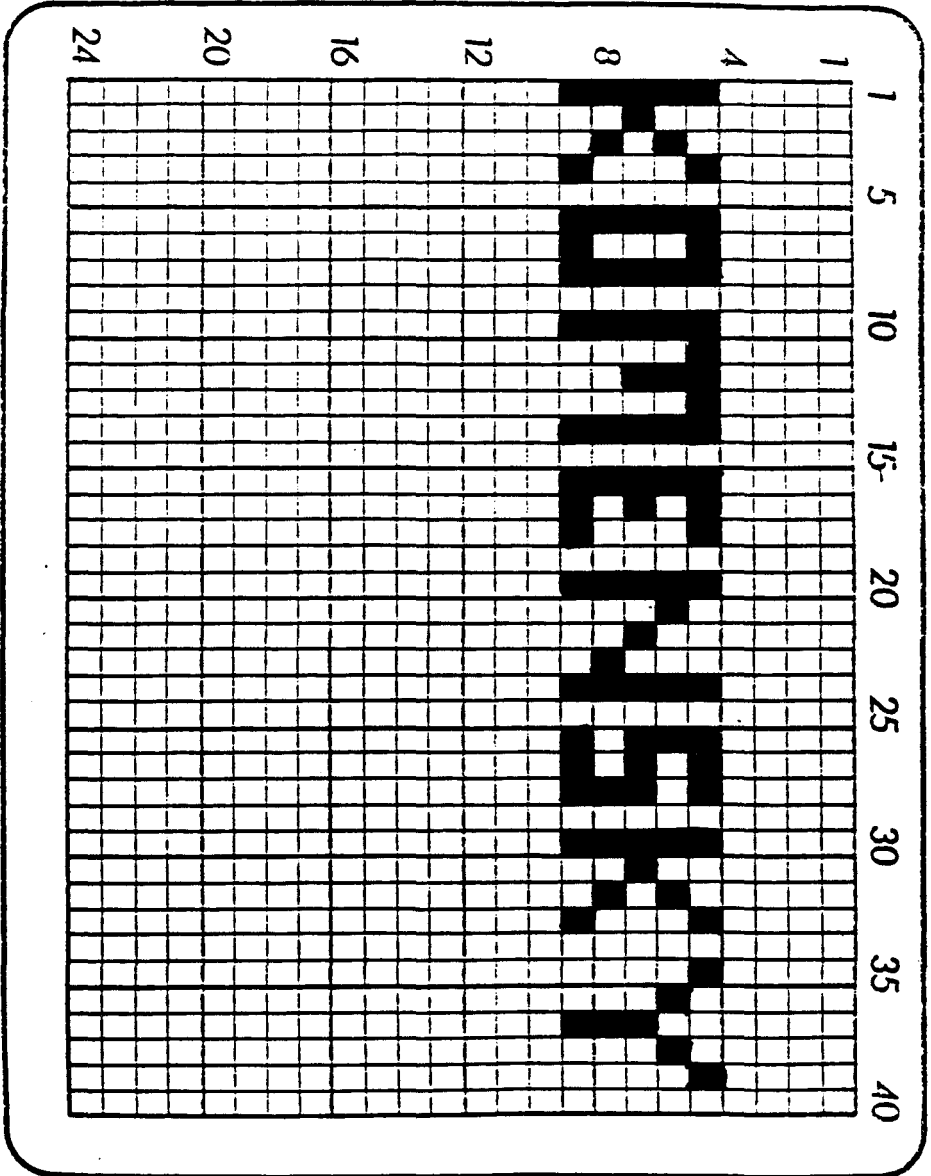
```
10    REM    KOMENSKY SCHOOL PROGRAM

15    REM      <YOUR NAME AND SECTION>

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,2 : POKE  53281,2

30    FOR X = 1 TO 4

40    PRINT

50    NEXT X

60    PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3>
      <1 SP><C7><5 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
      <1 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C0>"

70    PRINT "<C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><2 SP><C3><2 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C0>"

80    PRINT "<C9><C7><2 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C7><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <2 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><3 SP><C3><1 SP><C7><2 SP><C3><5 SP><C7><1 SP><C0>"

90    PRINT "<C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><3 SP><C7><1 SP><C3><2 SP><C7><2 SP><C3><3 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C0>"

100   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3>
      <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7>
      <1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7><1 SP><C3>
      <2 SP><C7><1 SP><C3><3 SP><C7><1 SP><C0>"

110 END
```
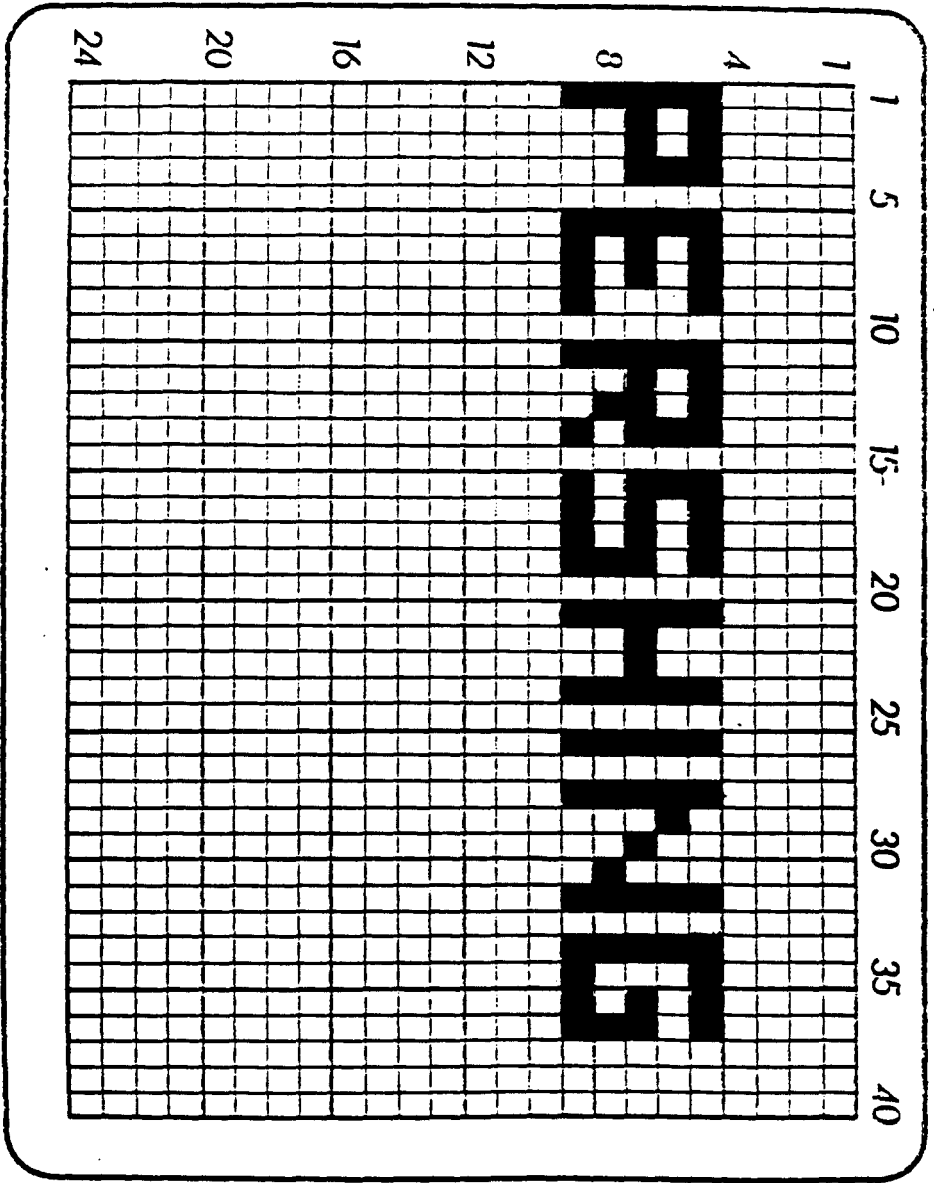
GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A
TEACHER'S COPY #2

90

NAME _____

SECTION _____

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A FOR PERSHING
TEACHER'S COPY

NAME _____

SECTION _____

91

ENTER THE FOLLOWING PROGRAM:

```
10    REM    PERSHING SCHOOL PROGRAM

15    REM       <YOUR NAME AND SECTION>

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,2 : POKE  53281,2

30    FOR X = 1 TO 4

40    PRINT

50    NEXT X

60    PRINT "<C9><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3>
      <1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><4 SP><C0>"

70    PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <4 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7>
      <1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><2 SP><C3>
      <2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C0>"

80    PRINT "<C9><C7><4 SP><C3><1 SP><C7><3 SP><C3><2 SP><C7><4 SP><C3>
      <1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><2 SP><C0>"

90    PRINT "<C9><C7><1 SP><C3><4 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><5 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><2 SP><C3>
      <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C0>"

100   PRINT "<C9><C7><1 SP><C3><4 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3>
      <2 SP><C7><1 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
      <1 SP><C7><4 SP><C0>"

110 END
```

GRADE 4 - DAY 9
COMPUTER LITERACY
WORKSHEET 9A
TEACHER'S COPY #2

NAME _____

SECTION _____

G4.D09.W9A.TC2

LESSON PLAN

```
;----------------------------------------------------------------
;GRADE 4 - DAY 10
;COMPUTER LITERACY
;TEACHER'S LESSON PLAN
;----------------------------------------------------------------
;INSTRUCTIONAL AIDS:            ;TOOLS, EQUIPMENT AND MATERIALS:
;                               ;
; COPIES OF TEST #2             ; CHALK, ERASER AND PENCILS
;                               ;
;                               ;
;                               ;
;----------------------------------------------------------------
;OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
;STUDENT EVALUATION, ADDITIONAL TOPIC
;----------------------------------------------------------------
```

OBJECTIVE FOR THE DAY:

THE STUDENTS WILL REVIEW WITH THE TEACHER THE COMPUTER PROGRAMMING SKILLS AND
TAKE A TEST.

INTRODUCTION:

REVIEW WITH THE STUDENTS THE MATERIAL COVERED AT THE PREVIOUS CLASSES AND GIVE
A TEST IN THE HOMEROOM.

PRESENTATION:

DISTRIBUTE COPIES OF:

TEST #2 (G4.D10.T2.SC)

ADMINISTER THE TEST.
INSTRUCTIONS FOR THE MATCHING SECTION:
"THERE ARE 12 DEFINITIONS AND 12 WORDS. WRITE THE LETTER A - L ON THE LINE
NEXT TO THE CORRECT DEFINITION. EACH LINE IS WORTH ONE POINT."
INSTRUCTIONS FOR THE TRUE AND FALSE SECTION:
"THERE ARE 6 TRUE OR FALSE QUESTIONS. WRITE A "T" OR A "F" ON THE LINE NEXT TO
THE PROBLEM NUMBER. EACH LINE IS WORTH ONE POINT."
INSTRUCTIONS FOR PAGE TWO OF THE TEST:
"THE FIRST TWO PROBLEMS ARE WORTH ONE POINT EACH AND THE THIRD PROBLEM IS WORTH
10 POINTS."

G4.D10.LP.TC

LESSON PLAN
CONTINUED
PAGE 2

GRADE 4 - DAY 10
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC

SUMMARY:

IF THERE IS TIME AVAILABLE, YOU COULD GO OVER THE TEST.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING INDEPENDENTLY ON A TEST.

STUDENT EVALUATION:

THE STUDENTS' TESTS WILL BE EVALUATED GIVING THE APPROPRIATE POINT VALUE FOR
EACH CORRECT ANSWER.

ADDITIONAL TOPIC:

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G4.D10.LP.TC

MATCHING: LISTEN TO THE TEACHER'S INSTRUCTIONS.

_____ 1. THE NAME OF THE COMPUTER LANGUAGE USED   A.   DISK DRIVE
         IN THIS CLASS.
                                                           B.   COMPUTER
_____ 2. FIVE MAIN PARTS OF A MICROCOMPUTER
         USED IN THIS MINI-COURSE.   C.   BASIC

_____ 3.   D.   MONITOR

_____ 4.   E.   RETURN

_____ 5.   F.   RUN

_____ 6.   G.   MEMORY

                                                           H.   LINE NUMBER
_____ 7. THE KEY YOU MUST PRESS TO ENTER
         INFORMATION INTO THE COMPUTER'S MEMORY.   I.   LIST

_____ 8. THE COMMAND THAT SHOWS YOU THE PROGRAM   J.   KEYBOARD
         THAT IS IN THE COMPUTER'S MEMORY.
                                                           K.   NEW
_____ 9. THE COMMAND THAT EXECUTES (OR CARRIES OUT)
         THE PROGRAM IN THE COMPUTER'S MEMORY.   L.   CPU

_____10. THE COMMAND THAT ERASES THE PROGRAM
         IN THE COMPUTER'S MEMORY.

_____11. IT MUST APPEAR AT THE BEGINNING OF EACH
         LINE OF A PROGRAM.

_____12. A MACHINE WHICH PERFORMS TASKS AT A HIGH
         RATE OF SPEED WITH GREAT ACCURACY.

TRUE OR FALSE: LISTEN TO THE TEACHER'S INSTRUCTIONS.

_____13. PRESSING ONLY THE CLR-HOME KEY CLEARS THE SCREEN AND SENDS THE CURSOR
         TO THE UPPER LEFT CORNER.

_____14. A PROGRAM IS A LIST OF INSTRUCTIONS (STATEMENTS) FOR THE COMPUTER TO
         FOLLOW.

_____15. THE WORD THAT IS FOUND IN THE LAST LINE OF A PROGRAM IS: "STOP".

_____16. THE MESSAGE THE COMPUTER PRINTS WHEN IT DOES NOT UNDERSTAND YOU IS:
         "?SYNTAX ERROR".

_____17. THE LITTLE SQUARE THAT MOVES ALONG THE SCREEN SHOWING WHERE THE NEXT
         LETTER YOU TYPE GOES IS CALLED THE CURSOR.

_____18. ALL COMMANDS ARE THE SAME FOR ANY COMPUTER.

G4.D10.T2.SC

INSTRUCTIONS: FILL-IN THE BLANKS WITH THE CORRECT ANSWER/RESPONSE:

1. THE TWO KEYS PRESSED TO TURN ON THE REVERSE COLOR, (RVS ON), ARE:

    THE _____ KEY AND THE NUMBER _____ .

2. THE TWO KEYS PRESSED TO TURN OFF THE REVERSE COLOR, (RVS OFF), ARE:

    THE _____ KEY AND THE NUMBER _____ .

3. WRITE A LINE OF PROGRAMMING THAT WILL MAKE A RED COLOR BAR 5 SPACES LONG, A
    WHITE COLOR BAR 5 SPACES LONG AND A BLUE COLOR BAR 5 SPACES LONG.

SOME OF THE CODES YOU WILL NEED ARE:

<RED> ====> <C3>,   <WHITE> ====> <C2>,   <BLUE> ====> <C7>

_____

_____

NAME _____

SECTION _____

MATCHING: LISTEN TO THE TEACHER'S INSTRUCTIONS.

_C_ 1. THE NAME OF THE COMPUTER LANGUAGE USED
        IN THIS CLASS.

_J_ 2. FIVE MAIN PARTS OF A MICROCOMPUTER
        USED IN THIS MINI-COURSE.

_D_ 3.

_A_ 4.

_G_ 5.

_L_ 6.

·E_ 7. THE KEY YOU MUST PRESS TO ENTER
        INFORMATION INTO THE COMPUTER'S MEMORY.

_I_ 8. THE COMMAND THAT SHOWS YOU THE PROGRAM
        THAT IS IN THE COMPUTER'S MEMORY.

_F_ 9. THE COMMAND THAT EXECUTES (OR CARRIES OUT)
        THE PROGRAM IN THE COMPUTER'S MEMORY.

_K_ 10. THE COMMAND THAT ERASES THE PROGRAM
        IN THE COMPUTER'S MEMORY.

_H_ 11. IT MUST APPEAR AT THE BEGINNING OF EACH
        LINE OF A PROGRAM.

_B_ 12. A MACHINE WHICH PERFORMS TASKS AT A HIGH
        RATE OF SPEED WITH GREAT ACCURACY.

A.	DISK DRIVE
B.	COMPUTER
C.	BASIC
D.	MONITOR
E.	RETURN
F.	RUN
G.	MEMORY
H.	LINE NUMBER
I.	LIST
J.	KEYBOARD
K.	NEW
L.	CPU

TRUE OR FALSE: LISTEN TO THE TEACHER'S INSTRUCTIONS.

_F_ 13. PRESSING ONLY THE CLR-HOME KEY CLEARS THE SCREEN AND SENDS THE CURSOR
        TO THE UPPER LEFT CORNER.

_T_ 14. A PROGRAM IS A LIST OF INSTRUCTIONS (STATEMENTS) FOR THE COMPUTER TO
        FOLLOW.

_F_ 15. THE WORD THAT IS FOUND IN THE LAST LINE OF A PROGRAM IS: "STOP".

_T_ 16. THE MESSAGE THE COMPUTER PRINTS WHEN IT DOES NOT UNDERSTAND YOU IS:
        "?SYNTAX ERROR".

_T_ 17. THE LITTLE SQUARE THAT MOVES ALONG THE SCREEN SHOWING WHERE THE NEXT
        LETTER YOU TYPE GOES IS CALLED THE CURSOR.

_F_ 18. ALL COMMANDS ARE THE SAME FOR ANY COMPUTER.

GRADE 4 - DAY 10
COMPUTER LITERACY
TEST #2 - DAY 10
TEACHER'S COPY - PAGE 2

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NAME _____

SECTION _____

INSTRUCTIONS: FILL-IN THE BLANKS WITH THE CORRECT ANSWER/RESPONSE:

1.   THE TWO KEYS PRESSED TO TURN ON THE REVERSE COLOR, (RVS ON), ARE:

     THE _____CONTROL_____ KEY AND THE NUMBER ___9___ .

2.   THE TWO KEYS PRESSED TO TURN OFF THE REVERSE COLOR, (RVS OFF), ARE:

     THE _____CONTROL_____ KEY AND THE NUMBER ___0___ .

3.   WRITE A LINE OF PROGRAMMING THAT WILL MAKE A RED COLOR BAR 5 SPACES LONG, A
     WHITE COLOR BAR 5 SPACES LONG AND A BLUE COLOR BAR 5 SPACES LONG.

SOME OF THE CODES YOU WILL NEED ARE:

<RED> ====> <C3>,   <WHITE> ====> <C2>,   <BLUE> ====> <C7>

 20 PRINT "<C9><C3><5 SPACES><C2><5 SPACES><C7><5 SPACES><C0>" (10 PTS)

_____

SUGGESTED GRADING:

A = 27 TO 30 PTS
B = 24 TO 26 PTS
C = 21 TO 23 PTS
D = 18 TO 20 PTS
F = 0 TO 17 PTS

DISTRICT 100

FIFTH GRADE

COMPUTER

CURRICULUM

CHARLES S. SAUNDERS

SUMMER OF 1987

OBJECTIVES FOR THE FIFTH
GRADE COMPUTER CLASSES

DAY 1:   THE STUDENTS WILL REVIEW THE COMPUTER PROGRAMMING TAUGHT IN FOURTH
         GRADE, BE GIVEN THEIR MAJOR GRAPHICS PROGRAM ASSIGNMENT AND BE
         PREPARED FOR A QUIZ ON DAY 2.

DAY 2:   THE STUDENTS WILL REVIEW THE OPERATING PROCEDURES OF THE COMMODORE
         COMPUTER AND ENTER PROGRAMS INTO THE COMPUTER, USE THE "GOTO"
         COMMAND, USE THE COLOR GRAPHICS COMMANDS AND BE PREPARED FOR A QUIZ
         ON DAY 3.

DAY 3:   THE STUDENTS WILL LEARN HOW TO CONTROL THE OUTPUT OF A PROGRAM BY
         USING THE "TAB" AND DOWN COMMANDS AND BE PREPARED FOR A QUIZ ON DAY
         4.

DAY 4:   THE STUDENTS WILL PRACTICE IDENTIFYING ERRORS IN A PROGRAM, USE THE
         "FOR-NEXT" COMMAND AND BE PREPARED FOR A QUIZ ON DAY 5.

DAY 5:   THE STUDENTS WILL LEARN HOW THE "GOTO", "IF-THEN", AND COUNTER
         COMMANDS CONTROL THE OUTPUT OF A PROGRAM BY USING THE COMMANDS IN
         SOME PROGRAMS AND BE PREPARED FOR A QUIZ ON DAY 6.

DAY 6:   THE STUDENTS WILL USE THE "LOAD", "SAVE" AND "POKE" COMMANDS. THE
         STUDENTS WILL WORK ON A SAMPLE GRAPHICS PROGRAM, START WRITING THEIR
         OWN GRAPHICS PROGRAMS AND TAKE HOME A QUIZ DUE ON DAY 7.

DAY 7:   THE STUDENTS WILL USE THE SAVE & REPLACE COMMAND AND THE "VERIFY"
         COMMAND. THE STUDENTS WILL WORK ON SAMPLE GRAPHICS PROGRAM, CONTINUE
         WRITING THEIR OWN GRAPHICS PROGRAMS AND BE PREPARED FOR A TEST ON DAY
         10.

DAY 8:   THE STUDENTS WILL WORK ON SAMPLE GRAPHICS PROGRAM, CONTINUE WRITING
         THEIR OWN GRAPHICS PROGRAMS AND BE PREPARED FOR A TEST ON DAY 10.

DAY 9:   THE STUDENTS WILL FINISH WRITING THEIR OWN GRAPHICS PROGRAMS, WORK ON
         SAMPLE GRAPHICS PROGRAM AND BE PREPARED FOR A TEST ON DAY 10.

DAY 10: THE STUDENTS WILL REVIEW WITH THE TEACHER THE COMPUTER PROGRAMMING
         SKILLS AND TAKE A TEST.

B.OBJECTIVES

DAILY GOALS

DAY	TERMS	RESERVED WORDS OR COMMANDS	STUDENT ACTIVITIES
1	COMPUTER MONITOR KEYBOARD MEMORY DISK DRIVE CPU BASIC CURSOR RETURN KEY PROGRAM LINE NUMBER	CLR-HOME SHIFT/CLR-HOME NEW LIST REM PRINT TAB(#) END RUN	REVIEW THE FOURTH GRADE CURRICULUM WRITE OUT A SAMPLE PROGRAM RECEIVE MAJOR GRAPHICS PROGRAM ASSIGNMENT
2	NONE	GOTO REVERSE ON REVERSE OFF	QUIZ REVIEW ENTERING, RUNNING AND LISTING A PROGRAM CLEAR THE SCREEN ERASE THE MEMORY
3	DOWN COMMAND	INVERSE Q	QUIZ EDIT A PROGRAM MOVE TEXT AROUND THE SCREEN
4	NONE	FOR - NEXT	QUIZ FIND ERRORS IN A PROGRAM (TAKE-HOME) (DUE DAY 5) USE THE FOR - NEXT COMMAND
5	LOOP COUNTER	IF - THEN X = X + 1	COLLECT PROGRAM AND GIVE QUIZ USE THE IF - THEN, X = X + 1 AND GOTO COMMANDS CHECK MAJOR GRAPHICS PICTURE

C.DAILY.GOALS

DAY	TERMS	RESERVED WORDS OR COMMANDS	STUDENT ACTIVITIES
6	POKE COMMANDS	POKE LOAD SAVE	GIVE QUIZ AND HANDOUT TAKE-HOME QUIZ (DUE DAY 7) WRITE COLOR GRAPHICS PROGRAM FROM A PICTURE AND WORK ON MAJOR GRAPHICS PROGRAM
7	NONE	SAVE & REPLACE VERIFY	WRITE COLOR GRAPHICS PROGRAM FROM A PICTURE AND WORK ON MAJOR GRAPHICS PROGRAM
8	NONE	NONE	WRITE COLOR GRAPHICS PROGRAM FROM A PICTURE AND WORK ON MAJOR GRAPHICS PROGRAM
9	NONE	NONE	WORK ON MAJOR GRAPHICS PROGRAM OR WRITE COLOR GRAPHICS PROGRAM FROM A PICTURE
10	NONE	NONE	TEST

C.DAILY.GOALS

READ THIS FIRST ! !

THE FILES ON THE DISK ARE CATALOGUED IN THE ORDER IN WHICH THEY ARE TO BE USED. THERE IS A DIRECTORY AT THE BACK WHICH REFLECTS WHICH FILES ARE LOCATED ON EACH SIDE OF THE DISK. THERE IS A TEACHER'S LESSON PLAN FOR EACH DAY, ALONG WITH THE NECESSARY QUIZZES AND HANDOUTS FOR THE STUDENTS WITH A TEACHER'S VERSION OF THE SAME QUIZZES AND HANDOUTS WITH A FEW ADDITIONAL NOTES. FOR VARIETY, THERE MAY BE ONE OR TWO VERSIONS OF EACH QUIZ TO BE GIVEN TO THE STUDENTS AS OUTLINED IN THE LESSON PLANS.

AFTER THIS PAGE IN THIS MANUAL, THE FILES THAT ARE PRINTED IN THE DRAFT MODE (LIGHT) ARE FOR THE TEACHER, AND THE FILES THAT ARE PRINTED IN THE NEAR LETTER QUALITY MODE (DARK) ARE FOR THE STUDENTS.

THE DISTRICT'S COMPUTER COMMITTEE WOULD APPRECIATE HAVING CHANGES, IMPROVEMENTS AND/OR ADDITIONS TO THIS CURRICULUM DONE IN SUCH A WAY THAT THE INFORMATION STORED ON THIS DISK IS UPDATED TO BE CONSISTENT WITH THE MATERIAL BEING TAUGHT TO THE STUDENTS. BY WORKING WITH THE DISTRICT'S COMPUTER COMMITTEE THIS GOAL CAN BE ACHIEVED.

D.READ.ME.FIRST

LESSON PLAN

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,--------------------------------------------------------------------------.
| GRADE 5 - DAY 1                                                          |
| COMPUTER LITERACY                                                        |
| TEACHER'S LESSON PLAN                                                    |
|--------------------------------------------------------------------------|
| INSTRUCTIONAL AIDS:                    | TOOLS, EQUIPMENT AND MATERIALS: |
|                                        |                                 |
| COPIES OF THE NECESSARY HANDOUTS *     | CHALK, ERASER AND PENCILS       |
|                                        |                                 |
| A TRANSPARENCY OF WORKSHEET #1         | OVERHEAD PROJECTOR              |
| (TEACHER'S VERSION)                    |                                 |
|--------------------------------------------------------------------------|
| OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,     |
| STUDENT EVALUATION, ADDITIONAL TOPIC                                     |
`--------------------------------------------------------------------------'
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OBJECTIVE FOR THE DAY:

THE STUDENTS WILL REVIEW THE COMPUTER PROGRAMMING TAUGHT IN FOURTH GRADE, BE
GIVEN THEIR MAJOR GRAPHICS PROGRAM ASSIGNMENT AND BE PREPARED FOR A QUIZ ON DAY
2.

INTRODUCTION:

INTRODUCE YOURSELF AND COMPLETE WORKSHEET #1 WITH THE STUDENTS IN THE HOMEROOM.

PRESENTATION:

IT IS IMPORTANT TO PLAN YOUR TIME SO THERE WILL BE ENOUGH TIME LEFT OVER TO
COMPLETE THE MATERIAL COVERED IN THE ADDITIONAL TOPIC SECTION ALSO.

DISTRIBUTE COPIES OF:

WORKSHEET #1   (G5.D01.W1.SC)   STUDENT'S COPY

USING AN OVERHEAD PROJECTOR AND A TRANSPARENCY OF THE TEACHER'S COPY OF
WORKSHEET #1, READ EACH TERM/DEFINITION AND HAVE THE STUDENTS WRITE THE
TERM/DEFINITION ON THE APPROPRIATE LINE ON THE WORKSHEET. EMPHASIZE THAT THE
STUDENTS SHOULD STUDY THESE DEFINITIONS SOME TIME BEFORE THE NEXT CLASS MEETING
BECAUSE THERE WILL BE A QUIZ ON THE TWENTY DEFINITIONS.

DISTRIBUTE COPIES OF:

WORKSHEET #1   (G5.D01.W1.TC)   TEACHER'S COPY

AFTER THE STUDENTS COMPLETE WORKSHEET #1, COLLECT THE STUDENT'S COPY FOR
GRADING AND EXCHANGE IT FOR A TEACHER'S COPY SO THE STUDENTS HAVE A WORKSHEET
TO STUDY FROM.

THIS TOPIC WILL ALSO BE ON THE QUIZ TOMORROW, SO IT IS IMPORTANT TO COVER THIS
MATERIAL ON DAY 1. HAVE THE STUDENTS TURN THE TEACHER'S COPY OF WORKSHEET #1
OVER, AND ON THE BACK HAVE THE STUDENTS WRITE THE PROGRAM WITH THE PROPER
INFORMATION SUBSTITUTED FOR THE COMMENTS FOUND INSIDE THE <   > BRACKETS.
(PROGRAM IS IN THE ADDITIONAL TOPIC SECTION.)

G5.D01.LP.TC

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;GRADE 5 - DAY 1
;COMPUTER LITERACY
;TEACHER'S LESSON PLAN

;OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
;STUDENT EVALUATION, ADDITIONAL TOPIC
```

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING TODAY'S CLASS MEETING.

STUDENT INVOLVEMENT:

THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' PROGRESS ON THIS WORKSHEET SHOULD BE EVALUATED AND RECORDED
GIVING ONE POINT FOR A EACH CORRECTLY COMPLETED TERM/DEFINITION.

ADDITIONAL TOPIC:

```
10   REM  NAME AND ADDRESS PROGRAM

20   PRINT "<SHIFT/CLR-HOME>

30   PRINT "<YOUR FIRST AND LAST NAME>"

40   PRINT "<STREET ADDRESS >"

50   PRINT "<CITY, STATE   ZIPCODE>"

60   END
```

DISCUSS THE MAJOR GRAPHICS PROGRAM ASSIGNMENT. HAVE SOME GOOD AND NOT SO GOOD
SAMPLES OF GRAPHICS TO SHOW THE STUDENTS. THE STUDENTS SHOULD START THINKING
OF A PICTURE AND BEGIN COLORING IN A STUDENT HANDOUT #1 SO THEY WILL HAVE IT
DONE BY DAY 5.

DISTRIBUTE COPIES OF:

STUDENT HANDOUT #1 (G5.D01.SH1.TS)

LEAVE A FOLDER WITH EXTRA COPIES OF STUDENT HANDOUT #1 IN THE HOMEROOM.

G5.D01.LP.TC

GRADE 5 - DAY 1
COMPUTER LITERACY
STUDENT HANDOUT #1
TEXT SCREEN

NAME _____

SECTION _____

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G5.D01.SH1.TS

GRADE 5 - DAY 1
COMPUTER LITERACY
STUDENT HANDOUT #1A
TEXT SCREEN #2

NAME _____

SECTION _____

END

G5.DO1.SH1A.TS

NAME _____

SECTION _____

1. _____ - A MACHINE WHICH PERFORMS TASKS AT A HIGH SPEED WITH GREAT ACCURACY.

THERE ARE FIVE PARTS TO A COMPUTER SYSTEM:

2. _____ - A DEVICE WITH KEYS USED TO INPUT INFORMATION INTO THE COMPUTER SYSTEM.

3. _____ - A T.V.-LIKE UNIT CONNECTED TO PART OF THE COMPUTER SYSTEM.

4. _____ - A DEVICE THAT IS CONNECTED TO THE COMPUTER SYSTEM AND ALLOWS THE LOADING AND SAVING OF PROGRAMS.

5. _____ - A PLACE IN THE COMPUTER WHERE A PROGRAM IS STORED.

6. _____ - THE INITIALS TO: CENTRAL PROCESSING UNIT.

7. cursor _____

8. return key _____

9. clr-home _____

10. shift/clr-home_____

11. program _____

12. basic _____

13. line number _____

14. REM _____

15. PRINT _____

16. TAB(#) _____

17. END _____

18. RUN _____

19. LIST _____

20. NEW _____

G5.D01.W1.SC

GRADE 5 - DAY 1
COMPUTER LITERACY
WORKSHEET 1
TEACHER'S COPY

NAME _____

SECTION _____

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1. <u>computer</u>   – A MACHINE WHICH PERFORMS TASKS AT A HIGH SPEED WITH
                          GREAT ACCURACY.

    THERE ARE FIVE PARTS TO A COMPUTER SYSTEM:

2. <u>keyboard</u>   – A DEVICE WITH KEYS USED TO INPUT INFORMATION INTO THE
                          COMPUTER SYSTEM.
3. <u>monitor</u>   – A T.V.-LIKE UNIT CONNECTED TO PART OF THE COMPUTER
                          SYSTEM.
4. <u>disk drive</u>   – A DEVICE THAT IS CONNECTED TO THE COMPUTER SYSTEM AND
                          ALLOWS THE LOADING AND SAVING OF PROGRAMS.
5. <u>memory</u>   – A PLACE IN THE COMPUTER WHERE A PROGRAM IS STORED.

6. <u>cpu</u>   – THE INITIALS TO: <u>C</u>ENTRAL <u>P</u>ROCESSING <u>U</u>NIT.

7. cursor   <u>BLINKING BOX THAT SHOWS WHERE YOU ARE ON THE SCREEN</u>

8. return key   <u>KEY PRESSED TO ENTER INFORMATION INTO THE MEMORY</u>

9. clr-home   <u>SENDS THE CURSOR TO THE UPPER LEFT CORNER (HOME)</u>

10. shift/clr-home <u>CLEARS THE SCREEN AND SENDS THE CURSOR HOME</u>

11. program   <u>GROUP OF STATEMENTS FOR THE COMPUTER TO FOLLOW</u>

12. basic   <u>THE COMPUTER LANGUAGE USED IN THIS CLASS</u>

13. line number   <u>APPEARS AT THE BEGINNING OF EACH LINE OF A PROGRAM</u>

14. REM   <u>COMMAND TO INCLUDE REMARKS THAT DON'T CHANGE THE PROGRAM</u>

15. PRINT   <u>COMMAND TO DISPLAY CHARACTERS IN THE OUTPUT OF A PROGRAM</u>

16. TAB(#)   <u>COMMAND USED TO MOVE OUTPUT TO THE RIGHT ON THE SCREEN</u>

17. END   <u>COMMAND USED ON THE LAST LINE OF A PROGRAM</u>

18. RUN   <u>COMMAND TO EXECUTE (START) THE PROGRAM</u>

19. LIST   <u>COMMAND TO DISPLAY THE PROGRAM IN MEMORY ON THE SCREEN</u>

20. NEW   <u>COMMAND TO ERASE THE CURRENT PROGRAM FROM MEMORY</u>

LESSON PLAN

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-----------------------------------------------------------------
| GRADE 5 - DAY 2                                                |
| COMPUTER LITERACY                                              |
| TEACHER'S LESSON PLAN                                          |
|---------------------------------------------------------------|
| INSTRUCTIONAL AIDS:            | TOOLS, EQUIPMENT AND MATERIALS:|
|                               |                                |
|  COPIES OF THE NECESSARY HANDOUTS AND |  CHALK, ERASER AND PENCILS |
|  QUIZ 1 - DAY 1               |                                |
|                               |                                |
|                               |                                |
|---------------------------------------------------------------|
| OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT, |
| STUDENT EVALUATION, ADDITIONAL TOPIC                           |
-----------------------------------------------------------------
```

OBJECTIVE FOR THE DAY:

THE STUDENTS WILL REVIEW THE OPERATING PROCEDURES OF THE COMMODORE COMPUTER AND ENTER PROGRAMS INTO THE COMPUTER, USE THE "GOTO" COMMAND, USE THE COLOR GRAPHICS COMMANDS AND BE PREPARED FOR A QUIZ ON DAY 3.

INTRODUCTION:

REVIEW WITH THE STUDENTS THE MATERIAL COVERED AT THE PREVIOUS CLASS AND GIVE A QUIZ IN THE HOMEROOM.

PRESENTATION:

DISTRIBUTE COPIES OF:

WORKSHEET #2   (G5.D02.W2.SC)

READING FROM THE TEACHER'S COPY OF THE WORKSHEET #2, HAVE THE STUDENTS PROCEED WITH STEP 1. EMPHASIZE TO THE STUDENTS THAT THEY SHOULD REVIEW THE MATERIAL COVERED DURING THE CLASS PERIOD SOME TIME BEFORE THE NEXT CLASS MEETING BECAUSE THERE WILL BE A QUIZ ON ANY OF THE MATERIAL, NEXT TIME WE MEET. ASSIST THE STUDENTS ON WORKSHEET #2 BY CHECKING OFF AND RECORDING THE COMPLETION OF STEP 1. HAVE THE STUDENTS DO STEPS 3 - 5. WHEN THE STUDENTS ARE READY FOR STEP 6, ASSIST THE STUDENTS IN DOING STEPS 7 - 10 BY ASKING THE NECESSARY QUESTIONS.

WHEN THE STUDENTS ARE DONE WITH WORKSHEET #2,

DISTRIBUTE COPIES OF:

STUDENT HANDOUT #2 (G5.D02.SH2.SC)
WORKSHEET #2A (G5.D02.W2A.SC)

REMIND THE STUDENTS THAT THE <   > BRACKETS ARE USED TO INFORM THEM OF INFORMATION THAT SHOULD BE ENTERED USING THE PROPER KEY STROKES OR THE APPROPRIATE DATA.

G5.D02.LP.TC

```
!_____!
!GRADE 5 - DAY 2                                                  !
!COMPUTER LITERACY                                                !
!TEACHER'S LESSON PLAN                                            !
!_____!
!                                                                 !
!OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT, !
!STUDENT EVALUATION, ADDITIONAL TOPIC                             !
!_____!
```

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING TODAY'S CLASS MEETING.
REVIEW WHAT THE STUDENTS SHOULD BE WORKING ON FOR THEIR MAJOR GRAPHICS PROGRAM.
(PICTURE DUE DAY 5)

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING INDEPENDENTLY ON A QUIZ.
THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' QUIZZES WILL BE EVALUATED GIVING ONE POINT FOR EACH CORRECT
ANSWER.
THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF TEN POINTS FOR A CORRECTLY COMPLETED WORKSHEET.(1-1/2 PAGES)

ADDITIONAL TOPIC:

IF THE STUDENTS FINISH WITH WORKSHEET #2 AND THE FIRST HALF OF WORKSHEET #2A,
THERE IS AN EXTRA CREDIT SECTION ON THE SECOND HALF OF WORKSHEET #2A.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G5.DO2.LP.TC

NAME _____

SECTION _____

MATCHING:

____1. ERASES THE CURRENT PROGRAM FROM MEMORY.   A.   SHIFT/CLR-HOME

____2. DISPLAYS CHARACTERS IN OUTPUT OF A PROGRAM.   B.   PROGRAM

____3. THE COMPUTER LANGUAGE USED IN THIS CLASS.   C.   LIST

____4. EXECUTES THE PROGRAM CURRENTLY IN MEMORY.   D.   NEW

____5. A T.V.-LIKE UNIT CONNECTED TO THE COMPUTER.   E.   CURSOR

____6. CLEARS THE SCREEN AND SENDS THE CURSOR   F.   RUN
       TO THE UPPER LEFT CORNER OF THE MONITOR.
                                                        G.   RETURN
____7. COMMAND THAT DISPLAYS THE PROGRAM IN
       MEMORY ON THE SCREEN.   H.   MONITOR

____8. BLINKING BOX THAT SHOWS WHERE YOU ARE   I.   BASIC
       WORKING ON THE SCREEN.
                                                        J.   PRINT
____9. KEY PRESSED TO ENTER THE INFORMATION
       INTO THE COMPUTER'S MEMORY.

____10.A GROUP OF STATEMENTS COMBINED TOGETHER
       FOR THE COMPUTER TO FOLLOW.

TRUE OR FALSE:

____1. LINE NUMBERS MUST ALWAYS BE INCREMENTED BY 10'S.

____2. WHEN THE COMPUTER IS TURNED OFF, YOUR PROGRAM IS LOST.

____3. THE SHIFT KEY CAUSES THE UPPER CHARACTER ON A KEY TO BE PRINTED.

____4. IF YOU CLEAR THE SCREEN, YOUR PROGRAM WILL BE CLEARED FROM
        THE COMPUTER'S MEMORY.

____5. A COMPUTER IS A MACHINE THAT PERFORMS TASKS AT A HIGH SPEED
        WITH GREAT ACCURACY.

WRITING A PROGRAM:

A.   WRITE A PROGRAM TO DISPLAY YOUR NAME AND ADDRESS.
      (USE BACK OF PAPER IF NECESSARY.)

B.   WHAT COMMAND WOULD YOU USE TO EXECUTE THIS PROGRAM? _____

C.   WHAT COMMAND WILL DISPLAY YOUR PROGRAM STATEMENTS BACK ON

      THE SCREEN? _____

G5.D02.Q1.SC

MATCHING:

_D_ 1. ERASES THE CURRENT PROGRAM FROM MEMORY.   A.   SHIFT/CLR-HOME

_J_ 2. DISPLAYS CHARACTERS IN OUTPUT OF A PROGRAM.   B.   PROGRAM

_I_ 3. THE COMPUTER LANGUAGE USED IN THIS CLASS.   C.   LIST

_F_ 4. EXECUTES THE PROGRAM CURRENTLY IN MEMORY.   D.   NEW

_H_ 5. A T.V.-LIKE UNIT CONNECTED TO THE COMPUTER.   E.   CURSOR

_A_ 6. CLEARS THE SCREEN AND SENDS THE CURSOR   F.   RUN
       TO THE UPPER LEFT CORNER OF THE MONITOR.
                                                      G.   RETURN
_C_ 7. COMMAND THAT DISPLAYS THE PROGRAM IN
       MEMORY ON THE SCREEN.   H.   MONITOR

_E_ 8. BLINKING BOX THAT SHOWS WHERE YOU ARE   I.   BASIC
       WORKING ON THE SCREEN.
                                                      J.   PRINT
_G_ 9. KEY PRESSED TO ENTER THE INFORMATION
       INTO THE COMPUTER'S MEMORY.

_B_ 10.A GROUP OF STATEMENTS COMBINED TOGETHER
       FOR THE COMPUTER TO FOLLOW.

TRUE OR FALSE:

_F_ 1. LINE NUMBERS MUST ALWAYS BE INCREMENTED BY 10'S.

_T_ 2. WHEN THE COMPUTER IS TURNED OFF, YOUR PROGRAM IS LOST.

_T_ 3. THE SHIFT KEY CAUSES THE UPPER CHARACTER ON A KEY TO BE PRINTED.

_F_ 4. IF YOU CLEAR THE SCREEN, YOUR PROGRAM WILL BE CLEARED FROM
        THE COMPUTER'S MEMORY.

_T_ 5. A COMPUTER IS A MACHINE THAT PERFORMS TASKS AT A
        HIGH SPEED WITH GREAT ACCURACY.

WRITING A PROGRAM:
A.   WRITE A PROGRAM TO DISPLAY YOUR NAME AND ADDRESS.
     (USE BACK OF PAPER IF NECESSARY.)
     10 REM NAME AND ADDRESS PROGRAM
     20 PRINT"<SHIFT/CLR-HOME>
     30 PRINT"<STUDENT'S FIRST AND LAST NAME>"
     40 PRINT"<STREET ADDRESS>"
     50 PRINT"<CITY, STATE   ZIPCODE>"
     60 END
B.   WHAT COMMAND WOULD YOU USE TO EXECUTE THIS PROGRAM? _RUN_____

C.   WHAT COMMAND WILL DISPLAY YOUR PROGRAM STATEMENTS BACK ON

     THE SCREEN? _LIST_____

NAME _____

SECTION _____

MATCHING:

____1. ERASES THE CURRENT PROGRAM FROM MEMORY.   A.   SHIFT/CLR-HOME

____2. DISPLAYS CHARACTERS IN OUTPUT OF A PROGRAM.   B.   PROGRAM

____3. THE COMPUTER LANGUAGE USED IN THIS CLASS.   C.   LIST

____4. EXECUTES THE PROGRAM CURRENTLY IN MEMORY.   D.   NEW

____5. A T.V.-LIKE UNIT CONNECTED TO THE COMPUTER.   E.   CURSOR

____6. CLEARS THE SCREEN AND SENDS THE CURSOR   F.   RUN
       TO THE UPPER LEFT CORNER OF THE MONITOR.
                                                        G.   RETURN
____7. COMMAND THAT DISPLAYS THE PROGRAM IN
       MEMORY ON THE SCREEN.   H.   MONITOR

____8. BLINKING BOX THAT SHOWS WHERE YOU ARE   I.   BASIC
       WORKING ON THE SCREEN.
                                                        J.   PRINT
____9. KEY PRESSED TO ENTER THE INFORMATION
       INTO THE COMPUTER'S MEMORY.

____10. A GROUP OF STATEMENTS COMBINED TOGETHER
        FOR THE COMPUTER TO FOLLOW.

TRUE OR FALSE:

____1. LINE NUMBERS MUST ALWAYS BE INCREMENTED BY 10'S.

____2. WHEN THE COMPUTER IS TURNED OFF, YOUR PROGRAM IS LOST.

____3. THE SHIFT KEY CAUSES THE UPPER CHARACTER ON A KEY TO BE PRINTED.

____4. IF YOU CLEAR THE SCREEN, YOUR PROGRAM WILL BE CLEARED FROM
        THE COMPUTER'S MEMORY.

____5. A COMPUTER IS A MACHINE THAT PERFORMS TASKS AT A
        HIGH SPEED WITH GREAT ACCURACY.

WRITING A PROGRAM:
A.   WRITE A PROGRAM TO DISPLAY YOUR NAME AND ADDRESS.
     (USE BACK OF PAPER IF NECESSARY.)
     10 REM NAME AND ADDRESS PROGRAM
     20 PRINT"<SHIFT/CLR-HOME>
     30 PRINT"_____ "
     40 PRINT"_____ "
     50 PRINT"_____ "
     60 END
B.   WHAT COMMAND WOULD YOU USE TO EXECUTE THIS PROGRAM? _____

C.   WHAT COMMAND WILL DISPLAY YOUR PROGRAM STATEMENTS BACK ON

     THE SCREEN? _____

GRADE 5 - DAY 2
COMPUTER LITERACY
QUIZ 1A - DAY 1
TEACHER'S COPY

NAME _____

115

SECTION _____

MATCHING:

_D_ 1. ERASES THE CURRENT PROGRAM FROM MEMORY.   A.   SHIFT/CLR-HOME

_J_ 2. DISPLAYS CHARACTERS IN OUTPUT OF A PROGRAM.   B.   PROGRAM

_I_ 3. THE COMPUTER LANGUAGE USED IN THIS CLASS.   C.   LIST

_F_ 4. EXECUTES THE PROGRAM CURRENTLY IN MEMORY.   D.   NEW

_H_ 5. A T.V.-LIKE UNIT CONNECTED TO THE COMPUTER.   E.   CURSOR

_A_ 6. CLEARS THE SCREEN AND SENDS THE CURSOR   F.   RUN
       TO THE UPPER LEFT CORNER OF THE MONITOR.
                                                  G.   RETURN
_C_ 7. COMMAND THAT DISPLAYS THE PROGRAM IN
       MEMORY ON THE SCREEN.   H.   MONITOR

_E_ 8. BLINKING BOX THAT SHOWS WHERE YOU ARE   I.   BASIC
       WORKING ON THE SCREEN.
                                                  J.   PRINT
_G_ 9. KEY PRESSED TO ENTER THE INFORMATION
       INTO THE COMPUTER'S MEMORY.

_B_ 10. A GROUP OF STATEMENTS COMBINED TOGETHER
        FOR THE COMPUTER TO FOLLOW.

TRUE OR FALSE:

_F_ 1. LINE NUMBERS MUST ALWAYS BE INCREMENTED BY 10'S.

_T_ 2. WHEN THE COMPUTER IS TURNED OFF, YOUR PROGRAM IS LOST.

_T_ 3. THE SHIFT KEY CAUSES THE UPPER CHARACTER ON A KEY TO BE PRINTED.

_F_ 4. IF YOU CLEAR THE SCREEN, YOUR PROGRAM WILL BE CLEARED FROM
       THE COMPUTER'S MEMORY.

_T_ 5. A COMPUTER IS A MACHINE THAT PERFORMS TASKS AT A
       HIGH SPEED WITH GREAT ACCURACY.

WRITING A PROGRAM:
A. WRITE A PROGRAM TO DISPLAY YOUR NAME AND ADDRESS.
    (USE BACK OF PAPER IF NECESSARY.)
    10 REM NAME AND ADDRESS PROGRAM
    20 PRINT"<SHIFT/CLR-HOME>"
    30 PRINT"<STUDENT'S FIRST AND LAST NAME>"
    40 PRINT"<STREET ADDRESS>"
    50 PRINT"<CITY, STATE   ZIPCODE>"
    60 END
B. WHAT COMMAND WOULD YOU USE TO EXECUTE THIS PROGRAM? ___RUN___

C. WHAT COMMAND WILL DISPLAY YOUR PROGRAM STATEMENTS BACK ON

    THE SCREEN? __LIST__

GRADE 5 - DAY 2
COMPUTER LITERACY
STUDENT HANDOUT #2
COLOR CODES

NAME _____

SECTION _____

PRESS		COLOR	DISPLAY
CTRL	1	BLACK	
CTRL	2	WHITE	
CTRL	3	RED	
CTRL	4	CYAN	
CTRL	5	PURPLE	
CTRL	6	GREEN	
CTRL	7	BLUE	
CTRL	8	YELLOW	
C=	1	ORANGE	
C=	2	BROWN	
C=	3	LT. RED	
C=	4	GRAY #1	
C=	5	GRAY #2	
C=	6	LT. GREEN	
C=	7	LT. BLUE	
C=	8	GRAY #3	
CTRL	9	REVERSE ON	
CTRL	Ø	REVERSE OFF	

G5.D02.SH2.CC

1. FILL IN THE BLANKS TO COMPLETE A PROGRAM TO PRINT YOUR FIRST NAMES.

    _____   REM   PROGRAM TO PRINT OUR NAMES

        20   _____ "<SHIFT/CLR-HOME>"

        30   PRINT "_____ "

        40   PRINT "_____ "

        50   _____

2. RAISE YOUR HAND TO HAVE YOUR COMPLETED PROGRAM CHECKED.

3. TURN ON THE COMPUTER AND THE MONITOR.

4. CLEAR THE SCREEN.

5. ENTER THE PROGRAM TO PRINT YOUR FIRST NAMES.

6. RAISE YOUR HAND TO HAVE YOUR PROGRAM CHECKED.

7. EXECUTE YOUR PROGRAM.

8. CLEAR THE SCREEN.

9. HAVE THE COMPUTER DISPLAY THE PROGRAM ON THE SCREEN.

10. ERASE THE PROGRAM FROM THE COMPUTER'S MEMORY.

11. ASK THE TEACHER FOR THE NEXT PAGE.

GRADE 5 - DAY 2
COMPUTER LITERACY
WORKSHEET 2
TEACHER'S COPY

NAME _____

SECTION _____

118

1. FILL IN THE BLANKS TO COMPLETE A PROGRAM TO PRINT YOUR FIRST NAMES.

   <u>10</u>   REM   PROGRAM TO PRINT OUR NAMES

   20   <u>PRINT</u>   "<SHIFT/CLR-HOME>"

   30   PRINT "<u>   <YOUR FIRST NAME>   </u>"

   40   PRINT "<u> <YOUR PARTNER'S FIRST NAME> </u>"

   50   <u>END</u>

2. RAISE YOUR HAND TO HAVE YOUR COMPLETED PROGRAM CHECKED.

3. TURN ON THE COMPUTER AND THE MONITOR.   (EACH STUDENT TURNS ON AN ITEM.)

4. CLEAR THE SCREEN.   <SHIFT/CLR-HOME>

5. ENTER THE PROGRAM TO PRINT YOUR FIRST NAMES.

6. RAISE YOUR HAND TO HAVE YOUR PROGRAM CHECKED. (HAVE THE STUDENTS PROCEED
                                                  WITH STEPS 7 - 10 ONLY IN
                                                  YOUR PRESENCE.)
7. EXECUTE YOUR PROGRAM.   (RUN)

8. CLEAR THE SCREEN.   <SHIFT/CLR-HOME>

9. HAVE THE COMPUTER DISPLAY THE PROGRAM ON THE SCREEN.   (LIST)

10. ERASE THE PROGRAM FROM THE COMPUTER'S MEMORY.   (NEW)

11. ASK THE TEACHER FOR THE NEXT PAGE.

GRADE 5 - DAY 2
COMPUTER LITERACY
WORKSHEET 2A
STUDENT'S COPY

119

NAME _____

SECTION _____

1. ENTER THE FOLLOWING PROGRAM, USING THE <CONTROL 9> TO ENTER "RVS ON" AND
   <CONTROL 3> TO ENTER "RED". THE COLOR BLACK IS ENTERED USING <CONTROL 1>.
   YOU SHOULD BE ABLE TO FIGURE OUT HOW TO ENTER THE "RVS OFF" YOURSELF. IF
   YOU NEED A HINT, ASK YOUR TEACHER!

```
10 REM    RED AND BLACK COLOR BARS
20 PRINT "<SHIFT CLR/HOME>"
30 PRINT "<RVS ON><RED><10 SPACES><CO>"
40 PRINT "<RVS ON><BLACK><10 SPACES><CO>"
50 PRINT "<RVS OFF>   THAT'S ALL!"
60 END
```

2. EXECUTE THE PROGRAM, LIST THE PROGRAM ON THE SCREEN AND THEN RAISE YOUR
   HAND TO HAVE YOUR PROGRAM CHECKED.

3. REPLACE LINE #50 WITH:

```
50 GOTO 20
```

4. EXECUTE THE PROGRAM, LIST THE PROGRAM ON THE SCREEN AND THEN RAISE YOUR
   HAND TO HAVE YOUR PROGRAM CHECKED.

EXTRA CREDIT:

A. ENTER THIS PROGRAM:

```
10 REM    PROGRAM TO UNDERSTAND THE GOTO COMMAND
20 PRINT "<SHIFT/CLR-HOME>"
30 PRINT "THE GOTO COMMAND ALLOWS YOU"
40 PRINT "TO REPEAT A STATEMENT OVER AND OVER"
50 PRINT "PRESS THE STOP BUTTON TO END PROGRAM"
60 GOTO 20
70 END
```

B. USE TODAY'S LESSON IN ORDER TO DEVELOP A PROGRAM THAT WILL COLOR THE
   SCREEN ALL ONE COLOR. (DO NOT USE A POKE STATEMENT AND AS A HINT, THE
   LENGTH OF ONE LINE IS 39 SPACES.)

1. ENTER THE FOLLOWING PROGRAM, USING THE <CONTROL 9> TO ENTER "RVS ON" AND
    <CONTROL 3> TO ENTER "RED". THE COLOR BLACK IS ENTERED USING <CONTROL 1>.
    YOU SHOULD BE ABLE TO FIGURE OUT HOW TO ENTER THE "RVS OFF" YOURSELF. IF
    YOU NEED A HINT, ASK YOUR TEACHER!

```
        10 REM    RED AND BLACK COLOR BARS         (HAVE THE STUDENTS
        20 PRINT "<SHIFT CLR/HOME>"                 TAKE TURNS ENTERING
        30 PRINT "<RVS ON><RED><10 SPACES><CO>"     LINES.)
        40 PRINT "<RVS ON><BLACK><10 SPACES><CO>"
        50 PRINT "<RVS OFF>  THAT'S ALL!"
        60 END
```

2. EXECUTE THE PROGRAM, LIST THE PROGRAM ON THE SCREEN AND THEN RAISE YOUR
    HAND TO HAVE YOUR PROGRAM CHECKED.

3. REPLACE LINE #50 WITH:

```
        50 GOTO 20
```

4. EXECUTE THE PROGRAM, LIST THE PROGRAM ON THE SCREEN AND THEN RAISE YOUR
    HAND TO HAVE YOUR PROGRAM CHECKED.

EXTRA CREDIT:

A. ENTER THIS PROGRAM:

```
        10 REM    PROGRAM TO UNDERSTAND THE GOTO COMMAND
        20 PRINT "<SHIFT/CLR-HOME>"
        30 PRINT "THE GOTO COMMAND ALLOWS YOU"
        40 PRINT "TO REPEAT A STATEMENT OVER AND OVER"
        50 PRINT "PRESS THE STOP BUTTON TO END PROGRAM"
        60 GOTO 20
        70 END
```

B. USE TODAY'S LESSON IN ORDER TO DEVELOP A PROGRAM THAT WILL COLOR THE
    SCREEN ALL ONE COLOR. (DO NOT USE A POKE STATEMENT AND AS A HINT, THE
    LENGTH OF ONE LINE IS 39 SPACES.)

```
            10 REM COLOR THE SCREEN
            20 PRINT "<SHIFT/CLR-HOME>"
            30 PRINT "<C9><C1-C8 OR C=1-C=8><39 SP><CO>"
(OPT.)      35 X = X + 1
(OPT.)      36 IF X = 22 THEN GOTO 50
            40 GOTO 30
            50 END
```

G5.D02.W2A.TC

<u>LESSON PLAN</u>

```
┌─────────────────────────────────────────────────────────────────────────┐
│ GRADE 5 - DAY 3                                                           │
│ COMPUTER LITERACY                                                         │
│ TEACHER'S LESSON PLAN                                                     │
├───────────────────────────────────────┬───────────────────────────────────┤
│ INSTRUCTIONAL AIDS:                    │ TOOLS, EQUIPMENT AND MATERIALS:   │
│                                        │                                   │
│  COPIES OF THE NECESSARY HANDOUTS AND  │  CHALK, ERASER AND PENCILS        │
│  QUIZ 2 - DAY 2                        │                                   │
│                                        │                                   │
│                                        │                                   │
├───────────────────────────────────────┴───────────────────────────────────┤
│ OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,       │
│ STUDENT EVALUATION, ADDITIONAL TOPIC                                       │
└─────────────────────────────────────────────────────────────────────────┘
```

OBJECTIVE FOR THE DAY:

THE STUDENTS WILL LEARN HOW TO CONTROL THE OUTPUT OF A PROGRAM BY USING THE "TAB" AND DOWN COMMANDS AND BE PREPARED FOR A QUIZ ON DAY 4.

INTRODUCTION:

REVIEW WITH THE STUDENTS THE MATERIAL COVERED AT THE PREVIOUS CLASS AND GIVE A QUIZ IN THE HOMEROOM.

PRESENTATION:

DISTRIBUTE COPIES OF:

WORKSHEET #3   (G5.D03.W3.SC)

READING FROM THE TEACHER'S COPY OF THE WORKSHEET #3, READ THE INSTRUCTIONS INCLUDED IN STEP 1. EMPHASIZE TO THE STUDENTS THAT THEY SHOULD REVIEW THE MATERIAL COVERED DURING THE CLASS PERIOD SOME TIME BEFORE THE NEXT CLASS MEETING BECAUSE THERE WILL BE A QUIZ ON ANY OF THE MATERIAL, NEXT TIME WE MEET. ASSIST THE STUDENTS ON WORKSHEET #3 BY CHECKING OFF AND RECORDING THE COMPLETION OF EACH STEP. QUESTIONS THAT COULD BE ASKED:
1. WHAT IS DIFFERENT ABOUT THE PROGRAM NOW?
2. HOW DID YOU PRINT A BLANK LINE?
3. WHAT COMMAND WAS IT THAT MOVED THE MESSAGE TO THE CENTER OF THE SCREEN?
4. WHAT COMMAND WAS IT THAT MOVED THE MESSAGE TO THE MIDDLE OF THE SCREEN?

WHEN THE STUDENTS ARE DONE WITH WORKSHEET #3,

DISTRIBUTE COPIES OF:

WORKSHEET #3A   (G5.D03.W3A.SC)

G5.D03.LP.TC

LESSON PLAN
CONTINUED
PAGE 2

GRADE 5 - DAY 3
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING TODAY'S CLASS MEETING.
REVIEW WHAT THE STUDENTS SHOULD BE WORKING ON FOR THEIR MAJOR GRAPHICS PROGRAM.
(PICTURE DUE DAY 5)

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING INDEPENDENTLY ON A QUIZ.
THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' QUIZZES WILL BE EVALUATED GIVING ONE POINT FOR EACH CORRECT
ANSWER.
THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF TEN POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

ADDITIONAL TOPIC:

IF THE STUDENTS FINISH WITH WORKSHEET #3, THEY COULD BEGIN WORKING ON WORKSHEET
#3A.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G5.D03.LP.TC

INSTRUCTIONS: FILL-IN THE BLANKS WITH THE CORRECT ANSWER/RESPONSE.

1. THE RESERVED WORD USED TO INCLUDE INFORMATION (REMARKS) IN A PROGRAM WHICH DOES NOT CHANGE THE PROGRAM:

   _____

2. THE SYMBOL " " APPEARS IN A PROGRAM STATEMENT WHEN YOU PRESS THE

   _____ & _____ KEYS.

3. WRITE A LINE OF PROGRAMMING TO GIVE A PROGRAM A TITLE/REMARK WHICH SAYS THE FOLLOWING: PROGRAM TO PRINT MY NAME.

   _____

4. WRITE A LINE OF PROGRAMMING TO CLEAR THE SCREEN.

   _____

5. WRITE A LINE OF PROGRAMMING TO DISPLAY YOUR NAME.

   _____

6. WRITE A LINE OF PROGRAMMING THAT IS ALWAYS USED AS A LAST STATEMENT IN A PROGRAM.

   _____

7. THE COMMAND USED TO HAVE THE COMPUTER EXECUTE (START) YOUR PROGRAM IS:

   _____

8. THE COMMAND USED TO DISPLAY THE PROGRAM IN MEMORY ON THE SCREEN:

   _____

9. THE TWO KEYS PRESSED TO TURN ON THE REVERSE COLOR, (RVS ON):

   THE _____ KEY AND THE NUMBER _____.

10. WRITE A LINE OF PROGRAMMING THAT WILL MAKE A BLACK COLOR BAR, 12 SPACES LONG.

   _____

GRADE 5 - DAY 3
COMPUTER LITERACY
QUIZ 2 - DAY 2
TEACHER'S COPY

124

NAME _____

SECTION _____

INSTRUCTIONS: FILL-IN THE BLANKS WITH THE CORRECT ANSWER/RESPONSE.

1. THE RESERVED WORD USED TO INCLUDE INFORMATION (REMARKS) IN A PROGRAM WHICH DOES NOT CHANGE THE PROGRAM:

   _____REM_____

2. THE SYMBOL " " APPEARS IN A PROGRAM STATEMENT WHEN YOU PRESS THE

   ____SHIFT____ & ____CLR-HOME____ KEYS.

3. WRITE A LINE OF PROGRAMMING TO GIVE A PROGRAM A TITLE/REMARK WHICH SAYS THE FOLLOWING: PROGRAM TO PRINT MY NAME.

   ___10___REM__PROGRAM TO PRINT MY NAME_____

4. WRITE A LINE OF PROGRAMMING TO CLEAR THE SCREEN.

   ___20___PRINT____"<SHIFT/CLR-HOME>"_____

5. WRITE A LINE OF PROGRAMMING TO DISPLAY YOUR NAME.

   ___30___PRINT____"<STUDENT'S NAME>"_____

6. WRITE A LINE OF PROGRAMMING THAT IS ALWAYS USED AS A LAST STATEMENT IN A PROGRAM.

   ___40___END_____

7. THE COMMAND USED TO HAVE THE COMPUTER EXECUTE (START) YOUR PROGRAM IS:

   ___RUN_____

8. THE COMMAND USED TO DISPLAY THE PROGRAM IN MEMORY ON THE SCREEN:

   ___LIST_____

9. THE TWO KEYS PRESSED TO TURN ON THE REVERSE COLOR, (RVS ON):

   THE ____CONTROL____ KEY AND THE NUMBER ___9___.

10. WRITE A LINE OF PROGRAMMING THAT WILL MAKE A BLACK COLOR BAR,12 SPACES LONG.

OR
   ___35___PRINT____"<C9><C1><12 SP><C0>"_____
   ___35___PRINT____"<RVS ON><BLACK><12 SPACES><RVS OFF>"___

G5.D03.Q2.TC

GRADE 5 - DAY 3
COMPUTER LITERACY
WORKSHEET 3
STUDENT'S COPY

NAME _____

SECTION _____.

125

1. LISTEN TO THE TEACHER'S INSTRUCTIONS AND ENTER THE FOLLOWING PROGRAM:

```
10 REM    LEARNING TO PRINT
20 PRINT "<SHIFT/CLR-HOME>"
30 PRINT "<TEACHER'S NAME>"
40 END
```

2. BETWEEN LINE 30 AND 40, ADD THE LINE: IS MY COMPUTER TEACHER.

```
35 PRINT "IS MY COMPUTER TEACHER."
```

3. BELOW THIS LINE, ADD: AT <NAME OF YOUR SCHOOL>.

```
37 PRINT "AT <NAME OF YOUR SCHOOL>"
```

4. ADD A BLANK LINE BETWEEN THE LINES OF THE MESSAGE.

```
32 PRINT
36 PRINT
```

5. MODIFY LINES 30, 35 AND 37 TO CENTER THE MESSAGE ON THE SCREEN.

```
30 PRINT TAB(15) "<TEACHER'S NAME>"
```

```
35 PRINT TAB(15) "IS MY COMPUTER TEACHER."
```

```
37 PRINT TAB(15) "AT <NAME OF YOUR SCHOOL>"
```

6. MODIFY LINE 30 TO MOVE THE MESSAGE TO THE MIDDLE OF THE SCREEN.
(THE INVERSE "Q" IS ENTERED BY HOLDING THE CONTROL KEY WHILE PRESSING THE DOWN ARROW.)

```
30 PRINT TAB(15) "QQQQQQQQQQ<TEACHER'S NAME>"
```

ASK TEACHER FOR THE NEXT PAGE.

G5.D03.W3.SC

READ STEP 1 TO THE STUDENTS:

1. THIS WORKSHEET IS ONE COMPLETE PROGRAM. <u>DO NOT</u> USE THE RESERVED WORD
    "NEW" UNTIL THE TEACHER INSTRUCTS YOU. ENTER THE FOLLOWING PROGRAM,
    EXECUTE THE PROGRAM AND LIST THE PROGRAM ON THE SCREEN AT EACH STEP. WAIT
    FOR THE TEACHER <u>AFTER COMPLETING</u> EACH STEP.
```
            10 REM    LEARNING TO PRINT
            20 PRINT "<SHIFT/CLR-HOME>"
            30 PRINT "<TEACHER'S NAME>"
            40 END
```

2. BETWEEN LINE 30 AND 40, ADD THE LINE: IS MY COMPUTER TEACHER.
```
            10 REM    LEARNING TO PRINT
            20 PRINT "<SHIFT/CLR-HOME>"
            30 PRINT "<TEACHER'S NAME>"
          *35 PRINT "IS MY COMPUTER TEACHER."
            40 END
```

3. BELOW THIS LINE, ADD: AT <NAME OF YOUR SCHOOL>.
```
            10 REM    LEARNING TO PRINT
            20 PRINT "<SHIFT/CLR-HOME>"
            30 PRINT "<TEACHER'S NAME>"
            35 PRINT "IS MY COMPUTER TEACHER."
          *37 PRINT "AT <NAME OF YOUR SCHOOL>"
            40 END
```

4. ADD A BLANK LINE BETWEEN THE LINES OF THE MESSAGE.
```
            10 REM    LEARNING TO PRINT
            20 PRINT "<SHIFT/CLR-HOME>"
            30 PRINT "<TEACHER'S NAME>"
          *32 PRINT
            35 PRINT "IS MY COMPUTER TEACHER."
          *36 PRINT
            37 PRINT "AT <NAME OF YOUR SCHOOL>"
            40 END
```

5. MODIFY LINES 30, 35 AND 37 TO CENTER THE MESSAGE ON THE SCREEN.
```
            10 REM    LEARNING TO PRINT
            20 PRINT "<SHIFT/CLR-HOME>"
          *30 PRINT TAB(15) "<TEACHER'S NAME>"
            32 PRINT
          *35 PRINT TAB(15) "IS MY COMPUTER TEACHER."
            36 PRINT
          *37 PRINT TAB(15) "AT <NAME OF YOUR SCHOOL>"
            40 END
```

6. MODIFY LINE 30 TO MOVE THE MESSAGE TO THE MIDDLE OF THE SCREEN.
    (THE INVERSE "Q" IS ENTERED BY HOLDING THE CONTROL KEY WHILE PRESSING THE
    DOWN ARROW.)
```
            10 REM    LEARNING TO PRINT
            20 PRINT "<SHIFT/CLR-HOME>"
          *30 PRINT TAB(15) "QQQQQQQQQQ<TEACHER'S NAME>"
            32 PRINT
            35 PRINT TAB(15) "IS MY COMPUTER TEACHER."
            36 PRINT
            37 PRINT TAB(15) "AT <NAME OF YOUR SCHOOL>"
            40 END
```
ASK TEACHER FOR THE NEXT PAGE.

GRADE 5 - DAY 3
COMPUTER LITERACY
WORKSHEET 3A
STUDENT'S COPY

NAME _____

SECTION _____

127

1. LISTEN TO THE TEACHER'S INSTRUCTIONS. CLEAR MEMORY AND ENTER A PROGRAM
    WHICH WOULD PRINT YOUR NAME AND YOUR PARTNER'S NAME ON TWO SEPARATE LINES.

2. ADD LINES OF PROGRAMMING TO PUT A COLOR BAR UNDER YOUR NAME AND YOUR
    PARTNER'S NAME. YOU MAY USE ANY COLOR EXCEPT THE BACKGROUND COLOR.

3. COPY AND MODIFY THE PROGRAM TO CENTER THE SAME MESSAGE ON THE SCREEN.(15)

4. COPY AND MODIFY THE PROGRAM TO MOVE THE SAME MESSAGE TO THE MIDDLE OF THE
    SCREEN.(8 AND 15)

5. ADD A LINE OF PROGRAMMING TO ADD A COLOR BAR. THE COLOR BAR SHOULD BE 10
    SPACES RED, 10 SPACES WHITE AND 10 SPACES BLUE.

READ STEP 1 TO THE STUDENTS:

1. THIS WORKSHEET IS ONE COMPLETE PROGRAM. <u>DO NOT</u> USE THE RESERVED WORD
    "NEW" UNTIL THE TEACHER INSTRUCTS YOU. AFTER COMPLETING EACH STEP,
    EXECUTE THE PROGRAM AND LIST THE PROGRAM. WAIT FOR THE TEACHER <u>BEFORE</u>
    GOING ON TO THE NEXT STEP. CLEAR MEMORY AND ENTER A PROGRAM WHICH WOULD
    PRINT YOUR NAME AND YOUR PARTNER'S NAME ON <u>TWO SEPARATE LINES</u>.

```
        10 REM PROGRAM TO PRINT OUR NAMES
        20 PRINT   "<SHIFT/CLR-HOME>
        30 PRINT   "<STUDENT'S NAME>"
        40 PRINT   "<PARTNER'S NAME>"
        140 END
```

2. ADD LINES OF PROGRAMMING TO PUT A COLOR BAR UNDER YOUR NAME AND YOUR
    PARTNER'S NAME. YOU MAY USE ANY COLOR EXCEPT THE BACKGROUND COLOR.

```
        10 REM PROGRAM TO PRINT OUR NAMES
        20 PRINT   "<SHIFT/CLR-HOME>
        30 PRINT   "<STUDENT'S NAME>"
       *35 PRINT   "<C9><C#><XX SP><C0>"
        40 PRINT   "<PARTNER'S NAME>"
       *45 PRINT   "<C9><C#><XX SP><C0>"
        140 END
```

3. COPY AND MODIFY THE PROGRAM TO CENTER THE SAME MESSAGE ON THE SCREEN.(15)

```
        10 REM PROGRAM TO PRINT OUR NAMES
        20 PRINT   "<SHIFT/CLR-HOME>
        30 PRINT   "<STUDENT'S NAME>"
        35 PRINT   "<C9><C#><XX SP><C0>"
        40 PRINT   "<PARTNER'S NAME>"
        45 PRINT   "<C9><C#><XX SP><C0>"
       *50 PRINT   TAB(15) "<STUDENT'S NAME>"
       *60 PRINT   TAB(15) "<C9><C#><XX SP><C0>"
       *70 PRINT   TAB(15) "<PARTNER'S NAME>"
       *80 PRINT   TAB(15) "<C9><C#><XX SP><C0>"
        140 END
```

4. COPY AND MODIFY THE PROGRAM TO MOVE THE SAME MESSAGE TO THE MIDDLE OF THE
    SCREEN.(8 AND 15)

```
        10 REM PROGRAM TO PRINT OUR NAMES
        20 PRINT   "<SHIFT/CLR-HOME>
        30 PRINT   "<STUDENT'S NAME>"
        35 PRINT   "<C9><C#><XX SP><C0>"
        40 PRINT   "<PARTNER'S NAME>"
        45 PRINT   "<C9><C#><XX SP><C0>"
        50 PRINT   TAB(15) "<STUDENT'S NAME>"
        60 PRINT   TAB(15) "<C9><C#><XX SP><C0>"
        70 PRINT   TAB(15) "<PARTNER'S NAME>"
        80 PRINT   TAB(15) "<C9><C#><XX SP><C0>"
       *90 PRINT   TAB(15) "QQQQQQQQ<STUDENT'S NAME>"
      *100 PRINT   TAB(15) "<C9><C#><XX SP><C0>"
      *110 PRINT   TAB(15) "<PARTNER'S NAME>"
      *120 PRINT   TAB(15) "<C9><C#><XX SP><C0>"
        140 END
```

5. ADD A LINE OF PROGRAMMING TO ADD A COLOR BAR. THE COLOR BAR SHOULD BE 10
    SPACES RED, 10 SPACES WHITE AND 10 SPACES BLUE.

```
       *130 PRINT "<C9><C3><10 SP><C2><10 SP><C4><10 SP><C0>"
```

LESSON PLAN

```
;GRADE 5 - DAY 4
;COMPUTER LITERACY
;TEACHER'S LESSON PLAN
```

INSTRUCTIONAL AIDS:	TOOLS, EQUIPMENT AND MATERIALS:
COPIES OF THE NECESSARY HANDOUTS AND QUIZ 3 - DAY 3	CHALK, ERASER AND PENCILS

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT, STUDENT EVALUATION, ADDITIONAL TOPIC

OBJECTIVE FOR THE DAY:

THE STUDENTS WILL PRACTICE IDENTIFYING ERRORS IN A PROGRAM, USE THE "FOR-NEXT" COMMAND AND BE PREPARED FOR A QUIZ ON DAY 5.

INTRODUCTION:

REVIEW WITH THE STUDENTS THE MATERIAL COVERED AT THE PREVIOUS CLASS AND GIVE A QUIZ IN THE HOMEROOM.

PRESENTATION:

DISTRIBUTE COPIES OF:

WORKSHEET #4   (G5.D04.W4.SC)

THIS WORKSHEET IS TO BE COMPLETED AS HOMEWORK. THE WORKSHEET WILL BE DUE AT THE NEXT CLASS MEETING. ONE HINT YOU MIGHT WANT TO GIVE IS THAT THERE ARE TWO LINES THAT DO NOT HAVE ANY ERROR, BUT MIGHT NOT BE IN THE PROPER SEQUENCE.

DISTRIBUTE COPIES OF:

WORKSHEET #4A   (G5.D04.W4A.SC)

THIS WORKSHEET HAS THREE PROGRAMS. INSTRUCT STUDENTS NOT TO USE THE RESERVED WORD "NEW" UNTIL YOU INSTRUCT THEM TO DO SO. THE STUDENTS SHOULD ENTER THE PROGRAM, EXECUTE THE PROGRAM AND LIST THE PROGRAM ON THE SCREEN AT EACH STEP. INSTRUCT STUDENTS TO WAIT FOR YOU TO CHECK THEIR PROGRAMS AFTER COMPLETING EACH NUMBERED STEP.

G5.D04.LP.TC

LESSON PLAN
CONTINUED
PAGE 2

GRADE 5 - DAY 4
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING THE COURSE AND REMIND THE STUDENTS TO
STUDY ALL MATERIAL IN PREPARATION FOR THE QUIZ AT THE NEXT CLASS MEETING.
REVIEW WHAT THE STUDENTS SHOULD BE WORKING ON FOR THEIR MAJOR GRAPHICS PROGRAM.
(PICTURE DUE DAY 5)

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING INDEPENDENTLY ON A QUIZ.
THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' QUIZZES WILL BE EVALUATED GIVING ONE POINT FOR EACH CORRECT
ANSWER.
THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF TEN POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

ADDITIONAL TOPIC:

IF THE STUDENTS FINISH WITH WORKSHEET #4A, THEY CAN PROCEED TO WORK ON
CORRECTING WORKSHEET #4. IF THERE IS TIME AVAILABLE, THE STUDENTS CAN ENTER
WORKSHEET #4 INTO THE COMPUTER.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G5.D04.LP.TC

NAME _____

SECTION _____

INSTRUCTIONS: FILL-IN THE BLANKS WITH THE CORRECT ANSWER/RESPONSE.

1. THE RESERVED WORD USED TO INCLUDE INFORMATION (REMARKS) IN A PROGRAM WHICH DOES NOT CHANGE THE PROGRAM:

   _____

2. THE SYMBOL "   " APPEARS IN A PROGRAM STATEMENT WHEN YOU PRESS THE

   _____ & _____ KEYS.

3. WRITE A LINE OF PROGRAMMING TO GIVE A PROGRAM A TITLE/REMARK WHICH SAYS THE FOLLOWING: PROGRAM TO PRINT MY NAME.

   _____

4. WRITE A LINE OF PROGRAMMING TO CLEAR THE SCREEN.

   _____

5. WRITE A LINE OF PROGRAMMING TO DISPLAY YOUR NAME.

   _____

6. WRITE A LINE OF PROGRAMMING THAT IS ALWAYS USED AS A LAST STATEMENT IN A PROGRAM.

   _____

7. THE COMMAND USED TO HAVE THE COMPUTER EXECUTE (START) YOUR PROGRAM IS:

   _____

8. THE COMMAND USED TO DISPLAY THE PROGRAM IN MEMORY ON THE SCREEN:

   _____

9. THE TWO KEYS PRESSED TO TURN ON THE REVERSE COLOR, (RVS ON):

   THE _____ KEY AND THE NUMBER _____ .

10. WRITE A LINE OF PROGRAMMING THAT WILL MAKE A BLACK COLOR BAR, 12 SPACES LONG.

   _____

INSTRUCTIONS: FILL-IN THE BLANKS WITH THE CORRECT ANSWER/RESPONSE.

1. THE RESERVED WORD USED TO INCLUDE INFORMATION (REMARKS) IN A PROGRAM WHICH
    DOES NOT CHANGE THE PROGRAM:

    _____REM_____

2. THE SYMBOL " " APPEARS IN A PROGRAM STATEMENT WHEN YOU PRESS THE

    ____SHIFT____ & ____CLR-HOME____ KEYS.

3. WRITE A LINE OF PROGRAMMING TO GIVE A PROGRAM A TITLE/REMARK WHICH SAYS
    THE FOLLOWING: PROGRAM TO PRINT MY NAME.

    ____10__REM__PROGRAM TO PRINT MY NAME_____

4. WRITE A LINE OF PROGRAMMING TO CLEAR THE SCREEN.

    ____20__PRINT____"<SHIFT/CLR-HOME>"_____

5. WRITE A LINE OF PROGRAMMING TO DISPLAY YOUR NAME.

    ____30__PRINT____"<STUDENT'S NAME>"_____

6. WRITE A LINE OF PROGRAMMING THAT IS ALWAYS USED AS A LAST STATEMENT IN A
    PROGRAM.

    ____40__END_____

7. THE COMMAND USED TO HAVE THE COMPUTER EXECUTE (START) YOUR PROGRAM IS:

    ____RUN_____

8. THE COMMAND USED TO DISPLAY THE PROGRAM IN MEMORY ON THE SCREEN:

    ____LIST_____

9. THE TWO KEYS PRESSED TO TURN ON THE REVERSE COLOR, (RVS ON):

    THE _____CONTROL_____ KEY AND THE NUMBER ____9____.

10. WRITE A LINE OF PROGRAMMING THAT WILL MAKE A BLACK COLOR BAR,12 SPACES
    LONG.

    ____35__PRINT____"<C9><C1><12 SP><C0>"_____
OR ____35__PRINT____"<RVS ON><BLACK><12 SPACES><RVS OFF>"_____

G5.D04.Q3.TC

THERE ARE TEN MISTAKES IN THE FOLLOWING PROGRAM, ONE IN EACH LINE.

FIND EACH MISTAKE, CORRECT IT, AND GIVE THE CORRECTED WORKSHEET TO YOUR
TEACHER BY THE NEXT CLASS MEETING. IF YOU HAVE TIME, YOU CAN ENTER THE
PROGRAM INTO A COMPUTER IN YOUR HOMEROOM TO SEE IF YOU HAVE IT CORRECT.

```
10    REM   "COMPUTER PROGRAMMING"

20    PRINT   <SHIFT/CLR-HOME>

30    PRINT     (10) "COMPUTER PROGRAMMING"

40    PRINT BLANK

50    PRINT TAB(16) "EASY AS"

60    "PRINT"

70    PRINT TAB(18) "IS AS"

80    PRIMT

90    PRINT "TAB(16)  CAN BE!"

100   PRINT END
```

THERE ARE TEN MISTAKES IN THE FOLLOWING PROGRAM, ONE IN EACH LINE.

FIND EACH MISTAKE, CORRECT IT, AND GIVE THE CORRECTED WORKSHEET TO YOUR
TEACHER BY THE NEXT CLASS MEETING. IF YOU HAVE TIME, YOU CAN ENTER THE
PROGRAM INTO A COMPUTER IN YOUR HOMEROOM TO SEE IF YOU HAVE IT CORRECT.

10   REM   "COMPUTER PROGRAMMING"   10   REM   COMPUTER PROGRAMMING

20   PRINT <SHIFT/CLR-HOME>   20   PRINT "<SHIFT/CLR-HOME>"

30 PRINT (10)"COMPUTER PROG."   30 PRINT TAB(10)"COMPUTER PROGRAMMING"

40   PRINT BLANK   40   PRINT

50   PRINT TAB(16) "EASY AS"   70   PRINT TAB(16) "EASY AS"

60   "PRINT"   60   PRINT

70   PRINT TAB(18) "IS AS"   50   PRINT TAB(18) "IS AS"

80   PRIMT   80   PRINT

90   PRINT "TAB(16) CAN BE!"   90   PRINT TAB(16) "CAN BE!"

100   PRINT END   100   END

GRADE 5 - DAY 4
COMPUTER LITERACY
WORKSHEET 4A
STUDENT'S COPY

NAME _____

135

SECTION _____

1. ENTER THE FOLLOWING PROGRAM:

```
 5 REM NAME PROGRAM
10 PRINT "<SHIFT/CLR-HOME>"
40 PRINT "<YOUR FIRST AND LAST NAME>"
50 PRINT "<YOUR PARTNER'S FIRST AND LAST NAME>"
80 GOTO 10
90 END
```

2. ADD LINES #20 AND #30:

```
20 FOR T = 1 TO 500
30 NEXT T
```

3. ADD LINES #60 AND #70:

```
60 FOR T = 1 TO 500
70 NEXT T
```

1. ENTER THE FOLLOWING PROGRAM:

```
10 REM COLOR BAR PROGRAM
20 PRINT "<SHIFT/CLR-HOME>"
30 FOR X = 1 TO 10
40 PRINT "<RVS ON><YELLOW><10 SPACES>"
50 NEXT X
60 END
```

1. ENTER THE FOLLOWING PROGRAM:

```
10 REM COUNT TO TEN PROGRAM
15 PRINT "<SHIFT/CLR-HOME>"
20 FOR X = 1 TO 10
30 PRINT X
40 NEXT X
50 END
```

2. WRITE AN ADDITIONAL LINE TO THIS PROGRAM SO THAT A BLANK LINE PRINTS OUT
   BETWEEN EACH LINE.

3. MODIFY A LINE OF THE PROGRAM TO MOVE THE PRINTED NUMBERS TO THE CENTER OF
   THE SCREEN.

GRADE 5 - DAY 4
COMPUTER LITERACY
WORKSHEET 4A
TEACHER'S COPY

NAME _____

SECTION _____

136

1. ENTER THE FOLLOWING PROGRAM:

```
 5 REM NAME PROGRAM
10 PRINT "<SHIFT/CLR-HOME>"
40 PRINT "<YOUR FIRST AND LAST NAME>"
50 PRINT "<YOUR PARTNER'S FIRST AND LAST NAME>"
80 GOTO 10
90 END
```

2. ADD LINES #20 AND #30:

```
20 FOR T = 1 TO 500      MAKES THE PROGRAM PAUSE
30 NEXT T                AFTER CLEARING THE SCREEN
```

3. ADD LINES #60 AND #70:

```
60 FOR T = 1 TO 500      MAKES THE PROGRAM PAUSE
70 NEXT T                AFTER PRINTING NAMES
```

1. ENTER THE FOLLOWING PROGRAM:

```
10 REM COLOR BAR PROGRAM
20 PRINT "<SHIFT/CLR-HOME>"
30 FOR X = 1 TO 10
40 PRINT "<RVS ON><YELLOW><10 SPACES>"
50 NEXT X
60 END
```

1. ENTER THE FOLLOWING PROGRAM:

```
10 REM COUNT TO TEN PROGRAM
15 PRINT "<SHIFT/CLR-HOME>"
20 FOR X = 1 TO 10
30 PRINT X
40 NEXT X
50 END
```

2. WRITE AN ADDITIONAL LINE TO THIS PROGRAM SO THAT A BLANK LINE PRINTS OUT
    BETWEEN EACH LINE.

    35 PRINT

3. MODIFY A LINE OF THE PROGRAM TO MOVE THE PRINTED NUMBERS TO THE CENTER OF
    THE SCREEN.

    30 PRINT TAB(20) X

LESSON PLAN

```
 _____
|                                                                      |
| GRADE 5 - DAY 5                                                       |
| COMPUTER LITERACY                                                     |
| TEACHER'S LESSON PLAN                                                 |
|_____|
|                                       |                              |
| INSTRUCTIONAL AIDS:                   | TOOLS, EQUIPMENT AND MATERIALS:|
|                                       |                              |
|  COPIES OF THE NECESSARY HANDOUTS AND |  CHALK, ERASER AND PENCILS   |
|  QUIZ 4 - DAY 4                       |                              |
|                                       |                              |
|                                       |                              |
|_____|_____|
|                                                                      |
| OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,  |
| STUDENT EVALUATION, ADDITIONAL TOPIC                                  |
|_____|
```

OBJECTIVE FOR THE DAY:

THE STUDENTS WILL LEARN HOW THE "GOTO", "IF-THEN", AND COUNTER COMMANDS CONTROL
THE OUTPUT OF A PROGRAM BY USING THE COMMANDS IN SOME PROGRAMS AND BE PREPARED
FOR A QUIZ ON DAY 6.

INTRODUCTION:

COLLECT WORKSHEET #4 FROM THE STUDENTS, THEN REVIEW WITH THE STUDENTS THE
MATERIAL COVERED AT THE PREVIOUS CLASS AND GIVE A QUIZ IN THE HOMEROOM.

PRESENTATION:

DISTRIBUTE COPIES OF:

WORKSHEET #5   (G5.D05.W5.SC)

READ THE DEFINITIONS IN ITEMS # 1-4 AND HAVE THE STUDENTS SUGGEST WHAT THE
TERMS MIGHT BE.   AFTER SPENDING A LIMITED AMOUNT OF TIME, MAKE SURE THE
STUDENTS ALL HAVE THE SAME AND CORRECT TERMS FOR THE DEFINITIONS.

CONTINUE WITH WORKSHEET #5, AND HAVE THE STUDENTS ENTER PROGRAMS, TAKING TURNS
EITHER LINE BY LINE OR PROGRAM BY PROGRAM.   THIS WORKSHEET HAS THREE SEPARATE
PROGRAMS.   THE STUDENTS SHOULD ENTER A PROGRAM, EXECUTE THE PROGRAM, LIST THE
PROGRAM AND WAIT FOR THE TEACHER TO CHECK THEIR WORK AFTER COMPLETING EACH
PROGRAM BEFORE GOING TO THE NEXT PROGRAM.   REMIND THE STUDENTS TO ENTER "NEW"
BEFORE STARTING THE NEXT PROGRAM.   WHILE THE STUDENTS ARE WORKING ON WORKSHEET
#5, CHECK EACH STUDENT'S MAJOR GRAPHICS PICTURE.

DISTRIBUTE COPIES OF:

STUDENT HANDOUT #3   (G5.D05.SH3.SC)   (2 PAGES)

THIS IS A TWO PAGE WORKSHEET THE STUDENTS CAN WRITE THEIR MAJOR GRAPHICS
PROGRAM ON.

G5.D05.LP.TC

LESSON PLAN
CONTINUED
PAGE 2

```
GRADE 5 - DAY 5
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC
```

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING THE COURSE AND REMIND THE STUDENTS TO
STUDY ALL MATERIAL IN PREPARATION FOR THE QUIZ AT THE NEXT CLASS MEETING.
REVIEW WHAT THE STUDENTS SHOULD BE WORKING ON FOR THEIR MAJOR GRAPHICS PROGRAM.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING INDEPENDENTLY ON A QUIZ.
THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' QUIZZES WILL BE EVALUATED GIVING ONE POINT FOR EACH CORRECT
ANSWER.
THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF TEN POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

ADDITIONAL TOPIC:

IF THE STUDENTS FINISH WITH WORKSHEET #5, THE STUDENTS CAN BE GIVEN WORKSHEET
#5A.

DISTRIBUTE COPIES OF:

WORKSHEET #5A   (G5.D05.W5A.SC)

THIS WORKSHEET IS ONE COMPLETE PROGRAM.   THE INSTRUCTIONS ARE ON THE TEACHER'S
COPY.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G5.D05.LP.TC

GRADE 5 - DAY 5
COMPUTER LITERACY
QUIZ 4 - DAY 4
STUDENT'S COPY

NAME _____

139

SECTION _____

1. WRITE A PROGRAM TO PRINT YOUR NAME AND ADDRESS 10 SPACES TO THE RIGHT ON THE SCREEN.

   10 _____

   20 _____

   30 _____

   40 _____

   50 _____

   60 _____

2. ADD A LINE TO PRINT YOUR PHONE NUMBER UNDER YOUR ADDRESS.

   55 _____

3. ADD LINES TO PRINT A BLANK LINE BETWEEN THE LINES OF THE MESSAGE.

   35 _____

   45 _____

   52 _____

4. MODIFY LINE 30 TO MOVE THE MESSAGE DOWN 5 LINES.

   30 _____

NAME _____

SECTION _____

1. WRITE A PROGRAM TO PRINT YOUR NAME AND ADDRESS 10 SPACES TO THE RIGHT ON THE SCREEN.

    10   REM   NAME AND ADDRESS PROGRAM

    20   PRINT   "<SHIFT/CLR-HOME>"

    30   PRINT   TAB(10)   "<FIRST AND LAST NAME>"

    40   PRINT   TAB(10)   "<STREET ADDRESS>"

    50   PRINT   TAB(10)   "<CITY, STATE   ZIPCODE>"

    60   END

2. ADD A LINE TO PRINT YOUR PHONE NUMBER UNDER YOUR ADDRESS.

    55   PRINT   TAB(10)   "<PHONE NUMBER>"

3. ADD LINES TO PRINT A BLANK LINE BETWEEN THE LINES OF THE MESSAGE.

    35   PRINT

    45   PRINT

    52   PRINT

4. MODIFY LINE 30 TO MOVE THE MESSAGE DOWN 5 LINES.

    30   PRINT TAB(10)   "QQQQQ<FIRST AND LAST NAME>"

G5.D05.Q4.TC

NAME _____

SECTION _____

PRINT VERY CLEARLY USING COMPLETE AND PROPER PROGRAMMING CODE

10   REM _____   <PROGRAM NAME>

15   REM _____   <YOUR NAME AND SECTION>

20   PRINT "<SHIFT/CLR-HOME>"

25   POKE 53280,1 : POKE 53281,1

30   _____

      _____

40   _____

      _____

50   _____

      _____

60   _____

      _____

70   _____

      _____

80   _____

      _____

90   _____

      _____

100   _____

      _____

110   _____

      _____

G5.D05.SH3.GP

120 _____

     _____

130 _____

     _____

140 _____

     _____

150 _____

     _____

160 _____

     _____

170 _____

     _____

180 _____

     _____

190 _____

     _____

200 _____

     _____

210 _____

     _____

220 _____

     _____

230 _____

     _____

240 END

G5.D05.SH3.GP

GRADE 5 - DAY 5
COMPUTER LITERACY
WORKSHEET 5
STUDENT'S COPY

NAME _____

SECTION _____

143

WRITE THE TERMS FOR THE FOLLOWING DEFINITIONS:

1. _____ - PART OF THE PROGRAM TELLING THE COMPUTER TO DO SOMETHING OVER
               AND OVER.

2. _____ - COMMAND TELLING THE COMPUTER TO GO DIRECTLY TO A CERTAIN LINE OF
               THE PROGRAM.

3. _____ - PART OF THE PROGRAM WHICH COUNTS THE NUMBER OF TIMES SOMETHING
               IS DONE.

4. _____ - COMMAND TO EVALUATE PROGRAM AND TAKE GIVEN ACTION.

DEMONSTRATION PROGRAMS:

1. ENTER THE FOLLOWING PROGRAM USING THE GOTO COMMAND:

```
    10    REM   USING GOTO
    20    PRINT "<SHIFT/CLR-HOME>"
    30    PRINT "THIS LINE WILL RUN FOREVER"
    40    GOTO 30
    50    END
```


2. ENTER THE FOLLOWING PROGRAM USING A COUNTER:

```
    10    REM USING A COUNTER
    20    PRINT "<SHIFT/CLR-HOME>"
    25    C = C + 1
    30    PRINT C
    40    GOTO 25
    50    END
```


3. ENTER THE FOLLOWING PROGRAM USING AN IF - THEN COMMAND WITH A COUNTER:

```
    10    REM USING IF-THEN WITH A COUNTER
    20    PRINT "<SHIFT/CLR-HOME>"
    30    PRINT "IF-THEN TELLS YOU HOW MANY TIMES TO REPEAT"
    35    C = C + 1
    40    IF C < 5 THEN GOTO 30
    50    END
```

GRADE 5 - DAY 5
COMPUTER LITERACY
WORKSHEET 5
TEACHER'S COPY

144

NAME _____

SECTION _____

WRITE THE TERMS FOR THE FOLLOWING DEFINITIONS:

1. ___LOOP___ - PART OF THE PROGRAM TELLING THE COMPUTER TO DO SOMETHING OVER
AND OVER.

2. ___GOTO___ - COMMAND TELLING THE COMPUTER TO GO DIRECTLY TO A CERTAIN LINE OF
THE PROGRAM.

3. _COUNTER_ - PART OF THE PROGRAM WHICH COUNTS THE NUMBER OF TIMES SOMETHING
IS DONE.

4. _IF - THEN_ - COMMAND TO EVALUATE PROGRAM AND TAKE GIVEN ACTION.

DEMONSTRATION PROGRAMS:

1. ENTER THE FOLLOWING PROGRAM USING THE GOTO COMMAND:

```
10    REM  USING GOTO
20    PRINT "<SHIFT/CLR-HOME>"
30    PRINT "THIS LINE WILL RUN FOREVER"
40    GOTO 30
50    END
```


2. ENTER THE FOLLOWING PROGRAM USING A COUNTER:

```
10    REM USING A COUNTER
20    PRINT "<SHIFT/CLR-HOME>"
25    C = C + 1
30    PRINT C
40    GOTO 25
50    END
```


3. ENTER THE FOLLOWING PROGRAM USING AN IF - THEN COMMAND WITH A COUNTER:

```
10    REM USING IF-THEN WITH A COUNTER
20    PRINT "<SHIFT/CLR-HOME>"
30    PRINT "IF-THEN TELLS YOU HOW MANY TIMES TO REPEAT"
35    C = C + 1
40    IF C < 5 THEN GOTO 30
50    END
```

LISTEN TO THE TEACHER'S INSTRUCTIONS.

1. PRINTING A COLOR BAR:


```
10    REM BLACK COLOR BAR
20    PRINT "<SHIFT/CLR-HOME>"
25    POKE 53280,1:POKE 53281,1
30    PRINT "<C9><C1><39 SP><C0>"
50    END
```


2. PRINTING COLOR BARS USING THE GOTO COMMAND:

(ADD LINE 40)

```
 10    REM BLACK COLOR BAR
 20    PRINT "<SHIFT/CLR-HOME>"
 25    POKE 53280,1:POKE 53281,1
 30    PRINT "<C9><C1><39 SP><C0>"
*40    GOTO 30
 50    END
```


3. PRINTING COLOR BARS USING THE IF - THEN COMMAND:

(ADD LINE 35 AND MODIFY LINE 40)

```
 10    REM BLACK COLOR BAR
 20    PRINT "<SHIFT/CLR-HOME>"
 25    POKE 53280,1:POKE 53281,1
 30    PRINT "<C9><C1><39 SP><C0>"
*35    C = C + 1
*40    IF C < 5 THEN GOTO 30
 50    END
```


4. COLOR THE FULL SCREEN:

(MODIFY LINE 40)

```
 10    REM BLACK COLOR BAR
 20    PRINT "<SHIFT/CLR-HOME>"
 25    POKE 53280,1:POKE 53281,1
 30    PRINT "<C9><C1><39 SP><C0>"
 35    C = C + 1
*40    IF C < 21 THEN GOTO 30
 50    END
```

GRADE 5 - DAY 5
COMPUTER LITERACY
WORKSHEET 5A
TEACHER'S COPY

146

NAME _____

SECTION _____

THIS WORKSHEET IS ONE COMPLETE PROGRAM. DO NOT USE THE RESERVED WORD "NEW"
            UNTIL THE TEACHER INSTRUCTS YOU. AFTER COMPLETING EACH STEP,
            EXECUTE THE PROGRAM AND LIST THE PROGRAM. WAIT FOR THE
            TEACHER BEFORE GOING ON TO THE NEXT STEP.

1. PRINTING A COLOR BAR:

```
    10    REM BLACK COLOR BAR
    20    PRINT "<SHIFT/CLR-HOME>"
    25    POKE 53280,1:POKE 53281,1
    30    PRINT "<C9><C1><39 SP><C0>"
    50    END
```

2. PRINTING COLOR BARS USING THE GOTO COMMAND:

   (ADD LINE 40)

```
    10    REM BLACK COLOR BAR
    20    PRINT "<SHIFT/CLR-HOME>"
    25    POKE 53280,1:POKE 53281,1
    30    PRINT "<C9><C1><39 SP><C0>"
   *40    GOTO 30
    50    END
```

3. PRINTING COLOR BARS USING THE IF - THEN COMMAND:

   (ADD LINE 35 AND MODIFY LINE 40)

```
    10    REM BLACK COLOR BAR
    20    PRINT "<SHIFT/CLR-HOME>"
    25    POKE 53280,1:POKE 53281,1
    30    PRINT "<C9><C1><39 SP><C0>"
   *35    C = C + 1
   *40    IF C < 5 THEN GOTO 30
    50    END
```

4. COLOR THE FULL SCREEN:

   (MODIFY LINE 40)

```
    10    REM BLACK COLOR BAR
    20    PRINT "<SHIFT/CLR-HOME>"
    25    POKE 53280,1:POKE 53281,1
    30    PRINT "<C9><C1><39 SP><C0>"
    35    C = C + 1
   *40    IF C < 21 THEN GOTO 30
    50    END
```

<u>LESSON PLAN</u>

```
,--------------------------------------------------------------------,
;GRADE 5 - DAY 6                                                     ;
;COMPUTER LITERACY                                                   ;
;TEACHER'S LESSON PLAN                                               ;
;                                                                    ;
;--------------------------------------------------------------------;
;INSTRUCTIONAL AIDS:              ;TOOLS, EQUIPMENT AND MATERIALS:  ;
;                                 ;                                  ;
; COPIES OF THE NECESSARY HANDOUTS AND ; CHALK, ERASER AND PENCILS  ;
; QUIZ 5 - DAY 5                  ; 12 DISKS (6 FOR THE TEACHER &   ;
;                                 ;            6 FOR THE STUDENTS)   ;
;                                 ;                                  ;
;                                 ;                                  ;
;--------------------------------------------------------------------;
;OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT, ;
;STUDENT EVALUATION, ADDITIONAL TOPIC                                ;
;                                                                    ;
'--------------------------------------------------------------------'
```

<u>OBJECTIVE FOR THE DAY</u>:

THE STUDENTS WILL USE THE "LOAD", "SAVE" AND "POKE" COMMANDS. THE STUDENTS
WILL WORK ON A SAMPLE GRAPHICS PROGRAM, START WRITING THEIR OWN GRAPHICS
PROGRAMS AND TAKE HOME A QUIZ DUE ON DAY 7.

<u>INTRODUCTION</u>:

REVIEW WITH THE STUDENTS THE MATERIAL COVERED AT THE PREVIOUS CLASSES AND GIVE
A QUIZ IN THE HOMEROOM.

DISTRIBUTE COPIES OF:

QUIZ #6   (G5.D07.Q6.SC) (DUE DAY 7)
STUDENT HANDOUT #4   (G5.D07.SH4.CC)
STUDENT HANDOUT #5   (G5.D07.SH5.DD)

<u>PRESENTATION</u>:

THE STUDENTS WILL FIND A DISK AT THEIR ASSIGNED STATIONS. THE TEACHER SHOULD
GUIDE THE STUDENTS THROUGH THE USE OF A DISK DRIVE. HAVE THE STUDENTS PROPERLY
PLACE THE DISK INTO THE DISK DRIVE AND USE THE LOAD COMMAND TO TRANSFER A COPY
OF A PROGRAM FROM DISK TO THE COMPUTER'S MEMORY. HAVE THE STUDENTS EXECUTE THE
PROGRAM. WHEN THE PROGRAM IS DONE, CLEAR MEMORY.

DISTRIBUTE COPIES OF:

*WORKSHEET #6   (G5.D06.W6.SC)
 WORKSHEET #6   (G5.D06.W6.SC2)

*FOR THE 1987-1988 SCHOOL YEAR, GIVE THE STUDENTS A COPY OF THE PROGRAM.
 ALL FUTURE SCHOOL YEARS, GIVE THE STUDENTS ONLY A COPY OF THE GRAPHICS.

THE STUDENTS SHOULD BE ABLE TO ENTER THE PROGRAM FROM THE GRAPHICS. IT MIGHT
BE HELPFUL TO GIVE THE STUDENTS THE GRAPHICS WORKSHEET A DAY EARLIER, SO THEY
COULD WRITE OUT THE PROGRAM AS HOMEWORK. THE GRAPHICS PICTURE FOR A SPECIFIC
WORKSHEET ALWAYS HAS THE CODE "SC2" FOR THE STUDENT'S COPY AND "TC2" FOR THE
TEACHER'S COPY. WHEN THE STUDENTS CORRECTLY COMPLETE THE WORKSHEET OR RUN OUT
OF TIME, SHOW THE STUDENTS HOW TO SAVE THE PROGRAM.

G5.D06.LP.TC

GRADE 5 - DAY 6
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING THE COURSE AND REMIND THE STUDENTS TO
STUDY ALL MATERIAL IN PREPARATION FOR A FINAL TEST ON DAY TEN.
REMIND THE STUDENTS THAT THEIR MAJOR GRAPHICS PICTURE SHOULD BE DONE AND THE
STUDENTS SHOULD BE WORKING ON THEIR MAJOR GRAPHICS PROGRAM BECAUSE THE TWO
ITEMS ARE DUE ON DAY 10.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING INDEPENDENTLY ON A QUIZ.
THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' QUIZZES WILL BE EVALUATED GIVING ONE POINT FOR EACH CORRECT
ANSWER.
THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF TEN POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

ADDITIONAL TOPIC:

IF THE STUDENTS FINISH WITH WORKSHEET #6, THE STUDENTS SHOULD BEGIN WRITING OUT
THE PROGRAM FOR THEIR MAJOR GRAPHICS PICTURE AND FINISH THE PROGRAM AS
HOMEWORK. THE STUDENTS SHOULD NOT ATTEMPT TO ENTER THIS PROGRAM UNTIL THEY
HAVE THE FIRST PAGE OF STUDENT HANDOUT #3 DONE AND THE TEACHER HAS CHECKED IT.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G5.D06.LP.TC

GRADE 5 - DAY 6
COMPUTER LITERACY
QUIZ 5 - DAY 5
STUDENT'S COPY

149

NAME _____

SECTION _____

1. WRITE A PROGRAM TO PRINT YOUR NAME AND ADDRESS 10 SPACES TO THE RIGHT ON THE SCREEN.

10 _____

20 _____

30 _____

40 _____

50 _____

60 _____

2. ADD A LINE TO PRINT YOUR PHONE NUMBER UNDER YOUR ADDRESS.

55 _____

3. ADD LINES TO PRINT A BLANK LINE BETWEEN THE LINES OF THE MESSAGE.

35 _____

45 _____

52 _____

4. MODIFY LINE 30 TO MOVE THE MESSAGE DOWN 5 LINES.

30 _____

G5.D06.Q5.SC

GRADE 5 - DAY 6
COMPUTER LITERACY
QUIZ 5 - DAY 5
TEACHER'S COPY

150

NAME _____

SECTION _____

1. WRITE A PROGRAM TO PRINT YOUR NAME AND ADDRESS 10 SPACES TO THE RIGHT ON THE SCREEN.

```
10    REM       NAME AND ADDRESS PROGRAM

20    PRINT     "<SHIFT/CLR-HOME>"

30    PRINT     TAB(10)    "<FIRST AND LAST NAME>"

40    PRINT     TAB(10)    "<STREET ADDRESS>"

50    PRINT     TAB(10)    "<CITY, STATE    ZIPCODE>"

60    END
```

2. ADD A LINE TO PRINT YOUR PHONE NUMBER UNDER YOUR ADDRESS.

```
55    PRINT     TAB(10)    "<PHONE NUMBER>"
```

3. ADD LINES TO PRINT A BLANK LINE BETWEEN THE LINES OF THE MESSAGE.

```
35    PRINT

45    PRINT

52    PRINT
```

4. MODIFY LINE 30 TO MOVE THE MESSAGE DOWN 5 LINES.

```
30    PRINT TAB(10)       "QQQQQ<FIRST AND LAST NAME>"
```

INSTRUCTIONS: FILL-IN THE BLANKS WITH THE CORRECT ANSWER/RESPONSE.

1. _____ - PART OF THE PROGRAM TELLING THE COMPUTER TO DO SOMETHING OVER
                 AND OVER.

2. _____ - COMMAND TELLING THE COMPUTER TO GO DIRECTLY TO A CERTAIN LINE OF
                 THE PROGRAM.

3. _____ - PART OF THE PROGRAM WHICH COUNTS THE NUMBER OF TIMES SOMETHING
                 IS DONE.

4. _____ - COMMAND TO EVALUATE PROGRAM AND TAKE GIVEN ACTION.

```
    10    REM  USING GOTO
    20    PRINT "<SHIFT/CLR-HOME>"
    30    PRINT "THIS LINE WILL RUN FOREVER"
5.  40    _____ 30
    50    END
```

```
    10    REM USING A COUNTER
    20    PRINT "<SHIFT/CLR-HOME>"

6.  25    _____ = + _____
    30    PRINT C

7.  40    _____ 25
    50    END
```

```
    10    REM USING IF-THEN WITH A COUNTER
    20    PRINT "<SHIFT/CLR-HOME>"
    30    PRINT "IF-THEN TELLS YOU HOW MANY TIMES TO REPEAT"

8.  35    _____ = + _____

9.  40    _____ C < 5 _____  _____ 30
                                          ^
    50    END                        10. ¦
```

GRADE 5 - DAY 6
COMPUTER LITERACY
QUIZ 6 - DAY 6
TEACHER'S COPY
(TAKE-HOME QUIZ, DUE DAY 7)

152

NAME _____

SECTION _____

INSTRUCTIONS: FILL-IN THE BLANKS WITH THE CORRECT ANSWER/RESPONSE.

1. _____LOOP_____ - PART OF THE PROGRAM TELLING THE COMPUTER TO DO SOMETHING OVER
                   AND OVER.

2. _____GOTO_____ - COMMAND TELLING THE COMPUTER TO GO DIRECTLY TO A CERTAIN LINE OF
                    THE PROGRAM.

3. __COUNTER__ - PART OF THE PROGRAM WHICH COUNTS THE NUMBER OF TIMES SOMETHING
                 IS DONE.

4. _IF - THEN_ - COMMAND TO EVALUATE PROGRAM AND TAKE GIVEN ACTION.

```
10    REM   USING GOTO
20    PRINT "<SHIFT/CLR-HOME>"
30    PRINT "THIS LINE WILL RUN FOREVER"
```

5.   40   _____GOTO_____ 30
```
50    END
```

```
10    REM USING A COUNTER
20    PRINT "<SHIFT/CLR-HOME>"
```

6.   25   _C_ = _C_ + 1
```
30    PRINT C
```

7.   40   _____GOTO_____ 25
```
50    END
```

```
10    REM USING IF-THEN WITH A COUNTER
20    PRINT "<SHIFT/CLR-HOME>"
30    PRINT "IF-THEN TELLS YOU HOW MANY TIMES TO REPEAT"
```

8.   35   _C_ = _C_ + 1

9.   40   __IF__ C < 5 ____THEN____ ____GOTO____ 30

```
50    END                        10. ¦
```

GRADE 5 - DAY 6
COMPUTER LITERACY
STUDENT HANDOUT #4
POKE COLOR CODES

153

NAME _____

SECTION _____

NUMBER: COLOR:

        0   BLACK

        1   WHITE

        2   RED

        3   CYAN   (DARK BLUE)

        4   PURPLE

        5   GREEN

        6   BLUE

        7   YELLOW

        8   ORANGE

        9   BROWN

        10   LT. RED

        11   GRAY # 1

        12   GRAY # 2

        13   LT. GREEN

        14   LT. BLUE

        15   GRAY # 3

GRADE 5 - DAY 6
COMPUTER LITERACY
WORKSHEET 6
STUDENT'S COPY

NAME _____

SECTION _____

154

ENTER THE FOLLOWING PROGRAM:

```
10   REM _____<PROGRAM NAME>_____
15   REM _____<YOUR NAME AND SECTION>_____
20   PRINT "<SHIFT/CLR-HOME>"
25   POKE  53280,8 : POKE  53281,8
30   FOR X = 1 TO 4
40   PRINT
50   NEXT X
```
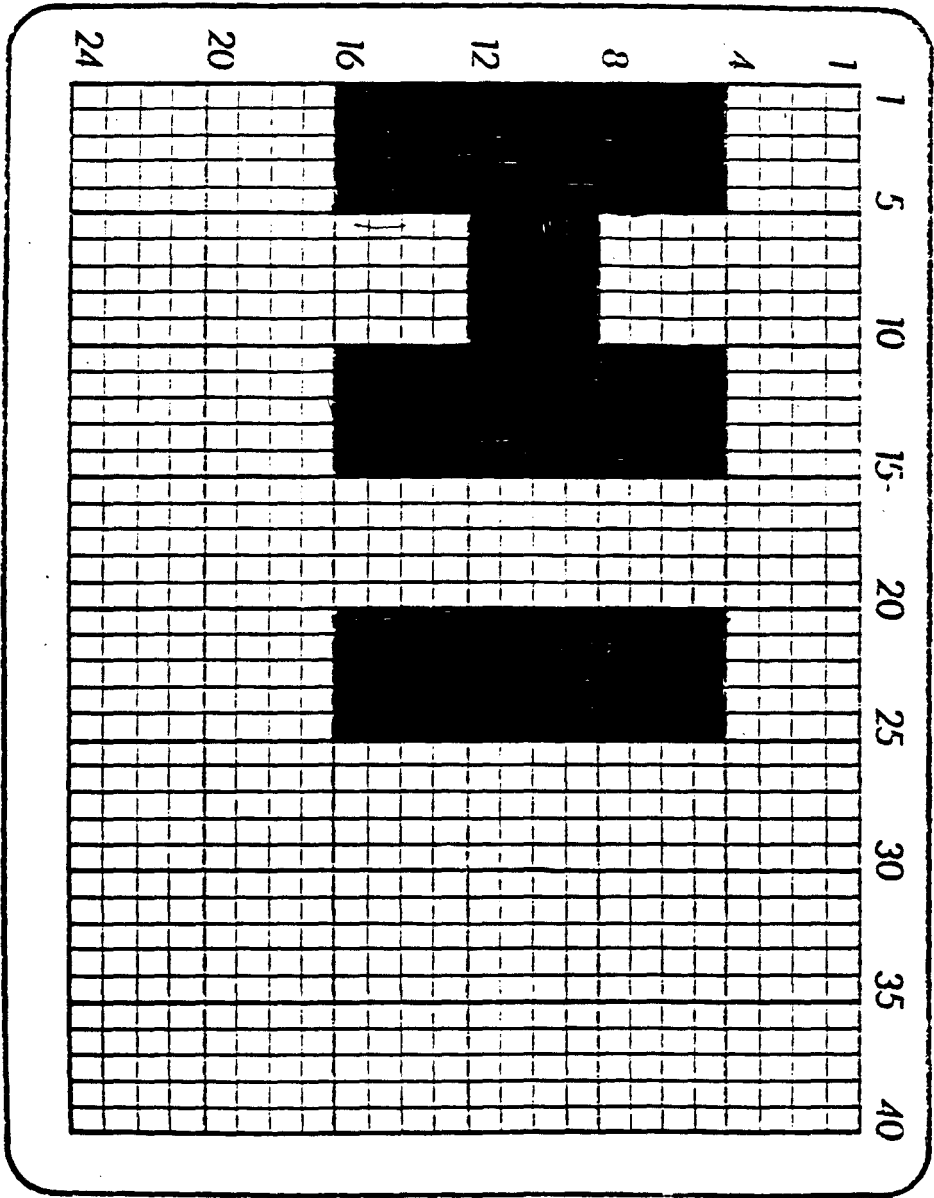
ENTER "RUN" AFTER COMPLETING EACH OF THE FOLLOWING LINES OF PROGRAMMING:

```
60   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

70   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

80   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

90   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"


100  PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"

110  PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"

120  PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"

130  PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"


140  PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

150  PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

160  PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

170  PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

180  END
```

GRADE 5 - DAY 6
COMPUTER LITERACY
WORKSHEET 6
STUDENT'S COPY #2

NAME _____

SECTION _____

G5.D06.W6.SC2

GRADE 5 - DAY 6
COMPUTER LITERACY
WORKSHEET 6
TEACHER'S COPY

156

NAME _____

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10   REM  _____<HELLO PROGRAM>_____
15   REM  _____<YOUR NAME AND SECTION>_____
20   PRINT "<SHIFT/CLR-HOME>"
25   POKE  53280,8 : POKE  53281,8
30   FOR X = 1 TO 4
40   PRINT
50   NEXT X
```

<u>ENTER "RUN" AFTER COMPLETING EACH OF THE FOLLOWING LINES OF PROGRAMMING:</u>

```
60   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

70   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

80   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

90   PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"


100  PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"

110  PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"

120  PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"

130  PRINT "<C9><C1><15 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>"


140  PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

150  PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

160  PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

170  PRINT "<C9><C1><5 SPACES><C0><5 SPACES><C9><C1><5 SPACES><C0>
     <5 SPACES><C9><C1><5 SPACES><C0>"

180  END
```
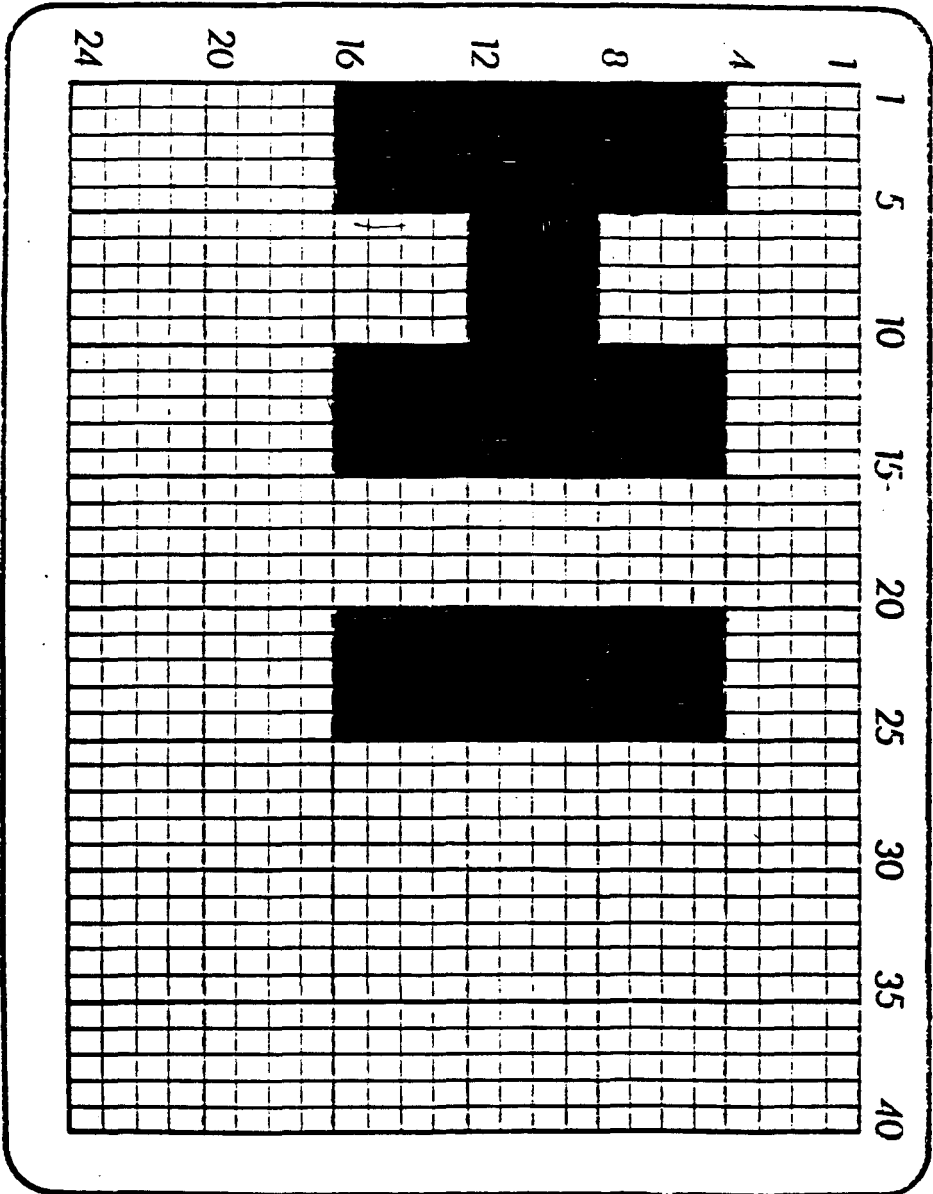
LINES 60 THROUGH 90 AND 140 THROUGH 170 ARE ALL THE SAME AND CAN BE COPIED
INSTEAD OF ENTERED IN INDIVIDUALLY. THE SAME IS TRUE FOR LINES 100 THROUGH
130. TO COPY A LINE, ENTER THE LINE THE FIRST TIME, THEN CHANGE THE LINE
NUMBER AND PRESS THE RETURN KEY.

GRADE 5 - DAY 6
COMPUTER LITERACY
WORKSHEET 6
TEACHER'S COPY #2

157

NAME _____

SECTION _____

LESSON PLAN

```
+------------------------------------------------------------------+
| GRADE 5 - DAY 7                                                  |
| COMPUTER LITERACY                                               |
| TEACHER'S LESSON PLAN                                           |
+------------------------------------------------------------------+
| INSTRUCTIONAL AIDS:          | TOOLS, EQUIPMENT AND MATERIALS:  |
|                              |                                  |
|  COPIES OF THE NECESSARY     |  CHALK, ERASER AND PENCILS       |
|  HANDOUTS                    |  6 DISKS (6 FOR THE STUDENTS)    |
|                              |                                  |
+------------------------------------------------------------------+
| OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT         |
| INVOLVEMENT, STUDENT EVALUATION, ADDITIONAL TOPIC              |
+------------------------------------------------------------------+
```

OBJECTIVE FOR THE DAY:

THE STUDENTS WILL USE THE SAVE & REPLACE COMMAND AND THE "VERIFY" COMMAND. THE STUDENTS WILL WORK ON SAMPLE GRAPHICS PROGRAM, CONTINUE WRITING THEIR OWN GRAPHICS PROGRAMS AND BE PREPARED FOR A TEST ON DAY 10.

INTRODUCTION:

COLLECT FROM THE STUDENTS:

QUIZ #6   (G5.D06.Q6.SC)   (DUE DAY 7)

MOVE THE CLASS TO THE COMPUTER ROOM AND PROCEED WITH THE LESSON FOR THE DAY.

PRESENTATION:

THE STUDENTS WILL FIND A DISK AT THEIR ASSIGNED STATIONS. HAVE THE STUDENTS PROPERLY PLACE THE DISK INTO THE DISK DRIVE AND USE THE LOAD COMMAND TO TRANSFER A COPY OF YESTERDAY'S PROGRAM FROM DISK TO THE COMPUTER'S MEMORY. HAVE THE STUDENTS EXECUTE THE PROGRAM. IF THE PROGRAM IS NOT COMPLETE, THE STUDENTS SHOULD FINISH THE PROGRAM AND SAVE THE PROGRAM USING THE SAVE AND REPLACE COMMAND AND VERIFY COMMAND. IF THE PROGRAM IS COMPLETELY DONE, CLEAR MEMORY.

DISTRIBUTE COPIES OF:

*WORKSHEET #7   (G5.D07.W7.SC)
 WORKSHEET #7   (G5.D07.W7.SC2)

*FOR THE 1987-1988 SCHOOL YEAR, GIVE THE STUDENTS A COPY OF THE PROGRAM.
 ALL FUTURE SCHOOL YEARS, GIVE THE STUDENTS ONLY A COPY OF THE GRAPHICS.

THE STUDENTS SHOULD BE ABLE TO ENTER THE PROGRAM FROM THE GRAPHICS. IT MIGHT BE HELPFUL TO GIVE THE STUDENTS THE GRAPHICS WORKSHEET A DAY EARLIER, SO THEY COULD WRITE OUT THE PROGRAM AS HOMEWORK. THE GRAPHICS PICTURE FOR A SPECIFIC WORKSHEET ALWAYS HAS THE CODE "SC2" FOR THE STUDENT'S COPY AND "TC2" FOR THE TEACHER'S COPY. WHEN THE STUDENTS CORRECTLY COMPLETE THE WORKSHEET OR RUN OUT OF TIME, HAVE THE STUDENTS SAVE THE PROGRAM.

G5.D07.LP.TC

LESSON PLAN
CONTINUED
PAGE 2

GRADE 5 - DAY 7
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING THE COURSE AND REMIND THE STUDENTS TO
STUDY ALL MATERIAL IN PREPARATION FOR A FINAL TEST ON DAY TEN.
REMIND THE STUDENTS THAT THEIR MAJOR GRAPHICS PICTURE SHOULD BE DONE AND THE
STUDENTS SHOULD BE WORKING ON THEIR MAJOR GRAPHICS PROGRAM BECAUSE THE TWO
ITEMS ARE DUE ON DAY 10.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' QUIZZES WILL BE EVALUATED GIVING ONE POINT FOR EACH CORRECT
ANSWER.
THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF TEN POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

ADDITIONAL TOPIC:

IF THE STUDENTS FINISH WITH WORKSHEET #7, THE STUDENTS SHOULD BEGIN WRITING OUT
THE PROGRAM FOR THEIR MAJOR GRAPHICS PICTURE AND FINISH THE PROGRAM AS
HOMEWORK. THE STUDENTS SHOULD NOT ATTEMPT TO ENTER THIS PROGRAM UNTIL THEY
HAVE THE FIRST PAGE OF STUDENT HANDOUT #3 DONE AND THE TEACHER HAS CHECKED IT.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G5.D07.LP.TC

GRADE 5 - DAY 7
COMPUTER LITERACY
WORKSHEET 7
STUDENT'S COPY

NAME _____

160

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10    REM  _____<PROGRAM NAME>_____
15    REM  _____<YOUR NAME AND SECTION>___
20    PRINT "<SHIFT/CLR-HOME>"
25    POKE  53280,6 : POKE  53281,6
30    FOR X = 1 TO 8
40    PRINT
50    NEXT X
60    PRINT "<17 SP><C9><C1><8 SP><C0>"
70    PRINT "<17 SP><C9><C1><8 SP><C0>"
80    PRINT "<15 SP><C9><C1><12 SP><C0>"
90    FOR Y = 1 TO 6
100   PRINT "<16 SP><C9><C2><10 SP><C0>"
110   NEXT Y
120   END
```

MODIFY THE ABOVE PROGRAM TO ADD SOMETHING TO THE CENTER AREA OF THE GRAPHICS PICTURE. USE THE CODES <C9> FOR <RVS ON>, <C0> FOR <RVS OFF>, <C1> FOR <BLACK> AND <C2> FOR <WHITE>. BELOW IS THE BASIC FORMAT THAT YOU SHOULD USE WHENEVER YOU WRITE A GRAPHICS PROGRAM.

```
90    PRINT "<   SP><C ><C ><   SP><C >"

100   PRINT "<   SP><C ><C ><   SP><C ><   SP><C ><   SP><C ><   SP>

          <C ><   SP><C >"

110   PRINT "<   SP><C ><C ><   SP><C ><   SP><C ><   SP><C >"

120   PRINT "<   SP><C ><C ><   SP><C ><   SP><C ><   SP><C ><   SP>

          <C ><   SP><C >"

130   PRINT "<   SP><C ><C ><   SP><C ><   SP><C ><   SP><C >"

140   PRINT "<   SP><C ><C ><   SP><C >"

150   __END__
```

GRADE 5 - DAY 7
COMPUTER LITERACY
WORKSHEET 7
STUDENT'S COPY #2

NAME _____

SECTION _____

GRADE 5 - DAY 7
COMPUTER LITERACY
WORKSHEET 7
TEACHER'S COPY

NAME _____

SECTION _____

162

ENTER THE FOLLOWING PROGRAM:

```
10   REM   <CLOWN PROGRAM WITHOUT A FACE>
15   REM       <YOUR NAME AND SECTION>
20   PRINT "<SHIFT/CLR-HOME>"
25   POKE  53280,6 : POKE  53281,6
30   FOR X = 1 TO 8
40   PRINT
50   NEXT X
60   PRINT "<17 SP><C9><C1><8 SP><C0>"
70   PRINT "<17 SP><C9><C1><8 SP><C0>"
80   PRINT "<15 SP><C9><C1><12 SP><C0>"
90   FOR Y = 1 TO 6
100  PRINT "<16 SP><C9><C2><10 SP><C0>"
110  NEXT Y
120  END
```

    MODIFY THE ABOVE PROGRAM TO ADD SOMETHING TO THE CENTER AREA OF THE
GRAPHICS PICTURE. USE THE CODES <C9> FOR <RVS ON>, <C0> FOR <RVS OFF>, <C1>
FOR <BLACK> AND <C2> FOR <WHITE>. BELOW IS THE BASIC FORMAT THAT YOU SHOULD
USE WHENEVER YOU WRITE A GRAPHICS PROGRAM.

```
90    PRINT "<16 SP><C9><C2><10 SP><C0>"

100   PRINT "<16 SP><C9><C2><1 SP><C1><2 SP><C2><4 SP><C1><2 SP>

          <C2><1 SP><C0>"

110   PRINT "<16 SP><C9><C2><4 SP><C1><2 SP><C2><4 SP><C0>"

120   PRINT "<16 SP><C9><C2><2 SP><C1><1 SP><C2><4 SP><C1><1 SP>

          <C2><2 SP><C0>"

130   PRINT "<16 SP><C9><C2><3 SP><C1><4 SP><C2><3 SP><C0>"

140   PRINT "<16 SP><C9><C2><10 SP><C0>"

150      END
```

COPY LINE 100 FROM PROGRAM PROVIDED TO LINE 90 OF MODIFICATIONS
DELETE LINES 100 - 120 (OPTIONAL)
ADD LINES 100 - 150

GRADE 5 - DAY 7
COMPUTER LITERACY
WORKSHEET 7
TEACHER'S COPY #2

NAME _____

SECTION _____

60
70
80
90
100
110
120
130
140
150 END

```
 _____
|                                                                |
| GRADE 5 - DAY 8                                                |
| COMPUTER LITERACY                                              |
| TEACHER'S LESSON PLAN                                          |
|_____|
|                                  |                             |
| INSTRUCTIONAL AIDS:              | TOOLS, EQUIPMENT AND MATERIALS: |
|                                  |                             |
|  COPIES OF THE NECESSARY HANDOUTS|  CHALK, ERASER AND PENCILS  |
|                                  |  6 DISKS (6 FOR THE STUDENTS) |
|                                  |                             |
|                                  |                             |
|                                  |                             |
|_____|_____|
|                                                                |
| OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT, |
| STUDENT EVALUATION, ADDITIONAL TOPIC                           |
|_____|
```

OBJECTIVE FOR THE DAY:

THE STUDENTS WILL WORK ON SAMPLE GRAPHICS PROGRAM, CONTINUE WRITING THEIR OWN
GRAPHICS PROGRAMS AND BE PREPARED FOR A TEST ON DAY 10.

INTRODUCTION:

MOVE THE CLASS TO THE COMPUTER ROOM AND PROCEED WITH THE LESSON FOR THE DAY.

PRESENTATION:

THE STUDENTS WILL FIND A DISK AT THEIR ASSIGNED STATIONS. HAVE THE STUDENTS
PROPERLY PLACE THE DISK INTO THE DISK DRIVE AND USE THE LOAD COMMAND TO
TRANSFER A COPY OF YESTERDAY'S PROGRAM FROM DISK TO THE COMPUTER'S MEMORY. HAVE
THE STUDENTS EXECUTE THE PROGRAM. IF THE PROGRAM IS NOT COMPLETE, THE STUDENTS
SHOULD FINISH THE PROGRAM AND SAVE THE PROGRAM USING THE SAVE AND REPLACE
COMMAND AND VERIFY COMMAND. IF THE PROGRAM IS COMPLETELY DONE, CLEAR MEMORY.

DISTRIBUTE COPIES OF:

*WORKSHEET #8   (G5.D08.W8.SC)
 WORKSHEET #8   (G5.D08.W8.SC2)

*FOR THE 1987-1988 SCHOOL YEAR, GIVE THE STUDENTS A COPY OF THE PROGRAM.
 ALL FUTURE SCHOOL YEARS, GIVE THE STUDENTS ONLY A COPY OF THE GRAPHICS.

THE STUDENTS SHOULD BE ABLE TO ENTER THE PROGRAM FROM THE GRAPHICS. IT MIGHT
BE HELPFUL TO GIVE THE STUDENTS THE GRAPHICS WORKSHEET A DAY EARLIER, SO THEY
COULD WRITE OUT THE PROGRAM AS HOMEWORK. THE GRAPHICS PICTURE FOR A SPECIFIC
WORKSHEET ALWAYS HAS THE CODE "SC2" FOR THE STUDENT'S COPY AND "TC2" FOR THE
TEACHER'S COPY. WHEN THE STUDENTS CORRECTLY COMPLETE THE WORKSHEET OR RUN OUT
OF TIME, HAVE THE STUDENTS SAVE THE PROGRAM.

G5.D08.LP.TC

LESSON PLAN
CONTINUED
PAGE 2

```
GRADE 5 - DAY 8
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC
```

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING THE COURSE AND REMIND THE STUDENTS TO
STUDY ALL MATERIAL IN PREPARATION FOR A FINAL TEST ON DAY TEN.
REMIND THE STUDENTS THAT THEIR MAJOR GRAPHICS PICTURE SHOULD BE DONE AND THE
STUDENTS SHOULD BE WORKING ON THEIR MAJOR GRAPHICS PROGRAM BECAUSE THE TWO
ITEMS ARE DUE ON DAY 10.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF TEN POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

ADDITIONAL TOPIC:

IF THE STUDENTS FINISH WITH WORKSHEET #8, THE STUDENTS SHOULD BEGIN WRITING OUT
THE PROGRAM FOR THEIR MAJOR GRAPHICS PICTURE AND FINISH THE PROGRAM AS
HOMEWORK. THE STUDENTS SHOULD NOT ATTEMPT TO ENTER THIS PROGRAM UNTIL THEY
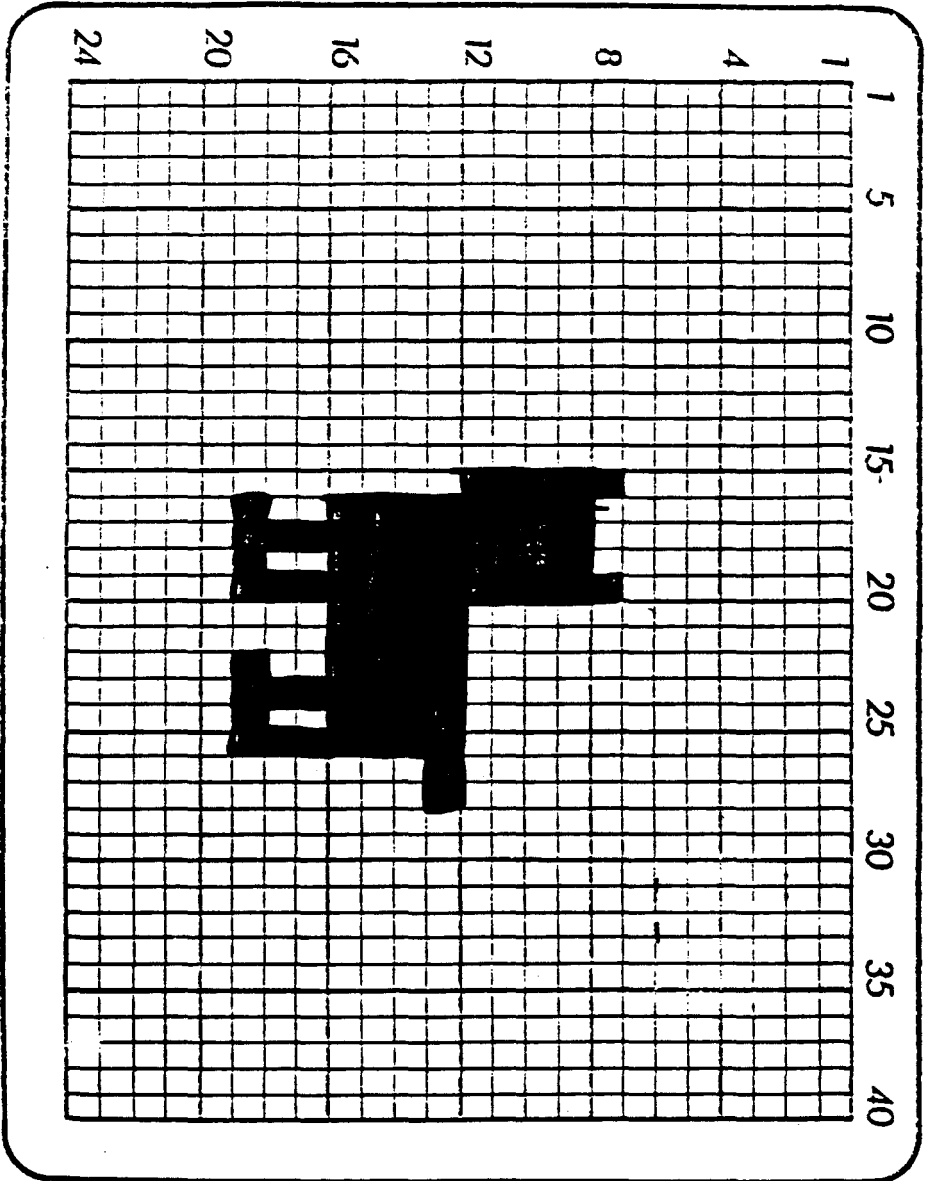HAVE THE FIRST PAGE OF STUDENT HANDOUT #3 DONE AND THE TEACHER HAS CHECKED IT.

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G5.D08.LP.TC

GRADE 5 - DAY 8
COMPUTER LITERACY
WORKSHEET 8
STUDENT'S COPY

NAME _____

SECTION _____

166

ENTER THE FOLLOWING PROGRAM:

```
10    REM  _____<PROGRAM NAME>_____

15    REM  _____<YOUR NAME AND SECTION>_____

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,6 : POKE  53281,6

30    FOR X = 1 TO 7

40    PRINT

50    NEXT X

60    PRINT "<15 SP><C9><C1><1 SP><C7><3 SP><C1><1 SP><C0>"

70    FOR X = 1 TO 4

80    PRINT "<15 SP><C9><C1><5 SP><C0>"

90    NEXT X

95    PRINT "<16 SP><C9><C1><12 SP><C0>"

100   FOR X = 1 TO 3

110   PRINT "<16 SP><C9><C1><10 SP><C0>"

120   NEXT X

130   PRINT "<17 SP><C9><C1><1 SP><C7><1 SP><C1><1 SP><C7><3 SP><C1>
          <1 SP><C7><1 SP><C1><1 SP><C0>"

140   PRINT "<17 SP><C9><C1><1 SP><C7><1 SP><C1><1 SP><C7><3 SP><C1>
          <1 SP><C7><1 SP><C1><1 SP><C0>"

150   PRINT "<16 SP><C9><C1><4 SP><C7><2 SP><C1><4 SP><C0>"

160   END
```
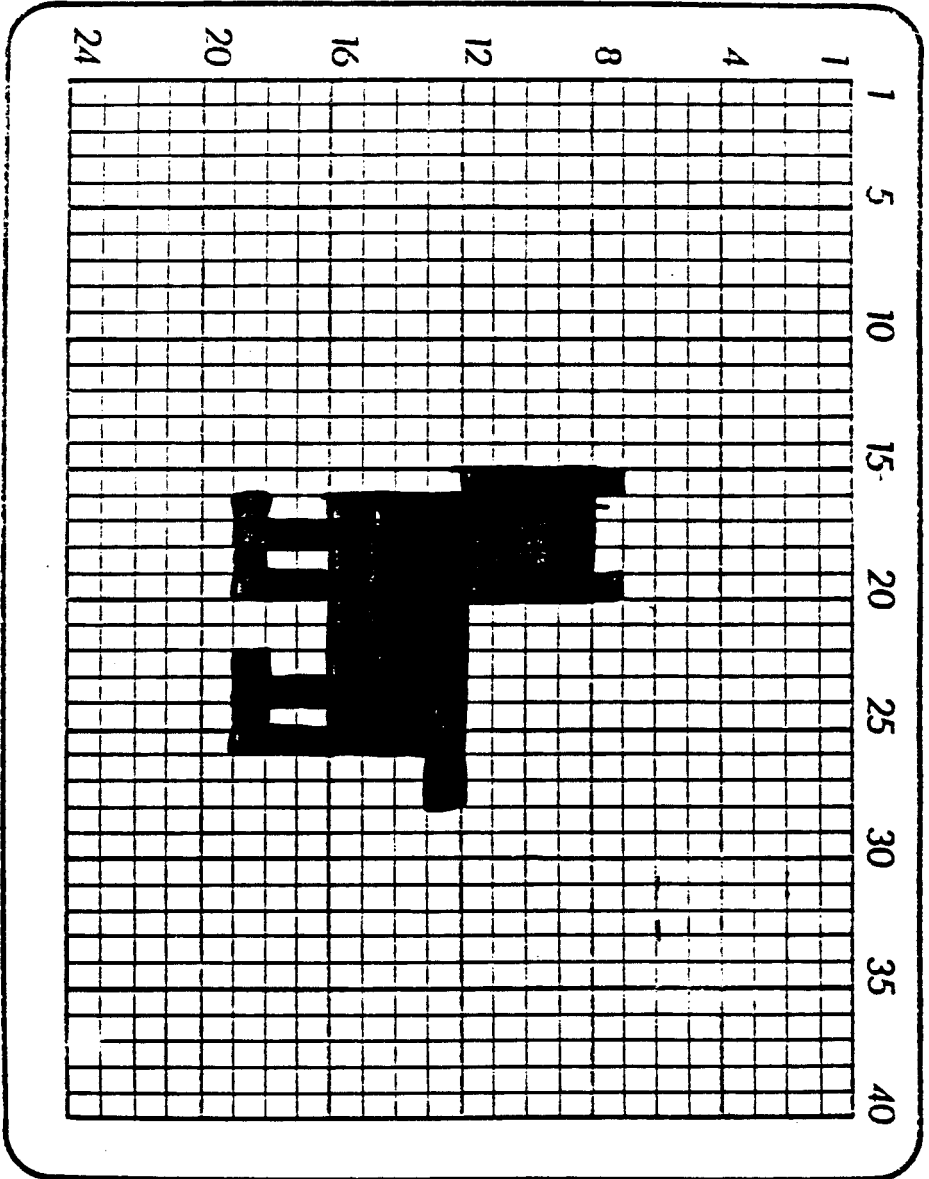
GRADE 5 – DAY 8
COMPUTER LITERACY
WORKSHEET 8
STUDENT'S COPY #2

167

NAME _____

SECTION _____

G5.D08.W8.SC2

GRADE 5 - DAY 8
COMPUTER LITERACY
WORKSHEET 8
TEACHER'S COPY

NAME _____

SECTION _____ _

168

ENTER THE FOLLOWING PROGRAM:

```
10   REM _____<PUPPY DOG>_____

15   REM ____<YOUR NAME AND SECTION>___

20   PRINT "<SHIFT/CLR-HOME>"

25   POKE  53280,6 : POKE  53281,6

30   FOR X = 1 TO 7

40   PRINT

50   NEXT X

60   PRINT "<15 SP><C9><C1><1 SP><C7><3 SP><C1><1 SP><C0>"

70   FOR X = 1 TO 4

80   PRINT "<15 SP><C9><C1><5 SP><C0>"

90   NEXT X

95   PRINT "<16 SP><C9><C1><12 SP><C0>"

100  FOR X = 1 TO 3

110  PRINT "<16 SP><C9><C1><10 SP><C0>"

120  NEXT X

130  PRINT "<17 SP><C9><C1><1 SP><C7><1 SP><C1><1 SP><C7><3 SP><C1>
         <1 SP><C7><1 SP><C1><1 SP><C0>"

140  PRINT "<17 SP><C9><C1><1 SP><C7><1 SP><C1><1 SP><C7><3 SP><C1>
         <1 SP><C7><1 SP><C1><1 SP><C0>"

150  PRINT "<16 SP><C9><C1><4 SP><C7><2 SP><C1><4 SP><C0>"

160  END
```

GRADE 5 - DAY 8
COMPUTER LITERACY
WORKSHEET 8
TEACHER'S COPY #2

169

NAME _____

SECTION _____

LESSON PLAN

```
,-----------------------------------------------------------------------,
! ,-------------------------------------------------------------------, !
! !GRADE 5 - DAY 9                                                    ! !
! !COMPUTER LITERACY                                                  ! !
! !TEACHER'S LESSON PLAN                                              ! !
! !---------------------------------------------------------------------!
! !INSTRUCTIONAL AIDS:           !TOOLS, EQUIPMENT AND MATERIALS:     ! !
! !                              !                                    ! !
! ! COPIES OF THE NECESSARY HANDOUTS ! CHALK, ERASER AND PENCILS      ! !
! !                              ! 6 DISKS (6 FOR THE STUDENTS)       ! !
! !                              !                                    ! !
! !                              !                                    ! !
! !---------------------------------------------------------------------!
! !OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,! !
! !STUDENT EVALUATION, ADDITIONAL TOPIC                               ! !
! !-------------------------------------------------------------------! !
'-----------------------------------------------------------------------'
```

OBJECTIVE FOR THE DAY:

THE STUDENTS WILL FINISH WRITING THEIR OWN GRAPHICS PROGRAMS, WORK ON SAMPLE
GRAPHICS PROGRAM AND BE PREPARED FOR A TEST ON DAY 10.

INTRODUCTION:

MOVE THE CLASS TO THE COMPUTER ROOM AND PROCEED WITH THE LESSON FOR THE DAY.

PRESENTATION:

THE STUDENTS WILL FIND A DISK AT THEIR ASSIGNED STATIONS. HAVE THE STUDENTS
PROPERLY PLACE THE DISK INTO THE DISK DRIVE AND USE THE LOAD COMMAND TO
TRANSFER A COPY OF YESTERDAY'S PROGRAM FROM DISK TO THE COMPUTER'S MEMORY. HAVE
THE STUDENTS EXECUTE THE PROGRAM. IF THE PROGRAM IS NOT COMPLETE, THE STUDENTS
SHOULD FINISH THE PROGRAM AND SAVE THE PROGRAM USING THE SAVE AND REPLACE
COMMAND AND VERIFY COMMAND. IF THE PROGRAM IS COMPLETELY DONE, CLEAR MEMORY.

IF THE STUDENTS HAVE FINISHED WORKSHEET #8, THE STUDENTS SHOULD BEGIN WRITING
OUT THE PROGRAM FOR THEIR MAJOR GRAPHICS PICTURE AND FINISH THE PROGRAM AS
HOMEWORK. THE STUDENTS SHOULD NOT ATTEMPT TO ENTER THIS PROGRAM UNTIL THEY
HAVE THE FIRST PAGE OF STUDENT HANDOUT #3 DONE AND THE TEACHER HAS CHECKED IT.

G5.D09.LP.TC

LESSON PLAN
CONTINUED
PAGE 2

GRADE 5 - DAY 9
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC

SUMMARY:

REVIEW THE MATERIAL DISCUSSED DURING THE COURSE AND REMIND THE STUDENTS TO
STUDY ALL MATERIAL IN PREPARATION FOR A FINAL TEST ON DAY TEN.
REMIND THE STUDENTS THAT THEIR MAJOR GRAPHICS PICTURE SHOULD BE DONE AND THE
STUDENTS SHOULD BE WORKING ON THEIR MAJOR GRAPHICS PROGRAM BECAUSE THE TWO
ITEMS ARE DUE ON DAY 10.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING ON A COMMODORE WITH A PARTNER.
THE STUDENTS WILL WORK TOWARD CORRECTLY COMPLETING A WORKSHEET.

STUDENT EVALUATION:

THE STUDENTS' PROGRESS ON THE WORKSHEETS SHOULD BE EVALUATED AND RECORDED ON
THE BASIS OF TEN POINTS FOR A CORRECTLY COMPLETED WORKSHEET.

ADDITIONAL TOPIC:

IF THE STUDENTS HAVE THEIR MAJOR GRAPHICS PICTURE AND PROGRAM DONE,

DISTRIBUTE COPIES OF:

*WORKSHEET #9   (G5.D09.W9.SC)
 WORKSHEET #9   (G5.D09.W9.SC2)

*FOR THE 1987-1988 SCHOOL YEAR, GIVE THE STUDENTS A COPY OF THE PROGRAM.
 ALL FUTURE SCHOOL YEARS, GIVE THE STUDENTS ONLY A COPY OF THE GRAPHICS.

THE STUDENTS SHOULD BE ABLE TO ENTER THE PROGRAM FROM THE GRAPHICS. IT MIGHT
BE HELPFUL TO GIVE THE STUDENTS THE GRAPHICS WORKSHEET A DAY EARLIER, SO THEY
COULD WRITE OUT THE PROGRAM AS HOMEWORK. THE GRAPHICS PICTURE FOR A SPECIFIC
WORKSHEET ALWAYS HAS THE CODE "SC2" FOR THE STUDENT'S COPY AND "TC2" FOR THE
TEACHER'S COPY. WHEN THE STUDENTS CORRECTLY COMPLETE THE WORKSHEET OR RUN OUT
OF TIME, HAVE THE STUDENTS SAVE THE PROGRAM.

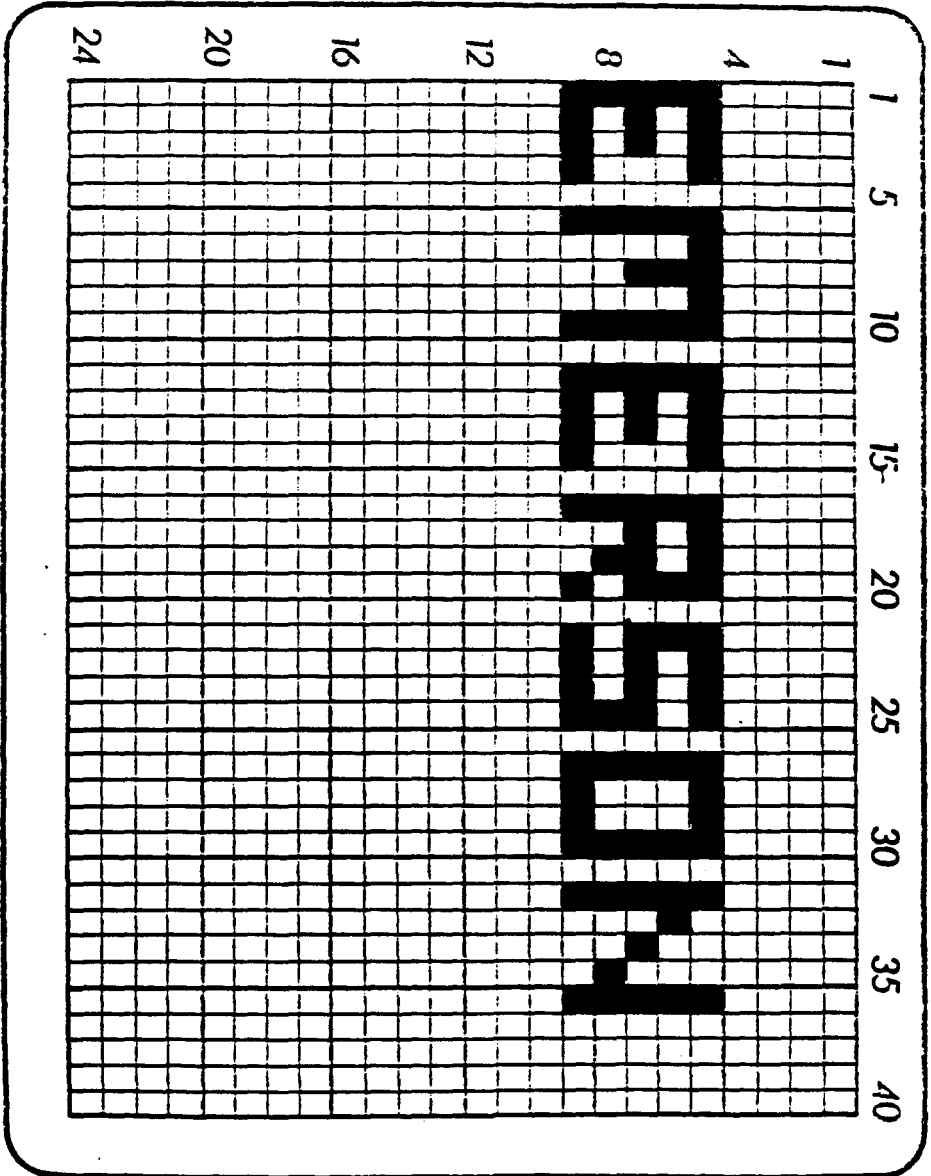CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G5.D09.LP.TC

GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9 FOR EMERSON
STUDENT'S COPY

172

NAME _____

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10    REM _____<PROGRAM NAME>_____

15    REM _____<YOUR NAME AND SECTION>___

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,2 : POKE  53281,2

30    FOR X = 1 TO 4

40    PRINT

50    NEXT X

60    PRINT "<C9><C7><4 SP><C3><1 SP><C7><5 SP><C3><1 SP><C7><4 SP><C3>
      <1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7>
      <1 SP><C3><3 SP><C7><1 SP><C0>"

70    PRINT "<C9><C7><1 SP><C3><4 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3><2 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
      <1 SP><C7><2 SP><C3><2 SP><C7><1 SP><C0>"

80    PRINT "<C9><C7><3 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3><2 SP><C7><4 SP><C3><1 SP><C7>
      <4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C0>"

90    PRINT "<C9><C7><1 SP><C3><3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><5 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <2 SP><C7><2 SP><C0>"

100   PRINT "<C9><C7><4 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
      <1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
      <4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C0>"

110 END
```
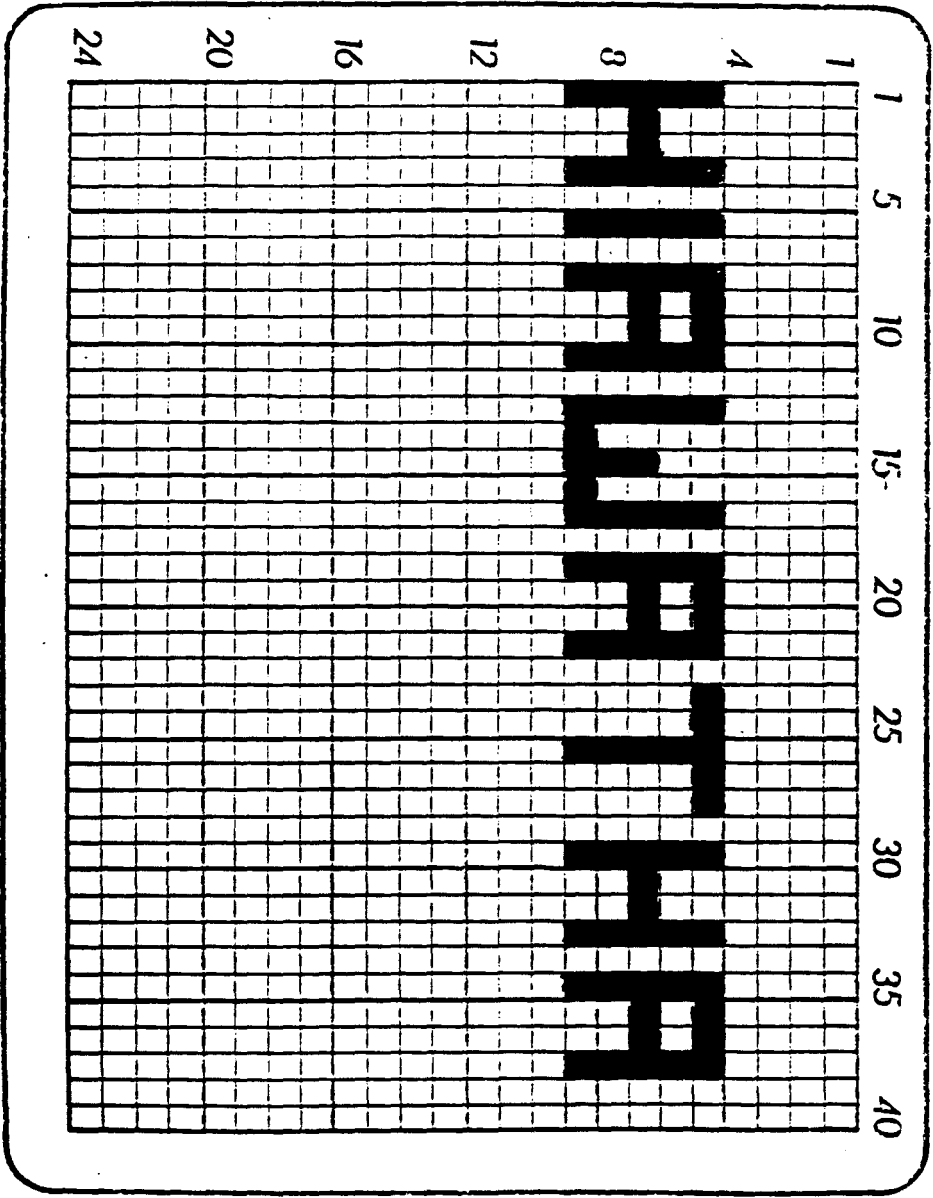
GRADE 5 – DAY 9
COMPUTER LITERACY
WORKSHEET 9
STUDENT'S COPY #2

NAME _____

SECTION _____

G5.D09.W9.SC2

ENTER THE FOLLOWING PROGRAM:

```
10    REM  _____<PROGRAM NAME>_____

15    REM  _____<YOUR NAME AND SECTION>_____

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,2 : POKE  53281,2

30    FOR X = 1 TO 4

40    PRINT

50    NEXT X

60    PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7>
      <4 SP><C3><1 SP><C7><5 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
      <1 SP><C7><4 SP><C0>"

70    PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><3SP><C7><1 SP><C3>
      <3 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7>
      <1 SP><C0>"

80    PRINT "<C9><C7><4 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><4 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <4 SP><C3><3 SP><C7><1 SP><C3><3 SP><C7><4 SP><C3><1 SP><C7><4 SP><C0>"

90    PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
      <3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><2 SP><C7><1 SP><C0>"

100   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><5 SP><C3><1 SP><C7>
      <1 SP><C3><2 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
      <2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C0>"

110 END
```
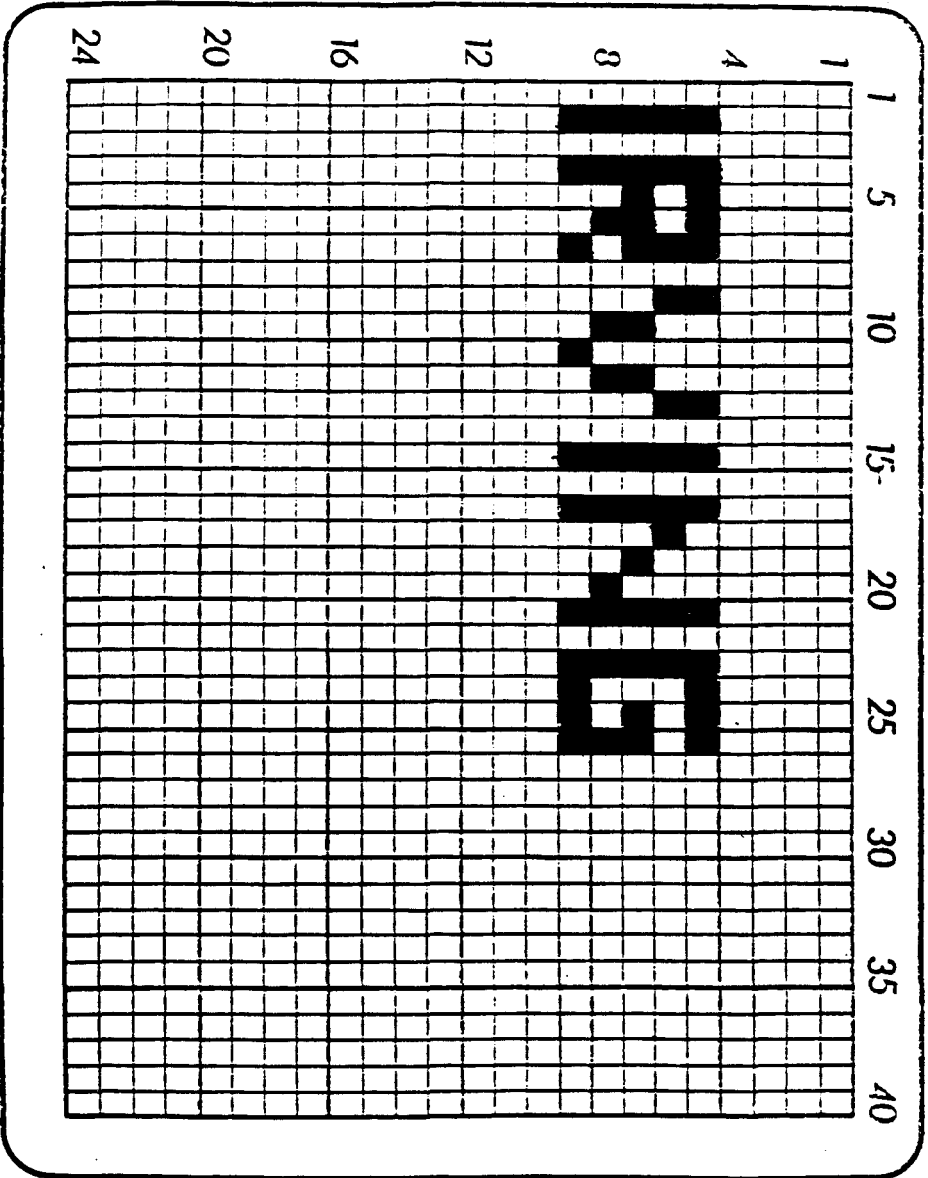
GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9
STUDENT'S COPY #2

NAME _____

SECTION _____

G5.D09.W9.SC2

GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9 FOR IRVING
STUDENT'S COPY

176

NAME _____

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10    REM    _____<PROGRAM NAME>_____

15    REM    ____<YOUR NAME AND SECTION>____

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,2 : POKE  53281,2

30    FOR X = 1 TO 4

40    PRINT

50    NEXT X

60    PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1SP><C3>
      <3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
      <1 SP><C3><1 SP><C7><4 SP><C0>"

70    PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1SP><C3>
      <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <2 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C0>"

80    PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><4 SP><C3><2 SP><C7><1SP><C3>
      <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><2 SP><C0>"

90    PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1SP><C3>
      <3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><2 SP><C7><2 SP><C3><1 SP><C7><1 SP><C3><1 SP><2 SP><C7>
      <1 SP><C0>"

100   PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1SP><C7>
      <3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
      <1 SP><C3><1 SP><C7><4 SP><C0>"

110 END
```
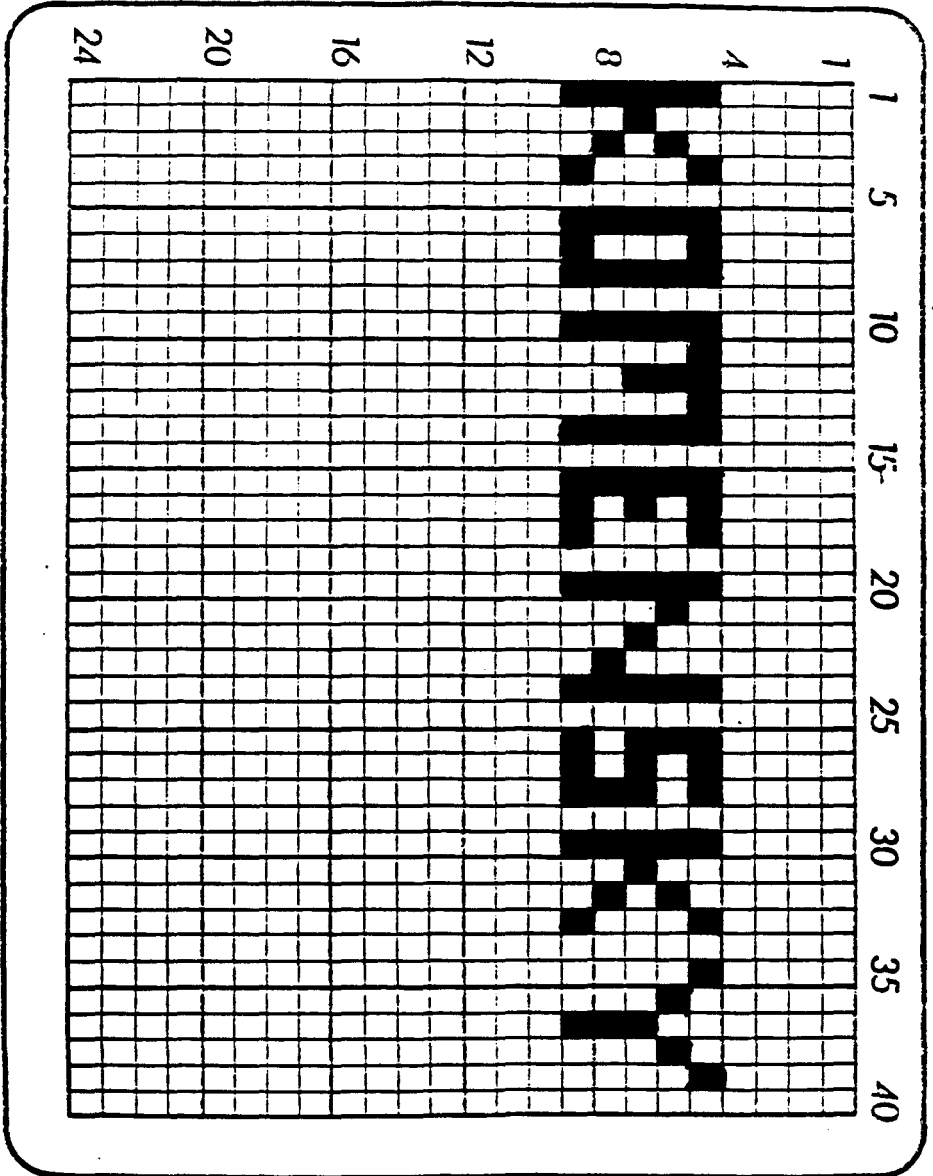
GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9
STUDENT'S COPY #2

177

NAME _____

SECTION _____

G5.D09.W9.SC2

GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9 FOR KOMENSKY
STUDENT'S COPY

NAME _____

SECTION _____

178

ENTER THE FOLLOWING PROGRAM:

```
10    REM  _____<PROGRAM NAME>_____

15    REM  _____<YOUR NAME AND SECTION>___

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,2 : POKE  53281,2

30    FOR X = 1 TO 4

40    PRINT

50    NEXT X

60    PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3>
      <1 SP><C7><5 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
      <1 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C0>"

70    PRINT "<C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><2 SP><C3><2 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C0>"

80    PRINT "<C9><C7><2 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C7><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <2 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><3 SP><C3><1 SP><C7><2 SP><C3><5 SP><C7><1 SP><C0>"

90    PRINT "<C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><3 SP><C7><1 SP><C3><2 SP><C7><2 SP><C3><3 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C0>"

100   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3>
      <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7>
      <1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7><1 SP><C3>
      <2 SP><C7><1 SP><C3><3 SP><C7><1 SP><C0>"

110 END
```
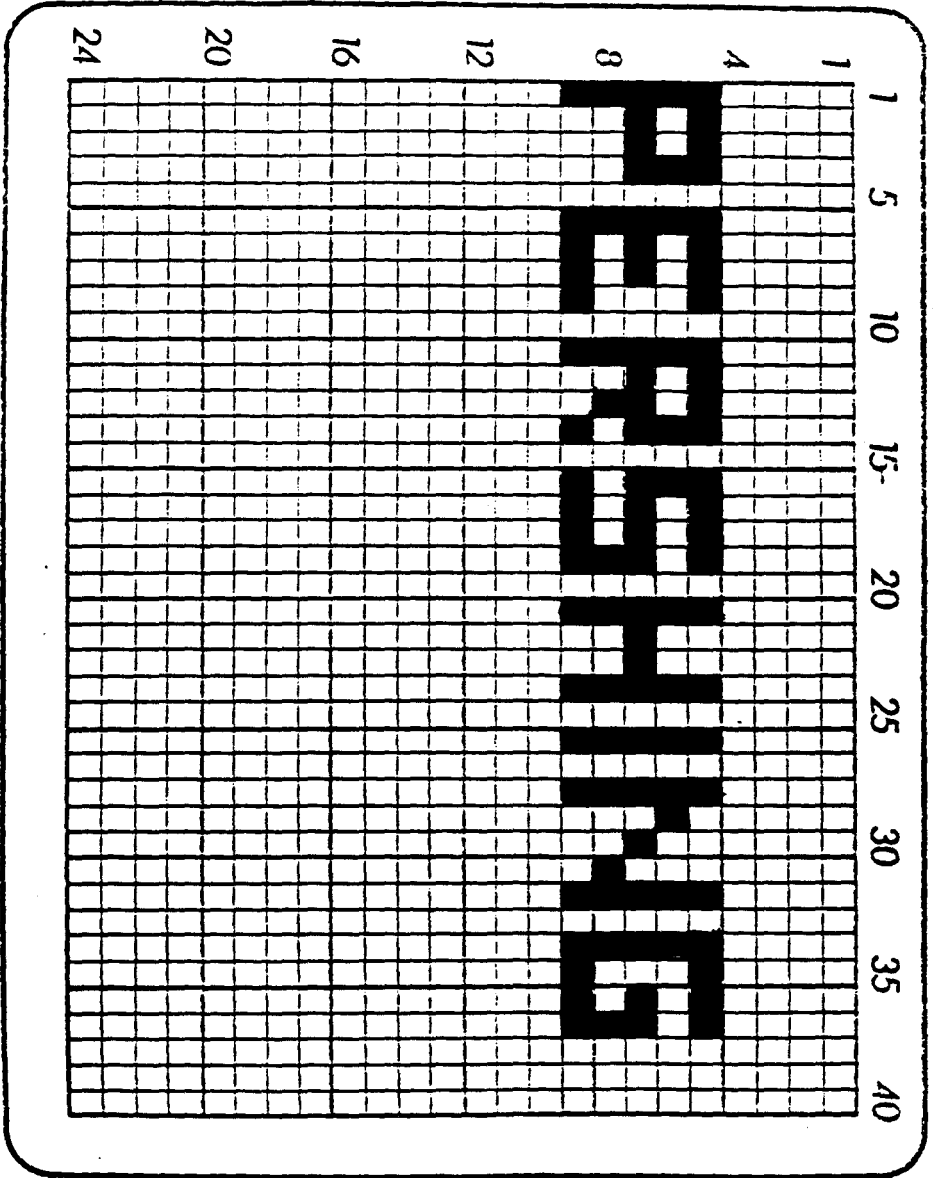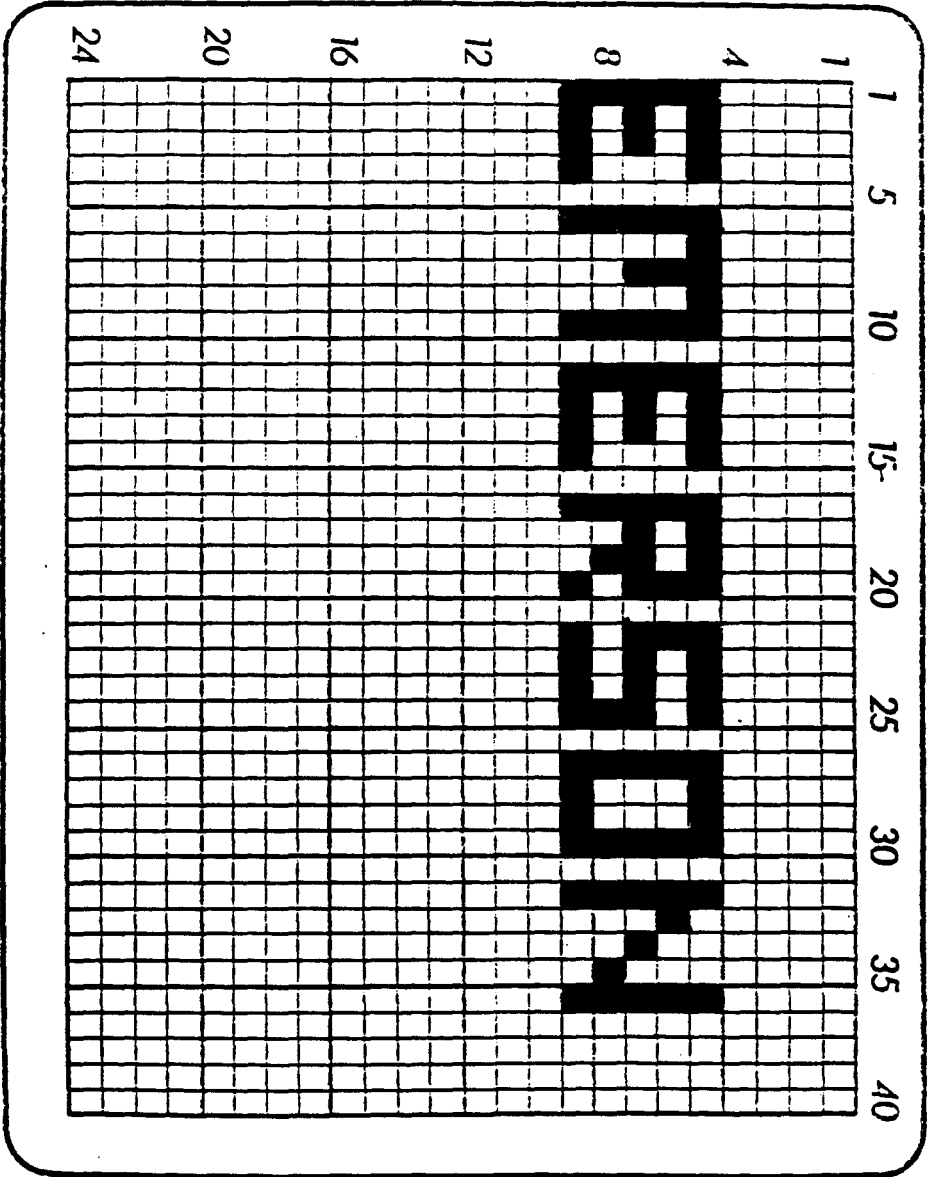
NAME _____

SECTION _____

GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9 FOR PERSHING
STUDENT'S COPY

NAME _____

SECTION _____

180

ENTER THE FOLLOWING PROGRAM:

```
10    REM _____<PROGRAM NAME>_____

15    REM _____<YOUR NAME AND SECTION>_____

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,2 : POKE  53281,2

30    FOR X = 1 TO 4

40    PRINT

50    NEXT X

60    PRINT "<C9><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3>
      <1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><4 SP><C0>"

70    PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <4 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7>
      <1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><2 SP><C3>
      <2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C0>"

80    PRINT "<C9><C7><4 SP><C3><1 SP><C7><3 SP><C3><2 SP><C7><4 SP><C3>
      <1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><2 SP><C0>"

90    PRINT "<C9><C7><1 SP><C3><4 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><5 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><2 SP><C3>
      <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C0>"

100   PRINT "<C9><C7><1 SP><C3><4 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3>
      <2 SP><C7><1 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
      <1 SP><C7><4 SP><C0>"

110 END
```

GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9
STUDENT'S COPY #2

NAME _____

SECTION _____

G5.D09.W9.SC2

GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9 FOR EMERSON
TEACHER'S COPY

NAME _____   182

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10    REM    EMERSON SCHOOL PROGRAM

15    REM    <YOUR NAME AND SECTION>

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,2 : POKE  53281,2

30    FOR X = 1 TO 4

40    PRINT

50    NEXT X

60    PRINT "<C9><C7><4 SP><C3><1 SP><C7><5 SP><C3><1 SP><C7><4 SP><C3>
      <1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7>
      <1 SP><C3><3 SP><C7><1 SP><C0>"

70    PRINT "<C9><C7><1 SP><C3><4 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3><2 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
      <1 SP><C7><2 SP><C3><2 SP><C7><1 SP><C0>"

80    PRINT "<C9><C7><3 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3><2 SP><C7><4 SP><C3><1 SP><C7>
      <4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C0>"

90    PRINT "<C9><C7><1 SP><C3><3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><5 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <2 SP><C7><2 SP><C0>"

100   PRINT "<C9><C7><4 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
      <1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
      <4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C0>"

110 END
```

GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9
TEACHER'S COPY #2

NAME _____

SECTION _____

G5.D09.W9.TC2

GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9 FOR HIAWATHA
TEACHER'S COPY

184

NAME _____

SECTION _____
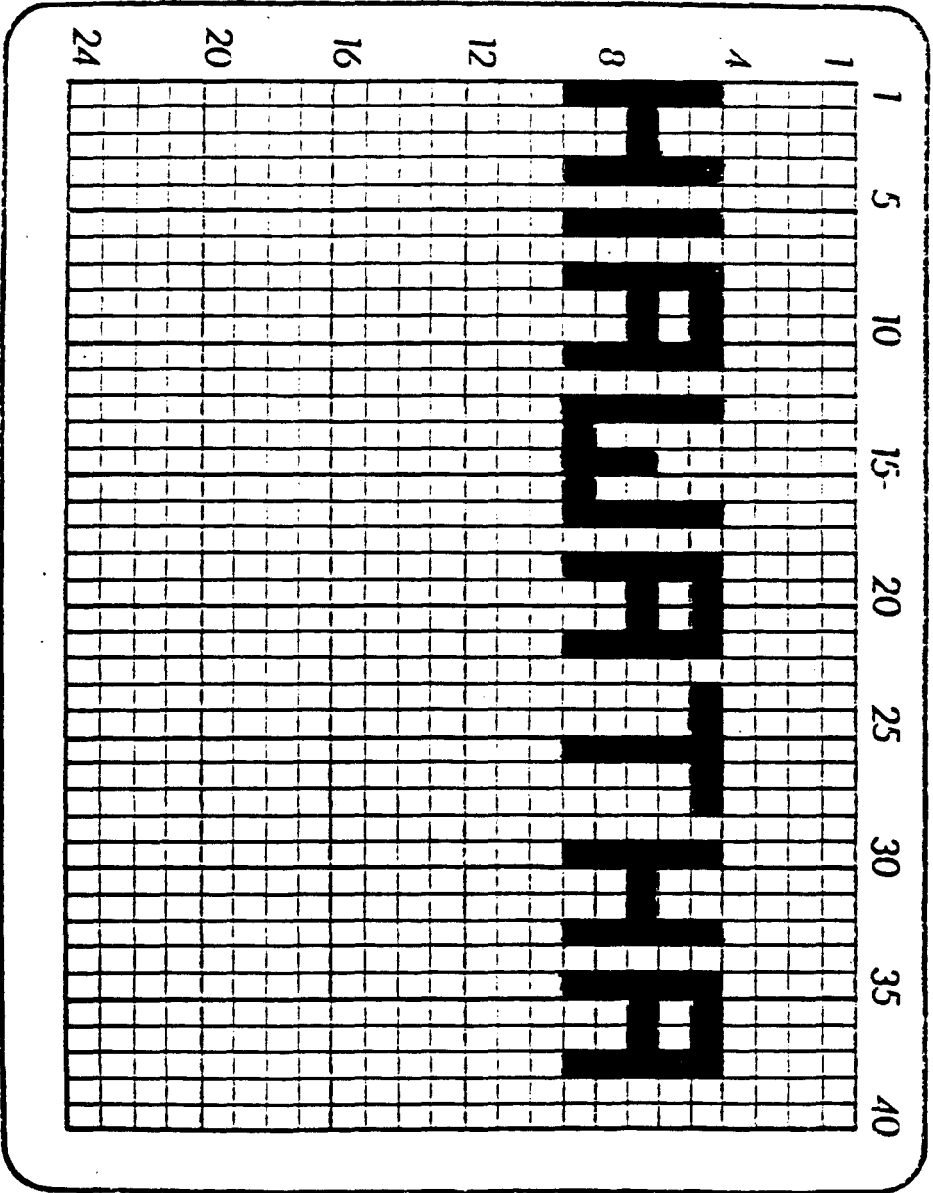
ENTER THE FOLLOWING PROGRAM:

```
10    REM    HIAWATHA SCHOOL PROGRAM

15    REM      <YOUR NAME AND SECTION>

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,2 : POKE  53281,2

30    FOR X = 1 TO 4

40    PRINT

50    NEXT X

60    PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7>
      <4 SP><C3><1 SP><C7><5 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
      <1 SP><C7><4 SP><C0>"

70    PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><3SP><C7><1 SP><C3>
      <3 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7>
      <1 SP><C0>"

80    PRINT "<C9><C7><4 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><4 SP><C3>
      <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <4 SP><C3><3 SP><C7><1 SP><C3><3 SP><C7><4 SP><C3><1 SP><C7><4 SP><C0>"

90    PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
      <3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><2 SP><C7><1 SP><C0>"

100   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
      <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><5 SP><C3><1 SP><C7>
      <1 SP><C3><2 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
      <2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C0>"

110 END
```
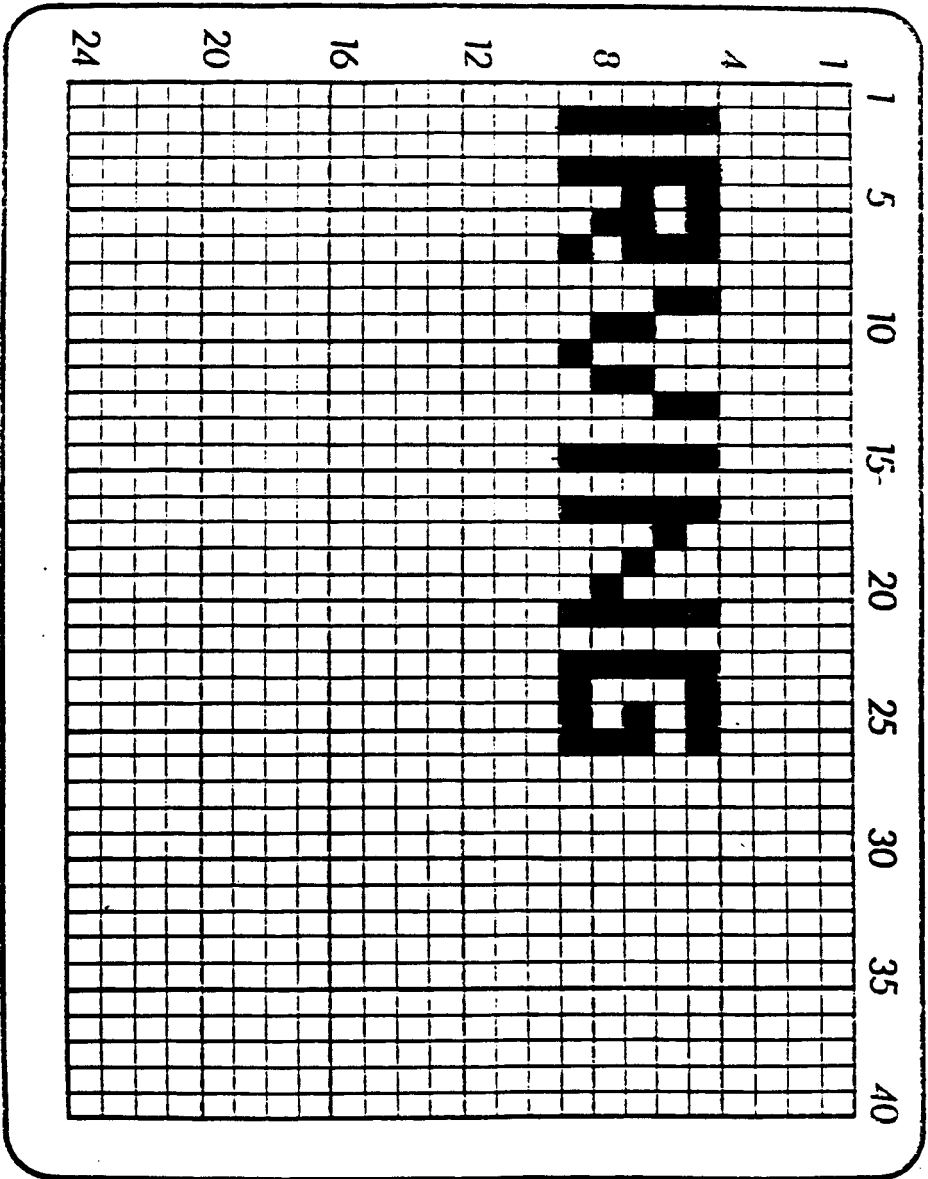
GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9
TEACHER'S COPY #2

NAME _____

SECTION _____

G5.D09.W9.TC2

GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9 FOR IRVING
TEACHER'S COPY

NAME _____

SECTION _____

186

ENTER THE FOLLOWING PROGRAM:

```
10    REM     IRVING SCHOOL PROGRAM

15    REM     <YOUR NAME AND SECTION>

20    PRINT "<SHIFT/CLR-HOME>"

25    POKE  53280,2 : POKE  53281,2

30    FOR X = 1 TO 4

40    PRINT

50    NEXT X

60    PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1SP><C3>
      <3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
      <1 SP><C3><1 SP><C7><4 SP><C0>"

70    PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1SP><C3>
      <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <2 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C0>"

80    PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><4 SP><C3><2 SP><C7><1SP><C3>
      <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><2 SP><C0>"

90    PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1SP><C3>
      <3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
      <1 SP><C3><2 SP><C7><2 SP><C3><1 SP><C7><1 SP><C3><1 SP><2 SP><C7>
      <1 SP><C0>"

100   PRINT "<1 SP><C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1SP><C7>
      <3 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
      <1 SP><C3><1 SP><C7><4 SP><C0>"

110 END
```
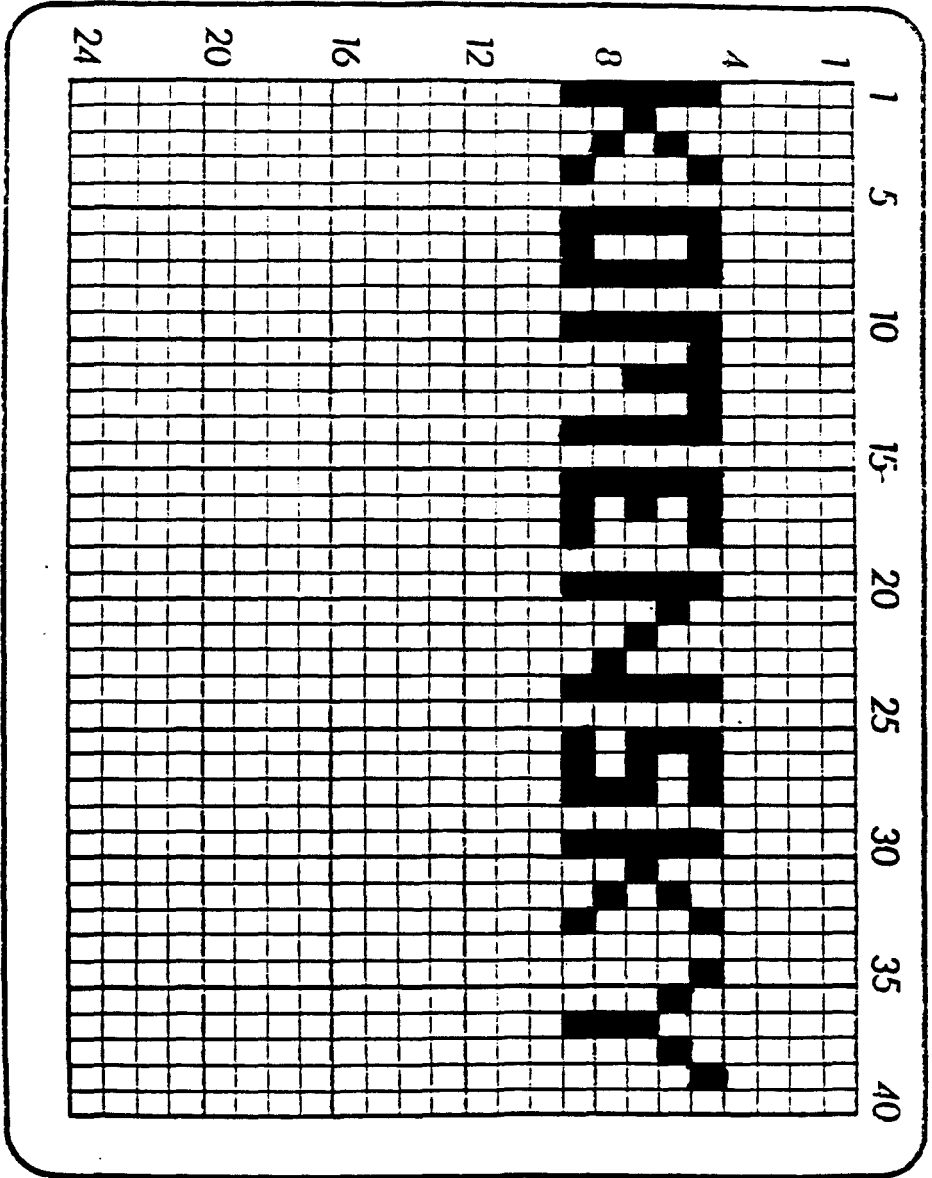
GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9
TEACHER'S COPY #2

NAME _____

SECTION _____

G5.D09.W9.TC2

GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9 FOR KOMENSKY
TEACHER'S COPY

NAME _____

188

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10   REM    KOMENSKY SCHOOL PROGRAM

15   REM      <YOUR NAME AND SECTION>

20   PRINT "<SHIFT/CLR-HOME>"

25   POKE  53280,2 : POKE  53281,2

30   FOR X = 1 TO 4

40   PRINT

50   NEXT X

60   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3>
     <1 SP><C7><5 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
     <1 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C0>"

70   PRINT "<C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><2 SP><C3><2 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C0>"

80   PRINT "<C9><C7><2 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C7><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
     <2 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><3 SP><C3><1 SP><C7><2 SP><C3><5 SP><C7><1 SP><C0>"

90   PRINT "<C9><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><3 SP><C7><1 SP><C3><2 SP><C7><2 SP><C3><3 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7><1 SP><C0>"

100  PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3>
     <1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7>
     <1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><3 SP><C3><1 SP><C7><1 SP><C3>
     <2 SP><C7><1 SP><C3><3 SP><C7><1 SP><C0>"

110 END
```
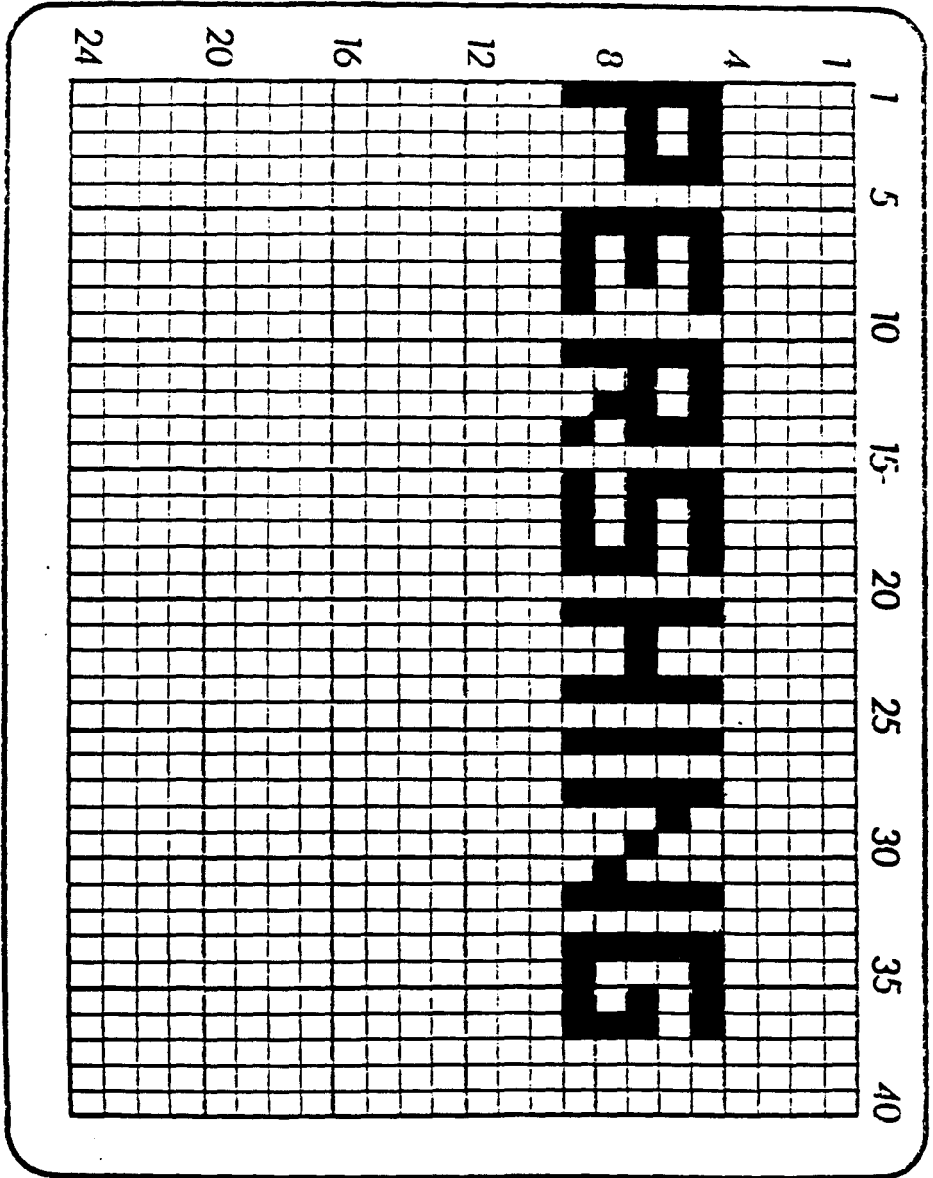
GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9
TEACHER'S COPY #2

189

NAME _____

SECTION _____

GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9 FOR PERSHING
TEACHER'S COPY

190

NAME _____

SECTION _____

ENTER THE FOLLOWING PROGRAM:

```
10   REM     PERSHING SCHOOL PROGRAM

15   REM        <YOUR NAME AND SECTION>

20   PRINT "<SHIFT/CLR-HOME>"

25   POKE  53280,2 : POKE  53281,2

30   FOR X = 1 TO 4

40   PRINT

50   NEXT X

60   PRINT "<C9><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3>
     <1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3><1 SP><C7><4 SP><C0>"

70   PRINT "<C9><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <4 SP><C7><1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><4 SP><C7>
     <1 SP><C3><2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><2 SP><C3>
     <2 SP><C7><1 SP><C3><1 SP><C7><1 SP><C0>"

80   PRINT "<C9><C7><4 SP><C3><1 SP><C7><3 SP><C3><2 SP><C7><4 SP><C3>
     <1 SP><C7><4 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3>
     <1 SP><C7><2 SP><C0>"

90   PRINT "<C9><C7><1 SP><C3><4 SP><C7><1 SP><C3><4 SP><C7><1 SP><C3>
     <1 SP><C7><1 SP><C3><5 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7><2 SP><C3>
     <1 SP><C7><1 SP><C3><2 SP><C7><1 SP><C0>"

100  PRINT "<C9><C7><1 SP><C3><4 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3>
     <2 SP><C7><1 SP><C3><1 SP><C7><4 SP><C3><1 SP><C7><1 SP><C3><2 SP><C7>
     <1 SP><C3><1 SP><C7><1 SP><C3><1 SP><C7><1 SP><C3><3 SP><C7><1 SP><C3>
     <1 SP><C7><4 SP><C0>"

110 END
```

GRADE 5 - DAY 9
COMPUTER LITERACY
WORKSHEET 9
TEACHER'S COPY #2

NAME _____ .

SECTION _____

G5.D09.W9.TC2

LESSON PLAN

```
GRADE 5 - DAY 10
COMPUTER LITERACY
TEACHER'S LESSON PLAN
```

INSTRUCTIONAL AIDS:	TOOLS, EQUIPMENT AND MATERIALS:
COPIES OF TEST # 1	CHALK, ERASER AND PENCILS

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT, STUDENT EVALUATION, ADDITIONAL TOPIC

OBJECTIVE FOR THE DAY:

INTRODUCTION:

REVIEW WITH THE STUDENTS THE MATERIAL COVERED AT THE PREVIOUS CLASSES AND GIVE A TEST IN THE HOMEROOM.

PRESENTATION:

DISTRIBUTE COPIES OF:

TEST #1   (G5.D010.T1.SC)

ADMINISTER THE TEST.
INSTRUCTIONS FOR THE MATCHING SECTION:
"THERE ARE 12 DEFINITIONS AND 12 WORDS. WRITE THE LETTER A - L ON THE LINE NEXT TO THE CORRECT DEFINITION. EACH LINE IS WORTH ONE POINT"
INSTRUCTIONS FOR THE TRUE AND FALSE SECTION:
"THERE ARE 7 TRUE OR FALSE QUESTIONS. WRITE A "T" OR A "F" ON THE LINE NEXT TO THE PROBLEM NUMBER. EACH LINE IS WORTH ONE POINT."
INSTRUCTIONS FOR PAGE TWO OF THE TEST:
"THE FIRST PROGRAM HAS SIX LINES OF PROGRAMMING. EACH LINE IS WORTH ONE POINT. COMPLETE THE LINES WITH THE PROPER PROGRAMMING. PROBLEMS B,C AND D ARE EACH WORTH ONE POINT. THE SECOND PROGRAM HAS TWO LINES OF PROGRAMMING. COMPLETE THE LINES WITH THE PROPER PROGRAMMING. EACH LINE IS WORTH ONE POINT."

COLLECT FROM THE STUDENTS:

MAJOR GRAPHICS PICTURE
MAJOR GRAPHICS PROGRAM

G5.D10.LP.TC

GRADE 5 - DAY 10
COMPUTER LITERACY
TEACHER'S LESSON PLAN

OBJECTIVE, INTRODUCTION, PRESENTATION, SUMMARY, STUDENT INVOLVEMENT,
STUDENT EVALUATION, ADDITIONAL TOPIC

SUMMARY:

IF THERE IS TIME AVAILABLE, YOU COULD DISCUSS THE QUESTIONS THAT WERE ON
TODAY'S TEST.

STUDENT INVOLVEMENT:

THE STUDENTS WILL BE WORKING INDEPENDENTLY ON A TEST.

STUDENT EVALUATION:

THE STUDENTS' TESTS WILL BE EVALUATED GIVING THE APPROPRIATE POINT VALUE FOR
EACH CORRECT ANSWER.
THE STUDENTS' MAJOR GRAPHICS PICTURE WILL BE EVALUATED GIVING 24 POINTS FOR A
COMPLETED PICTURE.
THE STUDENTS' MAJOR GRAPHICS PROGRAM WILL BE EVALUATED GIVING 26 POINTS FOR A
CORRECTLY COMPLETED PROGRAM.

ADDITIONAL TOPIC:

CHECK THAT ALL COMPUTERS, MONITORS AND DISK DRIVES ARE TURNED OFF.

G5.D10.LP.TC

MATCHING:

_____1. COMMAND THAT ERASES THE PROGRAM   A.   SHIFT/CLR-HOME
        CURRENTLY IN MEMORY.
                                                       B.   PROGRAM
_____2. COMMAND THAT DISPLAYS CHARACTERS IN THE
        OUTPUT OF A PROGRAM.   C.   LIST

_____3. THE COMPUTER LANGUAGE USED IN THIS CLASS.   D.   NEW

_____4. COMMAND THAT EXECUTES THE PROGRAM   E.   CURSOR
        CURRENTLY IN MEMORY.
                                                       F.   REM
_____5. A T.V.-LIKE UNIT CONNECTED TO THE COMPUTER.
                                                       G.   RETURN

_____6. CLEARS THE SCREEN AND SENDS THE CURSOR   H.   MONITOR
        TO THE UPPER LEFT CORNER OF THE MONITOR.
                                                       I.   SAVE
_____7. COMMAND THAT DISPLAYS THE PROGRAM IN
        MEMORY ON THE SCREEN.   J.   PRINT

_____8. BLINKING BOX THAT SHOWS WHERE YOU ARE   K.   RUN
        WORKING ON THE SCREEN.
                                                       L.   BASIC
_____9. KEY PRESSED TO ENTER INFORMATION
        INTO THE COMPUTER'S MEMORY.

_____10.A GROUP OF STATEMENTS COMBINED TOGETHER
        FOR THE COMPUTER TO FOLLOW.

_____11.COMMAND THAT ALLOWS THE WRITER TO PUT
        REMARKS INTO A PROGRAM WITHOUT CHANGING
        THE PROGRAM.

_____12.COMMAND THAT TELLS THE COMPUTER TO MOVE
        A PROGRAM FROM THE COMPUTER ONTO A DISK.

TRUE OR FALSE:

_____1. LINE NUMBERS MUST ALWAYS BE INCREMENTED BY 10'S.

_____2. WHEN THE COMPUTER IS TURNED OFF, YOUR PROGRAM IS LOST.

_____3. DEBUGGING IS DONE WHEN A PROGRAM HAS A SYNTAX ERROR.

_____4. IF YOU CLEAR THE SCREEN, YOUR PROGRAM WILL BE CLEARED FROM
         THE COMPUTER'S MEMORY.

_____5. A COMPUTER IS A MACHINE THAT PERFORMS TASKS AT A
         HIGH SPEED WITH GREAT ACCURACY.

_____6. THE COMMAND TO TRANSFER A COPY OF YOUR PROGRAM FROM DISK
         TO THE COMPUTER'S MEMORY IS KNOWN AS LOAD.

_____7. ALL COMMANDS ARE THE SAME FOR ANY COMPUTER.

G5.D10.T10.SC

WRITING A PROGRAM:

A.   WRITE A PROGRAM TO DISPLAY YOUR <u>FULL</u> NAME AND
     <u>COMPLETE</u> ADDRESS IN THE SCREEN.

     10   REM   _____

     20   PRINT _____

     30   _____

     40   _____

     50   _____

     60   _____

B.   COMMAND YOU WOULD USE TO EXECUTE THIS PROGRAM: _____
C.   COMMAND THAT WILL DISPLAY THE PROGRAM IN MEMORY ON THE
     THE SCREEN:
              _____

D.   COMMAND THAT IS MISSING FROM THIS STATEMENT:

     30   _____ 53280,14

E.   LINE 30 AND 40 ARE MISSING. WRITE A LINE OF PROGRAMMING THAT WILL
     PRODUCE <u>ONLY</u> THE FOLLOWING:

     <u>A COLOR BAR FOUR SPACES OF BLACK AND FOUR SPACES OF YELLOW</u>

     10   REM   TEST PROGRAM

     20   REM   QUESTION IS WORTH 2 POINTS

     30   PRINT "_____"

     40   _____

     50   END

G5.D10.T10.SC

GRADE 5 - DAY 10
COMPUTER LITERACY
TEST 1 - DAY 10
TEACHER'S COPY

NAME _____

196

SECTION _____

MATCHING:

_D_ 1. COMMAND THAT ERASES THE PROGRAM
      CURRENTLY IN MEMORY.

_J_ 2. COMMAND THAT DISPLAYS CHARACTERS IN THE
      OUTPUT OF A PROGRAM.

_L_ 3. THE COMPUTER LANGUAGE USED IN THIS CLASS.

_K_ 4. COMMAND THAT EXECUTES THE PROGRAM
      CURRENTLY IN MEMORY.

_H_ 5. A T.V.-LIKE UNIT CONNECTED TO THE COMPUTER.

_A_ 6. CLEARS THE SCREEN AND SENDS THE CURSOR
      TO THE UPPER LEFT CORNER OF THE MONITOR.

_C_ 7. COMMAND THAT DISPLAYS THE PROGRAM IN
      MEMORY ON THE SCREEN.

_E_ 8. BLINKING BOX THAT SHOWS WHERE YOU ARE
      WORKING ON THE SCREEN.

_G_ 9. KEY PRESSED TO ENTER INFORMATION
      INTO THE COMPUTER'S MEMORY.

_B_ 10. A GROUP OF STATEMENTS COMBINED TOGETHER
       FOR THE COMPUTER TO FOLLOW.

_F_ 11. COMMAND THAT ALLOWS THE WRITER TO PUT
       REMARKS INTO A PROGRAM WITHOUT CHANGING
       THE PROGRAM.

_I_ 12. COMMAND THAT TELLS THE COMPUTER TO MOVE
       A PROGRAM FROM THE COMPUTER ONTO A DISK.

A. SHIFT/CLR-HOME
B. PROGRAM
C. LIST
D. NEW
E. CURSOR
F. REM
G. RETURN
H. MONITOR
I. SAVE
J. PRINT
K. RUN
L. BASIC

TRUE OR FALSE:

_F_ 1. LINE NUMBERS MUST ALWAYS BE INCREMENTED BY 10'S.

_T_ 2. WHEN THE COMPUTER IS TURNED OFF, YOUR PROGRAM IS LOST.

_T_ 3. DEBUGGING IS DONE WHEN A PROGRAM HAS A SYNTAX ERROR.

_F_ 4. IF YOU CLEAR THE SCREEN, YOUR PROGRAM WILL BE CLEARED FROM
      THE COMPUTER'S MEMORY.

_T_ 5. A COMPUTER IS A MACHINE THAT PERFORMS TASKS AT A
      HIGH SPEED WITH GREAT ACCURACY.

_T_ 6. THE COMMAND TO TRANSFER A COPY OF YOUR PROGRAM FROM DISK
      TO THE COMPUTER'S MEMORY IS KNOWN AS LOAD.

_F_ 7. ALL COMMANDS ARE THE SAME FOR ANY COMPUTER.

G5.D10.T10.TC

WRITING A PROGRAM:

A.   WRITE A PROGRAM TO DISPLAY YOUR <u>FULL</u> NAME AND
     <u>COMPLETE</u> ADDRESS IN THE SCREEN.

     10   REM   _____<u>NAME AND ADDRESS PROGRAM</u>_____

     20   PRINT __<u>"<SHIFT/CLR-HOME>"</u>__

     30   <u>PRINT "<FIRST AND LAST NAME>"</u>_____

     40   <u>PRINT "<STREET ADDRESS>"</u>_____

     50   <u>PRINT "<CITY, STATE   ZIPCODE>"</u>_____

     60   <u>END</u>_____

B.   COMMAND YOU WOULD USE TO EXECUTE THIS PROGRAM: ____<u>RUN</u>_____
C.   COMMAND THAT WILL DISPLAY THE PROGRAM IN MEMORY ON THE
     THE SCREEN:
               ____<u>LIST</u>_____

D.   COMMAND THAT IS MISSING FROM THIS STATEMENT:

     30   __<u>POKE</u>__ 53280,14

E.   LINE 30 AND 40 ARE MISSING. WRITE A LINE OF PROGRAMMING THAT WILL
     PRODUCE <u>ONLY</u> THE FOLLOWING:

     <u>A COLOR BAR FOUR SPACES OF BLACK AND FOUR SPACES OF YELLOW</u>

     10   REM   TEST PROGRAM

     20   REM   QUESTION IS WORTH 2 POINTS

     30   PRINT "___<u><SHIFT/CLR-HOME></u>___"

     40   <u>PRINT "<C9><C1><4 SP><C8><4 SP><C0>"</u>_____

     50   END

G5.D10.T10.TC

CRITIQUE OF OLD CURRICULUM FOR FOURTH GRADE

The old curriculum for Fourth Grade was written with the intention to introduce some of the terms and to have the students master some of the skills used in basic computer programming. This included various activities from learning the names of the different parts of a computer system to using the computer to enter simple graphics programs. The old curriculum for the Fourth Grade was a five day program which consisted of a one page chart which had a row for each day's lesson and columns for: (a) terms for which the definitions were to be taught; (b) commands used in programming a computer which the students were to learn; and (c) activities which the students would perform. This chart was included with the curriculum to give some direction as to the order of the material to be covered. The student handouts which accompanied the chart consisted of nine pages. The handouts were set up for the students to either fill in the blanks or enter programming while reading along with the teacher.

There were no explicit written instruction as to how to share time on the computer operating with two students per computer. In the previous years of

teaching, the former instructor had each student entering his/her own work; this meant that after the first student entered a specific program, the teacher had to go to that computer, approve the work, clear the memory and then have the second student enter the same program. This created a volatile situation with disciplining the students while they were not involved in the activities, and this really slowed the progress of the curriculum.

The first day began with an introduction of the keyboard of the computer. The first handout was a blank version of the keyboard with the instructions, "Color in the 5 rows on keyboard." This instruction was misguiding, as it was not intended that the students "color" them. It would have been clearer if the instructions had been, "Write in the correct characters and symbols for each key from the keyboard."

The second page for day one was a handout to guide the students in learning the meanings of the terms computer, cursor and monitor. The definitions for computer and monitor were never given in the handout, and the definition of cursor was not clearly stated. The students were expected to know these terms so they should have been clearly identified by underlining the

terms the students would be responsible to know on a test and should have been clearly defined.

The second half of this page contained an activity to learn the command "CLR/HOME." The students used the handout by reading along with the teacher and typing certain words in on the keyboard. The activity was appropriate but needed clearer instructions and guidance. Also there was some art work on this page, a graphic showing a television being cleaned with an eraser by a walking house with the codes "CTRL" and "CLR" written across the roof. This art work was not consistent with the text; the command being taught used the keys labeled "SHIFT" and "CLR/HOME." There is a key with the code "CTRL" on it, but it was not the key being discussed in this handout.

The last activity for the first day had the students entering some lines of text and turning the computer on and off before and after each line. While the goal was only to demonstrate how to turn the computer on and off (the lines of text entered were irrelevant), this causes unnecessary stress to the computer and is a practice that should be avoided.

Day two started with the definitions of: computer commands, program, line number; and the reserved words:

new, return, print, and run stated at the beginning of
the first of two handouts. There were some definitions
and instructions to read and a line of programming to
enter. The statement was very simple and there could
have been a better example. Again, some additional art
work was incorporated at the bottom of the page. The
second page for this day, continued with more lines of
programming mixed in with a few more definitions and
art work. There were two concepts the students had to
master. First, that in order to enter a line of
programming the return key has to be pressed after each
statement. This was demonstrated by entering a
statement that would print the word "HI." The second
concept was demonstrated by entering the words "GIVE ME
CANDY." The intention of entering this statement was
to show that if not done properly, an error message of
"?syntax error" would be printed on the screen. Day
two ended with entering a couple of programs. These
programs resulted in output of cute phrases that really
did not relate to the task at hand. It would have made
the programs more relevant if it had emphasized the
important differences between a statement and a
program.

The third and fourth days' handouts consisted of a

total of three pages of programs with four definitions

which were written at the beginning of the day three

handout. In completing these handouts, students had

nine programs to enter. There was very little

instruction given to the students with these programs.

Day three began with the definitions of each of the

basic parts of a computer, basic language, list and

end. The main concept being emphasized in the handout

this day was that, in programming, the order in which

you enter the lines of programming is not critical

because the computer will read the lines in the

sequence of the line numbers assigned and entered with

the program. The first program had the students

entering nine statements nonsequentially that according

to assigned line numbers would spell the word

"SPAGHETTI" when listed or executed. The second

program dealt with the same concept and when executed,

produced the phrase "MARY HAD A LITTLE LAMB." If the

students finished early, the handout for day four could

be given since it had seven programs, more than enough

programs for both day three and day four. The programs

for days three and four had a variety of rhymes and

entertaining messages as output but did not help keep

the students aware of the computer skills that were

supposed to be emphasized by the handout.

There were two pages of extra material related to math and how the computer could be useful in doing calculations. This extra material dealt with teaching the difference between entering a mathematical equation with and without quotation marks, as well as the use of the semi-colon to have the computer give more than one response per line of programming. These two pages were completely inappropriate for Fourth Grade students at the level of mastery indicated by the other handouts; the students were just beginning to comprehend basic programming.

For the fifth and final day there was a test; three versions were provided, none of which were very well made. The first form used matching columns and fill in the blank activities, while the second and third forms used a question and short answer structure along with fill in the blank activities. Additionally, all three tests required the students to write two short programs as the final portion of the test. The definitions used in the tests were not identical to the definitions presented in the handouts. There were very limited instructions on the test itself, and with the lack of lesson plans for the teacher, there was no

guidance as to what was to be considered a passing score.

Generally, the old curriculum for Fourth Grade was very vague as to how it was to be used. The student handouts did not have any consistent titles or page numbers to indicate the intended order of completion. There were no suggestions as to how to score or grade the students' work either in the classroom activities or on the test. There were no written objectives included in the curriculum. With a majority of the materials on which the students worked being graded subjectively, the evaluating was made much more difficult.

The major problems with the format of this old curriculum were the lack of instructions for the teacher and the students to read before entering information into the computer, the need for guidance as to what the entering of a program was supposed to be teaching the student, and how the student would know if the output of the program was correct. There was also no provision on the handouts reminding the student to have the teacher check the work before continuing. All of these factors made the old curriculum very difficult for the teacher as well as the students.

RATIONALE OF NEW CURRICULUM FOR FOURTH GRADE

The new curriculum for Fourth Grade contains all the materials needed by the teacher and the students for the ten day course teaching beginning programming in Basic on a Commodore Computer.

One of the main improvements that this curriculum has is the medium on which the written material is stored. The entire curriculum is stored on data disks for AppleWorks, since most school districts use Apple Computers. This gives the district a clear and defined curriculum that is stored on a medium that is easy to access and reproduce and can accept modification to keep the curriculum up to date.

The new curriculum for the Fourth Grade is intended to be taught in ten days. The district decided to increase this from five days to give the same amount of time to both the Fourth and Fifth Grade levels. The Fourth Grade curriculum begins by listing the ten daily objectives. The next two pages give a chart showing the terms, reserved words or commands and activities the students will be covering on each day of the course. These pages are for the teacher's benefit and to aid in any review done by a curriculum

committee.

The materials for each of the ten days begins with a lesson plan, two pages in length, which is divided into seven sections. The first section is the restatement of the objective for that day. It is important to read this objective to the students each day so they become involved in accomplishing the objective. The objective section is followed by the introduction section. This section contains the information to begin the day's activities and is intended to assure that each day begins, except for the first day, with a review of the material from the day before. On the first day, this section lays out the ground rules for the teacher to convey to the students.

The section of the lesson plan which follows the introduction is the presentation section. This includes the information needed to explain the lesson for the day to the students. This third section is intended to give clear directions on how to work with the class through the handout(s) and worksheet(s) for the day. This section is supported by another addition to the curriculum found on a teacher's copy of the students' worksheet. The teacher's copy has all the information found on the student's copy with a few

additional comments. The teacher can use this copy like a script to direct the work of the students.

The fourth section, the summary, recaps the important points of the day's lesson and is intended to be covered with the students at the end of each class.

The next two sections, student involvement and student evaluation, clearly state what is expected from the students and how the students will be graded. These sections were an important improvement in the lesson plan in the evaluation of the students' progress. The old curriculum did not have material that would help the teacher evaluate the students' progress. It is important to inform the students that the materials completed in class earn given point values when completed properly, as do quizzes and tests. It is the total number of points earned that determines each student's grade. When the students are advised of the evaluation system, they know what they must do to improve their grades and can take responsibility accordingly.

The final part of the teacher's lesson plan is the additional topic section. This gives enrichment suggestions for students who finish the planned activities early.

Each of the ten daily lesson plans is followed by the student's and teacher's versions of all quizzes, handouts, worksheets or tests that will be used that day. There are three handouts, sixteen worksheets, four quizzes and two tests included in the curriculum. All of the materials given to the students have information in the upper left hand corner identifying the purpose of the sheet. There is a place in the upper right hand corner for the students to write their names and class sections. For the teacher's purposes, all pages are clearly marked with special coded numbers in the lower left-hand corner so they can be found easily on the data disk on which the curriculum is stored for copying purposes or for making improvements.

The three handouts are a blank keyboard, a list of the color bar codes, and a list of the poke color codes. Handouts generally contain informational charts while worksheets contain instructional activities. The student's version of a worksheet always begins with a list of the definitions that will be covered that day, followed by step-by-step instructions and clear explanations of what the day's tasks are. It's important to note that the teacher's version of the worksheets contains the same information with

additional instructions that clarify the students'
tasks for the day.

The work done on the worksheet receives a point
value that is used by the teacher to evaluate the
students. The four quizzes are given on the second,
third, fourth and seventh days of class. On the
preceding days the students are made aware that at the
next class meeting they will be taking a quiz. There
are two tests in the curriculum, one given on day five
and the other on day ten. These worksheets, quizzes
and tests give the teacher an objective means of
evaluating the students.

In addition to creating a more effective format
for the curriculum, the content of the curriculum was
altered to stress consistency in definitions and in
building concepts on previously covered concepts and to
incorporate an explanation for the students of what the
goal of each activity was so that they would be able to
anticipate a correct result.

The first day of the ten day course begins by the
teacher giving a brief outline of the expectations of
the course and how the students will be evaluated.
This is followed by spending some time becoming
familiar with the keyboard by filling in a handout that

contains a blank copy of the keyboard with the proper
characters or functions of all the keys. The
definitions for day one are listed at the beginning of
the first worksheet which the students receive as soon
as they have completed the keyboard handout. All of
the definitions are read, and the students are reminded
about the quiz to be given the next time they meet.
The worksheet directs the students to type phrases on
the computer to get accustomed to using two hands on
the keyboard and feeling for the keys instead of
looking at them. Also, the students are taught the use
of the "clr/home" key with and without the shift key.

The second day begins with a quiz reviewing the
seven definitions learned on day one. The students are
given a worksheet which has another seven definitions
that the students are expected to know for the quiz the
next day. On the second day the students begin work on
actual lines of programming. The objective of the
programming activity is to teach the students two
concepts of line by line programming. The first
concept is understanding what the error message
"?syntax error" means. The second concept is
understanding the difference between a single line of
programming, called a statement, and two or more lines

of programming, known as a program.

Another important change in the new curriculum is that the students, still in pairs, take turns entering statements into their assigned computer, while their partners are directed to proofread the statements. With two students to a computer, it is important to balance the amount of time each student spends working at the keyboard and to keep both actively participating in the activity.

Day three has a quiz to start the lesson. This is followed by seven new terms/commands on the worksheet. Now that the students have had an opportunity to enter some short programs, they are given a program that is determined by the school they attend. The program when executed will show the name of their school, but the lines of the program are scrambled. By using a word that is familiar to all the students, it helps in motivating the students to accomplish the task of getting the program to come out correctly.

The fourth day is opened with a quiz covering the seven terms/commands learned the day before. Today the students are still working in pairs on the computer, but for the first time each of them has a complete program to enter into the computer. While one student

is entering his/her program, the partner should be
writing out the output of the program on the
worksheets.

The fifth and half-way point of the curriculum is
a day set aside for testing. It is important to review
the material that the students are going to be quizzed
or tested on before giving the quiz or test.

There is no quiz on day six because the degree of
difficulty in the material being introduced requires
the entire class period. The students begin to work
with the color codes that will be used to create
graphics programs. (One of the major errors made in
the old curriculum was teaching the students an
incorrect way of making a color bar on the screen that
did not involve programming.) With this new lesson it
is important to stress the way being presented in this
lesson is the correct way to create colors in any
program or work.

The seventh day begins with a quiz reviewing the
color bar commands learned the day before. After the
quiz the students begin to enter some sample,
full-screen graphics programs by carefully taking turns
typing in, one line at a time, the program statements
given to them by the teacher. The students should check

their work after entering each statement. The students
work on this type of material for days seven through
nine. The tenth and final day of the course the
students have a test reviewing again all the material
covered during the course.

CRITIQUE OF OLD CURRICULUM FOR FIFTH GRADE

The old curriculum for Fifth Grade was a ten day
program which consisted of a pre-test given on the
first day followed by nine lesson plans, twenty-one
handouts, two graphics programs, one blank text screen
and a test.

The pre-test was comprised of ten matching columns
problems, five true or false statements, one question
for which the students had to write a program and a
couple of one word answer questions related to
programming. The intent of the pre-test was to review
the commands and terms covered in the old curriculum
for Fourth Grade. However, more than seventy-five
percent of the pre-test used different words or phrases
to describe concepts and define terms than had been
taught in the old curriculum for Fourth Grade, making
it difficult for the students recognize the material.
It was also not the appropriate material to give to
students on the first day due to the long interval of
time between the two courses and the short duration of
the earlier course. The first day could have been
better spent reviewing the material with a review
worksheet rather than creating a situation in which

failure was the more likely outcome.

The lesson plans, titled Computer Literacy, consisted of two sections. The first section of the lesson plans listed the definitions of the commands and terms to be taught during that day's lesson. The goal of the first section of the lesson plans was to introduce the new terms and commands to the students. Having the definitions in the lesson plans was ineffective as the students were not given the same written information in the handouts on the same day. The second section was titled "Procedures" and gave a description of the day's activities. If the intent of the second section of the lesson plans was to give the teacher a series of instructions to help guide the students through the activities for that day, these procedures did not accomplish this. The procedures included a list of what was to be handed out and collected, but lacked any details as to what the daily objectives were or any clearly defined steps that the teacher and the students were to be following.

The student handouts, at least one was to be given each day, contained the programs that the students were to enter into the computer. Most of the handouts began with a teacher-performed program, in which the teacher

entered a program at one of the computers while the students watched over the teacher's shoulder. This was not an effective activity as the students were generally not attentive and would generally prefer to be at the computer themselves.

The activity sheets, available on certain days, were used as extra credit material. Most of the programs used on these pages lacked explanations of what programming skills were being emphasized. There was also a limited amount of instructions other than, "Enter the following program." It was very rare for any student to have the opportunity to work any of the extra credit handouts because having two students at a computer, each having to enter the program independently, did not leave enough time for extra work. Most of these activities did not relate to the remainder of the curriculum; the time spent on these activities sheets would have been better spent with materials related to the final graphics project.

The student handout for day one had three programs for the students to enter in the computer. The purpose of the programs was to review the skills learned in Fourth Grade. The teacher's lesson plans contained the definitions for six terms/commands; however, while the

programs used some of these terms/commands, nowhere
were there any instructions telling the teacher to
write, say or use these terms/commands with the
students. The programs used for day one were to
emphasize that the order in which the lines are entered
does not matter because the computer will rearrange
them. The programs contained inappropriate phrases
that distracted the students from the task at hand.
The instructions given with the three programs did not
instruct the students to check with the teacher to
approve their progress after each program or step,
making the material less effective.

The programs on day two were to teach the use of
the color bar codes and the reserved word "GOTO." The
lesson plan contained the definitions for loop and
"GOTO," but the students were not given the definitions
in writing. The procedures only contained the
instructions to do the teacher-performed activities and
have the students complete the handouts. One of the
handouts was a listing of the color bar codes. The
quality of the printing of this handout made it very
difficult for the students to read it. Considering this
was the first experience working with color codes, it
would be important to give the students good quality

handouts. The last handout given to the students began with a teacher-performed activity. The goal of this program was for the students to be able to comprehend the use of color code commands. This teacher-performed activity was followed by two programs for the student to enter in the computer using the color bar codes and the "GOTO" command. A third program only used the "GOTO" command and again contained statements that did not relate to the topic of computer programming. An activities handout for day two was available for students who finished their work early. This extra credit work contained three more programs. The first two programs helped reinforce the skills employed in using the color code commands, while the third program did not have any value relative to the material for the day.

The day three through day seven lesson plans and student handouts followed the same pattern. The lesson plan would list the new terms for the day and the procedures for the teacher. If two handouts with programs were available on a given day the students were expected to complete the first one while the second handout was used as extra credit for those students who finished the other handout early.

The lesson plan for day three contained the definition for the "LET" command and the procedures for the teacher to follow. The programs on the handout began with a program for the teacher to do as a demonstration followed by three programs for the students to work on. The extra credit activities handout contained two activities to have the students create programs to meet specific requirements which were not appropriate for their level.

The fourth day's lesson plan contained the definitions for the "FOR-NEXT" and the "REM" commands. The handout consisted of two teacher-performed activities followed by two activities for the students to perform. The programs the students were to enter used the "FOR-NEXT" command, but the only program that used the "REM" command was one of the teacher-performed programs. The extra credit activities handout contained three challenging problems to write some programs. The level of these programs was well above the activities performed by the entire class and above the abilities of most of the students.

Day five did not have any new terms/commands. The procedure section only contained one step which said, "1. Handout student activities. Help as needed."

This was not enough information for the teacher to present the lesson for the day. The student handout for day five had two programs for the students to write or enter into the computer after the teacher demonstrated by entering a program as an example of what the students would be doing. The intent of the programs was to review and reinforce the many uses of the "FOR-NEXT" command. The extra credit activity handout had two programs for the students to enter into the computer. It would appear that these programs just reinforced typing skills because there was no explanation included with the programs as to any other purpose.

On the sixth day the students were given a four page handout to read as homework. The material in these four pages explained the use of the tape unit known as datassette and was discussed on day seven. The new commands given in the lesson plan for day six were "IF-THEN" and "INPUT." The student handout contained the teacher-performed program, followed by two programs for the students to enter. The extra credit activity sheet also contained two programs. Again, these programs apparently just reinforced typing skills because there was no explanation included with

the programs as to their purpose.

On day seven a summary sheet containing the definitions of the terms and commands from day one through day seven was included in a handout. As helpful as this comprehensive handout of definitions was, the students should have been given the definitions in writing on the day they were introduced. On day seven the routine was broken with the discussion of the handouts that had been given on day six for the students to read as homework. The material covered the use of the "LOAD" and "SAVE" commands when operating a datassette unit. The student handout for day seven contained a teacher-performed activity. This was followed by some programs to be entered by the students and saved on tape. But these programs did not contain any instructions as to when to use these new commands.

The eighth and ninth day handouts were different from those of earlier days. The students were given a text screen page on which they were to create a picture of some object by coloring the individual squares of a text screen. The text screen was a reproduction of the screen of the monitor showing each of the forty spaces on twenty-four lines. On day eight a graphic sheet of the head of a clown with no face was used as a

teacher-performed activity to show the students what was expected in their own graphics program. Also for day eight there was a graphics program that would create a picture of a dog for day eight to enter into the computer before the students began working on their own graphics programs. These would have been very good practice programs and helped the students understand the use of the color codes but should have been introduced to the students earlier. The final graphics assignment also should have been introduced earlier than day eight or nine. The students had part of the eighth class period and all of the ninth class period to enter their own personal graphics program.

The last day was spent taking a test. The final test contained ten matching column problems followed by three programs which the students were to write. The complexity of the programs which the students were expected to write using "FOR-NEXT," "IF-THEN" and "INPUT" statements was beyond the level of the students' knowledge, considering the amount of time spent using those terms in class.

The Fifth Grade curriculum was lacking in many respects. The "Procedures" portion of the teacher's lesson plan didn't give the teacher much guidance. The

student handouts did have some form of a title, such as a heading in the left-hand corner, but there wasn't a place to have the students write their names and there weren't page numbers to indicate the order of completion. There were a lot of rhymes and phrases used in all the programs and even though they were entertaining they detracted from or did not add meaning to the activities.

Two other factors that made the curriculum difficult, not only for the students but also for the teacher, were the lack of some written explanation of what the student was to be learning with each program and the lack of some written explanation as to how the student would be evaluated. The inadequate lesson plans, handouts with little or no instructions and programs containing distracting and non-relating phrases and a final graphics assignment not given to the students early enough for them to complete, clearly suggests the need for a new curriculum with some depth.

RATIONALE OF NEW CURRICULUM FOR FIFTH GRADE

The new curriculum for Fifth Grade is a
continuation of the new Fourth Grade curriculum. The
Fifth Grade curriculum begins with the statement of the
ten daily objectives for this curriculum. Again, this
is followed by a two page chart outlining terms,
reserved words or commands and activities that the
students are to cover each day in the Fifth Grade
curriculum.

Each of the ten days begins with a teacher's
lesson plan which is divided into seven parts. The
lesson plans for the new curriculum for Fifth Grade are
made from the same template as the lesson plans used in
the new curriculum for Fourth Grade. The first part is
the restating of the objective for that day, followed
by the introduction, the presentation, the summary, the
student involvement, the student evaluation and the
additional topic. Each of the ten daily lesson plans
is again followed by a student's and teacher's version
of each of the quizzes, handouts and worksheets that
will be used for that day. There are a total of
twenty-one worksheets, five handouts, six quizzes, two
tests and sixteen graphics.

One of the major changes from the old to the new curriculum is the elimination of the wasted time of having both students on one computer entering a program. Instead, the students should follow the instructions and take turns each entering a line at a time into the computer as the teacher requests. This allows each student an equal amount of opportunity in improving his/her skills of using the keyboard. While one student is entering information into the computer, the partner would be proof-reading the results on the screen for errors.

The first day of the course is spent reviewing the terms and commands learned in Fourth Grade. The first day's activities consist of completing a fill in the blank worksheet. The worksheet contains a total of twenty terms and/or commands. The students fill in the blanks with the definitions from a transparency as the teacher reviews each one. At the end of the period the students turn in this page for grading and are given a copy of the teacher's version to study for a quiz to be given the next day.

Continuing on the first day, the students receive a blank text screen handout that will be used to complete their final graphics assignment. The students

are given five days to fill in a picture on an entire text screen using any kind of colored pens/pencils. The text screen is a graph of what can be seen on the monitor. The picture is limited to 39 spaces across the screen and 21 lines down the screen. The reason for the limitations is that the picture will begin to scroll if made larger. The picture can be of any object or design accepted by the teacher. One of the most significant changes in the order of the Fifth Grade curriculum is this explanation of the major graphics assignment on day one instead of day eight or nine. By assigning this portion on day one with a due date of day five, it helped to improve the percentage of students having accomplished the assignment.

The second day begins with a quiz on the material reviewed during day one. This is followed by a two page worksheet allowing the students to refresh their skills in writing, entering and executing a program. The second page for this day reviews the use of the color codes and how to enter them in a program. The students are given a new color code sheet which contains all the colors available on the Commodore Computer.

Day three follows the pattern set on day two in

that a quiz is given to review the material covered on
the previous day. This is followed by a two page
worksheet. The first page has the student being guided
by the teacher and by the information given on the
worksheet to write a more complex program with some new
reserved words. The program is eight lines in length.
The second page has a similar program, sixteen lines in
length, but the worksheet provides no lines of
programming to assist the students. By following the
five steps outlined on the worksheet, the program is
written using the skills learned on the first page,
although different phrases are needed. This worksheet
serves as a good preparation for the writing of the
final graphics program that the students will be
starting in two days.

The quiz for day four is the same quiz used on day
three. This is done as the material covered on day
three is very similar to that covered on day two. It
also allows the students who had difficulty with the
quiz the day before to regain some ground since each
quiz is reviewed immediately after being given. The
worksheet for day four is divided into two pages. The
first page is designed to be done as homework and
returned at the next class meeting. The second page

has three programs which cover the use of the "for-next" command.

In order for the teacher to know whether students are grasping the material, a more challenging quiz is given on day five. This is intended to help identify problems, the material which students are not grasping. After the quiz the handouts needed to write their graphics programs are given with all the instructions as to when the assignment will be checked and when it will finally be due. After the assignment is reviewed, the students complete the two-page worksheet for day five which has four definitions on which the students have to fill in the blanks with the terms being defined. There are four separate programs for the students to work on in pairs taking turns entering statements into the computer. The teacher checks their progress after each program, while also checking for the completion of the final graphics program text screen assigned on day one.

The quiz for day six is a repeat of the previous day's to reemphasize the importance of the students' being able to write a program from scratch or from memory. To allow for more class time to work on the graphics programs, the seventh day's quiz is given in a

take-home format. The handouts for day six include a listing of the proper color codes for the "poke" command and a guide on how to use the disk drive. The worksheet for day six is a graphics program that prints the word "HI" which is the same graphics program used in the new curriculum for Fourth Grade but, in Fifth Grade the students must enter the program using only the graphics. The theory in reusing the same graphics from the Fourth Grade curriculum is that the program will be familiar to them and it will challenge them. The program looks difficult, but on close examination and by taking advantage of copying lines of programming, eleven lines of programming are all that are needed to do this program which consists of twenty lines.

Days seven through nine are spent working on the graphics programs used in the Fourth Grade Curriculum. The graphics program for day seven is the clown without a face. The students enter the program provided and then edit the program to add the face to the clown. This program gives the students the experience of having to edit a program. Throughout the days that the students work on graphics programs, it is always stressed to enter one line of programming at a time and

then to execute each line to make sure the line of
programming creates the correct addition to the
picture. For the school year 1987-1988, because this
class had not gone through the new curriculum for
Fourth Grade, the Fifth Graders were given the program
to enter into the computer, but in future years it is
intended that the students be given the text screen
only, having to enter the program using the knowledge
and skills they have been learning during the course.
One alternative to having some students frustrated,
would be to have the program available but to give only
half of the points to those using the program that
could be earned by those creating the program from the
text screen.

The dog is the graphics program for day eight, and
the name of the school the students attend is the final
graphics program done as classwork. Each day, from day
six through day nine, the teacher should be checking
the progress of each student on his/her final graphics
program to make sure each is completing the assignment
following the correct technique, and when students have
all their current day's classwork done they may be
offered time to begin entering this program into the
computer.

The test on the final day of the course is the last chance for the students to demonstrate that the curriculum is working correctly and to earn some points to improve their grades.

In summarizing, for both the Fourth and Fifth Grades, improvements in these new curricula come from the consistency in the use of the defined terms and from the explanations of concepts using the same words in the worksheets, handouts, quizzes and tests given to the students. The repetition, although it creates a certain amount of redundancy, allows the students to succeed and achieve the goals of the curricula. By sharing the work of entering programming statements between two students at each computer, the class time is used more effectively allowing the students more time to enter more examples. The development of a grading system encourages the students to take a position of responsibility relative to the determination of their grades. Finally, all of the elements are supported by the teacher's lesson plans which provide a unified and efficient vehicle for the accomplishment of both the students' and teacher's objectives.

EVALUATION BASED ON STUDENTS' SCORES

The old curriculum for Fourth Grade did not
contain sufficient material to objectively evaluate the
students' abilities or achievements. The prior teacher
had used a subjective grading process in evaluating the
handouts, and no written or verbal recommendation was
given with the curriculum. With no guidelines given
with the old curriculum, in order to evaluate the
students' progress a point value had to be assigned to
the work and test given. The handouts for days one
through three were given a point value of three each
while day four was given four points; relative values
were based on the number of programs. The majority of
the students did well at following the instructions
given by the teacher, reading the handouts along with
the teacher and entering the proper information into
the computer, but the comprehension of the material was
not adequately evaluated.

The assigned scores reflected that the students
had no difficulty the first two days but the third and
fourth days had a few students receiving lower scores
because of not completing the handouts and not entering
all the assigned programs into the computer. The main

reason this occurred was due to the slow process of having each student enter every program. With two students at each computer and a total of nine programs that each student had to enter in the last two class periods, completing the handouts was a difficult task to accomplish.

The final evaluation of the old curriculum for Fourth Grade was in the results of the test the students took on the fifth day. The test was assigned a point value of twenty-five. Most the students did well in the matching columns section but did not do well in the sections requiring the students either to write the output of a program given the program and a program given the output, or to write a program from scratch. The students may have been introduced to computer programming and to entering programs for four days, but mastering of the skills related to writing a program from scratch were not emphasized enough.

Looking at the assigned scores, 42% of the students received scores of less than seventeen points (or 68%) which was the number of points the students would have earned if they had correctly answered all but the writing of a program from scratch. With only 33% of the students able to scoring twenty (or 80%) or

more points, this clearly indicated the need to revise the curriculum to improve the material related to learning the skills of programming, to test at a more appropriate level of mastery and to include more methods of evaluating the students' daily achievements.

The new curriculum for Fourth Grade adds the materials necessary to evaluate the students subjectively. This is done with the addition of four quizzes and an additional test. The new curriculum is expanded from five days to ten days to give the Fourth Grade students an opportunity to spend more time with the computers and to develop increased computer literacy.

Each of the worksheets is worth five points in the new curriculum for Fourth Grade, but these points can be considered more subjectively than objectively earned because of the clearly defined evaluation section in the lesson plan. Most of the students did quite well in completing the required worksheets.

All the quizzes showed scores averaging above 50% correct. The first quiz had 58% of the students getting perfect scores. The scores were lower for the second and third quizzes; this would indicate the need to make sure that the material is being covered and

emphasized clearly.

The fifth day has a test for the students. The test scores are much better when compared to the test scores of the test of the old curriculum. The test is worth thirty points. The first half is made up of twelve definitions that the students have to match with the correct terms or reserved words, followed by six true or false statements. This portion of the test is worth eighteen points. This time only 12% of the students had scores of less than seventeen points (or 57%) and 60% of the student were able to score twenty-four (or 80%) or more points. The new curriculum for Fourth Grade is able to accomplish this by having consistency between the test and material covered and better use of time spent with activities in handouts that gives the students material more appropriate for the students' level.

The old curriculum for Fifth Grade started with a pre-test covering the material taught in the old curriculum for Fourth Grade. The pre-test was worth twenty points and found many students not remembering the material from the year before. The last time the students had worked with the material being tested would have been three or more months earlier which

explains the low scores. The highest score was seventeen, the lowest was two, and 56% of the students received a score of less than eleven points (or 55%). It might improve interest and motivation to give the pre-test on the second day after spending the first day reviewing the material from the Fourth Grade curriculum.

The handouts for day two through day eight were assigned point values ranging from one to four; relative values were based on the number of programs. Most of the students had great difficulty completing the daily assignments. Only one student was able to get perfect scores on all eight daily handouts. Again, just as in the old curriculum for Fourth Grade, the old curriculum for Fifth Grade required too much time having both students enter the same program in order to receive credit for the work.

The major assignment in the old curriculum for Fifth Grade was a graphics program that would create a picture drawn by the students on a graphics text screen. The students received this assignment on day eight which did not give the students sufficient time to accomplish the assignment. Only 7% of the students were able to complete the assignment properly. Another

33% were able to partially complete the assignment. The negative side shows 60% of the student not turning in the assignment.

The final score for this curriculum was the final test. The test was worth twenty-five points. Only one student received a score above twenty (or 80%). 42% of the students scored between ten and sixteen points (or 40 to 64%). Some 58% of the students scored less than ten points (or 40%).

The new Fifth Grade curriculum starts with a review day of the new curriculum for Fourth Grade, instead of a pre-test. This review worksheet was worth twenty points. The results of spending the time reviewing proved to be worthwhile. The quiz at the beginning of day two had 77% of the students earning ten or more points out of twenty points. This might seem a little on the low side but may be explained by the fact that these students had the old curriculum for Fourth Grade so much of this material was new to them.

The remaining daily worksheets for day two through day five are each worth ten points. The students do quite well achieving an average mean of 9.52 points per worksheet. The quiz given at the beginning of day three resulted in somewhat low scores, with most of the

students earning less than five points out of ten.
However, when the same quiz reappears as the quiz at
the beginning of day four the students' scores improve
with most of the students earning ten points out of
ten. Similar results occur for the quiz given on the
fifth and sixth days. Out of a possible ten points,
the students had a mean of 5.6 increase to 7.0,
respectively,. The scores for the quiz on day seven
dropped a little. This quiz was only given once and it
was handed to the students on day six as a take-home
quiz. Many of the students failed to remember to
complete the quiz and therefore only received points
for the completed portion.

The worksheets on days six, seven, eight and nine
were the four sample graphics programs. For these four
days the students had an average mean of 9.00 points.

The scores for the picture and the program relate
to the assignment given to the students on the first
day. The students received full credit if the picture
was completed properly by the fifth class period,
otherwise they were given partial credit for the
portion of the work that was correct. By the last day
of the class the students could either turn in a
written copy of their program with the picture or, if

time were available, enter and execute the written version of their program into the computer to properly create their picture. This is a great improvement over the results in the old curriculum. Over 50% of the students turned in the program. Two students even did an additional picture and program which earned them extra credit.

The last score of the new Fifth Grade curriculum was the test given on day ten. The test was worth thirty points. This time over 42% of the students scored more than twenty-four points (or 80%), 49% of the students scored between twelve and twenty-three points (or 40 to 77%) and only 9% of the students scored less than twelve points (or 40%).

The new Fourth and Fifth Grade curricula have greatly improved by supplying the teacher with detailed lesson plans, teacher's version of the student's worksheet, quizzes that give an objective based value to the grading, and the tests to evaluate the total effectiveness of the curricula in teaching the knowledge and skills to the students. Equally important is that these curricula have presented the material to the students in worksheets, activities ad methods that motivate, expand their knowledge and

skills, and challenge their creativity, and afford an opportunity to exercise responsibility and to succeed.

SCORES OF OLD FOURTH GRADE CURRICULUM

ASSIGNMENT	D1	D2	D3	D4	TEST
POINTS	3	3	3	4	25
STUDENT #1	3	3	3	4	21
STUDENT #2	3	3	3	4	19
STUDENT #3	3	3	3	4	23
STUDENT #4	3	3	3	4	25
STUDENT #5	3	3	3	4	21
STUDENT #6	3	3	3	4	20
STUDENT #7	3	3	3	4	19
STUDENT #8	3	3	3	4	12
STUDENT #9	3	3	1	0	18
STUDENT #10	3	3	2	4	15
STUDENT #11	3	3	2	2	14
STUDENT #12	3	3	2	3	18
STUDENT #13	3	3	3	4	25
STUDENT #14	3	3	1	0	10
STUDENT #15	3	3	3	4	16
STUDENT #16	3	3	1	2	12
STUDENT #17	3	3	1	0	10
STUDENT #18	3	3	1	4	17
STUDENT #19	3	3	3	4	20
STUDENT #20	3	0	3	4	17
STUDENT #21	3	3	3	2	8
STUDENT #22	3	0	3	0	11
STUDENT #23	3	0	3	4	18
STUDENT #24	3	3	3	4	22
STUDENT #25	3	3	3	4	20
STUDENT #26	3	3	3	4	25
STUDENT #27	3	3	3	4	15
STUDENT #28	3	3	3	4	21
STUDENT #29	3	3	0	4	18
STUDENT #30	3	3	3	4	19
STUDENT #31	3	3	3	4	9
STUDENT #32	3	3	3	4	24
STUDENT #33	3	3	3	4	24
STUDENT #34	3	3	3	4	21
STUDENT #35	0	3	3	4	18
STUDENT #36	3	3	3	4	11
STUDENT #37	3	3	3	4	16
STUDENT #38	3	3	3	4	6
STUDENT #39	3	3	3	4	16
STUDENT #40	3	3	0	4	17
STUDENT #41	0	0	3	4	12
STUDENT #42	3	3	3	4	16
STUDENT #43	3	3	3	4	11
ASSIGNMENT	D1	D2	D3	D4	TEST
POINTS	3	3	3	4	25
DAILY MEAN	2.9	2.7	2.6	3.5	17.0
DAILY RANGE	3	3	3	4	19
DAILY MODE	3	3	3	4	18

SCORES OF NEW FOURTH GRADE CURRICULUM

ASSIGNMENT	D1	RD1	D2	RD2	D3	RD3	D4	TEST
POINTS	5	7	5	7	5	7	5	30
STUDENT #1	5	7	5	5	5	7	5	27
STUDENT #2	5	7	5	2	5	5	5	26
STUDENT #3	5	7	5	7	5	4	5	28
STUDENT #4	5	7	5	4	5	5	5	22
STUDENT #5	5	5	5	2	5	4	5	23
STUDENT #6	5	5	5	4	5	6	5	25
STUDENT #7	5	7	5	5	5	7	5	24
STUDENT #8	5	7	5	3	5	7	5	27
STUDENT #9	5	7	5	3	5	7	5	27
STUDENT #10	5	5	5	3	5	4	5	29
STUDENT #11	5	7	5	4	5	4	5	30
STUDENT #12	5	7	5	7	5	4	5	29
STUDENT #13	5	7	5	7	5	3	5	28
STUDENT #14	5	7	5	4	5	5	5	27
STUDENT #15	5	7	5	7	5	3	5	27
STUDENT #16	5	7	5	1	5	4	5	24
STUDENT #17	5	7	5	3	5	6	5	29
STUDENT #18	5	7	5	4	5	4	5	29
STUDENT #19	5	7	5	4	5	2	5	26
STUDENT #20	5	7	5	5	5	6	5	30
STUDENT #21	5	5	5	5	5	7	5	29
STUDENT #22	5	7	5	4	5	4	5	24
STUDENT #23	5	4	5	1	5	5	5	9
STUDENT #24	5	7	5	5	5	4	5	24
STUDENT #25	5	5	5	4	5	5	5	24
STUDENT #26	5	5	5	3	5	4	5	21
STUDENT #27	0	0	5	3	5	4	5	18
STUDENT #28	5	5	5	1	5	2	5	23
STUDENT #29	5	5	5	1	5	5	5	21
STUDENT #30	5	3	5	3	5	1	5	6
STUDENT #31	5	7	5	4	5	6	5	16
STUDENT #32	5	3	5	0	0	3	5	25
STUDENT #33	5	5	5	3	5	2	5	19
STUDENT #34	5	7	5	7	5	3	5	23
STUDENT #35	5	5	5	3	5	2	5	16
STUDENT #36	5	7	5	4	5	6	5	20
STUDENT #37	5	7	5	5	5	3	5	23
STUDENT #38	5	5	5	3	5	0	5	25
STUDENT #39	5	5	5	3	5	5	5	2
STUDENT #40	5	2	5	2	5	5	5	30
STUDENT #41	5	3	5	2	5	4	5	20
STUDENT #42	5	2	5	7	5	4	5	20
STUDENT #43	5	7	5	2	5	0	5	20
ASSIGNMENT	D1	RD1	D2	RD2	D3	RD3	D4	TEST
POINTS	5	7	5	7	5	7	5	30
DAILY MEAN	4.9	5.7	5.0	3.8	4.9	4.2	5.0	23.1
DAILY RANGE	5	7	0	7	5	7	0	28
DAILY MODE	5	7	5	4	5	4	5	24

SCORES OF OLD FIFTH GRADE CURRICULUM

ASSIGNMENT	RD1	D1	D2	D3	D4	D5	D6	D7	D8	PIC	PROG	TEST
POINTS	20	3	4	3	4	2	3	4	1	14	25	25
STUDENT #1	15	3	1	2	3	1	2	2	1	14	25	8
STUDENT #2	14	3	1	2	3	1	2	2	1	14	13	5
STUDENT #3	11	3	1	3	3	0	3	4	1	7	13	8
STUDENT #4	7	3	1	2	2	1	2	2	1	14	11	8
STUDENT #5	4	3	1	3	2	1	2	4	1	14	10	7
STUDENT #6	13	3	1	3	2	2	3	4	1	0	0	13
STUDENT #7	11	3	1	2	3	1	2	2	1	0	0	16
STUDENT #8	14	3	1	3	2	1	2	2	1	0	0	10
STUDENT #9	6	3	1	3	3	0	2	2	1	0	0	11
STUDENT #10	9	3	2	2	3	1	2	2	1	0	0	7
STUDENT #11	9	3	1	3	2	1	3	2	1	0	0	6
STUDENT #12	11	3	1	2	2	1	2	2	1	0	0	3
STUDENT #13	15	3	4	3	3	0	2	2	1	13	0	14
STUDENT #14	11	1	2	2	2	1	2	2	1	14	20	10
STUDENT #15	7	3	4	2	2	1	2	2	1	0	0	8
STUDENT #16	11	3	4	3	3	1	2	2	1	0	0	13
STUDENT #17	16	3	4	3	4	2	3	4	1	14	25	21
STUDENT #18	11	2	4	3	2	1	2	3	1	13	0	6
STUDENT #19	17	2	3	2	2	1	2	4	1	14	21	12
STUDENT #20	12	2	2	2	2	1	2	4	1	14	0	14
STUDENT #21	9	0	1	2	2	1	2	3	1	0	0	4
STUDENT #22	12	2	2	2	0	0	0	1	1	14	13	6
STUDENT #23	14	2	3	0	2	0	2	2	0	0	0	13
STUDENT #24	6	3	4	2	3	0	2	2	1	0	0	10
STUDENT #25	11	2	0	3	4	1	1	4	1	0	0	7
STUDENT #26	7	2	1	2	2	0	1	0	1	0	0	6
STUDENT #27	9	3	0	3	3	1	2	2	1	0	0	8
STUDENT #28	8	2	1	3	3	0	2	3	1	0	0	3
STUDENT #29	5	3	2	3	3	1	1	2	1	0	0	3
STUDENT #30	6	3	1	3	3	1	1	4	1	0	0	13
STUDENT #31	6	3	1	3	4	0	2	2	1	9	9	13
STUDENT #32	5	2	1	2	0	1	2	2	1	0	0	7
STUDENT #33	5	3	2	3	3	1	2	2	1	0	0	11
STUDENT #34	9	2	1	2	2	0	1	1	1	0	0	11
STUDENT #35	13	3	0	2	2	1	2	2	1	0	0	9
STUDENT #36	10	2	2	2	2	1	2	2	1	14	6	10
STUDENT #37	2	3	4	3	4	2	2	3	1	0	0	8
STUDENT #38	7	3	2	2	2	0	2	2	1	0	0	5
STUDENT #39	8	2	1	3	3	1	2	2	1	0	0	9
STUDENT #40	7	3	3	3	3	0	1	2	1	13	0	3
STUDENT #41	12	3	4	1	2	0	1	1	1	14	25	7
STUDENT #42	7	3	4	2	2	0	1	2	1	13	0	1
STUDENT #43	8	3	4	3	4	2	1	2	1	0	0	10
ASSIGNMENT	RD1	D1	D2	D3	D4	D5	D6	D7	D8	PIC	PROG	TEST
POINTS	20	3	4	3	4	2	3	4	1	14	25	25
DAILY MEAN	9.5	2.6	2.0	2.4	2.5	.8	1.8	2.3	1.0	5.2	4.4	8.8
DAILY RANGE	15	3	4	3	4	2	3	4	1	14	25	26
DAILY MODE	11	3	1	3	2	1	2	2	1	14	25	8

SCORES OF NEW FIFTH GRADE CURRICULUM

ASSIGNMENT POINTS	D1 20	RD1 20	D2 10	RD2 10	D3 10	RD3 10	D4 10	D4A 10	RD4 10	D5 10	RD5 10	D6 10	RD6 10	D7 10	D8 10	D9 10	PIC 24	PROG 26	TEST 30
STUDENT #1	17	12	10	3	10	1	7	10	7	10	7	10	3	10	10	0	0	0	23
STUDENT #2	12	17	10	10	10	7	7	10	0	10	7	10	0	0	0	0	0	0	21
STUDENT #3	20	7	5	1	10	0	7	10	1	10	1	10	5	10	10	10	0	0	13
STUDENT #4	20	14	5	4	10	3	7	10	0	10	10	10	3	0	10	0	24	24	26
STUDENT #5	20	8	10	3	10	3	10	10	1	10	4	10	3	0	0	0	0	0	16
STUDENT #6	20	16	10	3	10	8	10	10	10	10	6	10	5	0	10	10	24	26	29
STUDENT #7	20	11	10	2	10	2	7	10	4	10	4	10	5	10	0	0	0	0	20
STUDENT #8	20	12	10	2	10	2	7	10	7	10	5	10	3	10	10	10	24	26	23
STUDENT #9	20	9	10	11	10	7	10	10	7	10	6	10	5	10	10	10	24	21	25
STUDENT #10	20	15	10	10	10	5	10	10	8	10	4	10	7	0	10	10	24	26	26
STUDENT #11	20	13	10	11	10	5	8	10	0	10	8	10	0	0	0	10	0	0	0
STUDENT #12	20	18	10	9	10	10	10	10	10	10	10	10	7	10	10	10	12	24	27
STUDENT #13	20	18	10	8	10	10	10	10	8	10	10	10	3	10	10	10	12	13	29
STUDENT #14	20	12	10	4	10	10	10	10	10	10	9	10	7	10	10	10	24	26	28
STUDENT #15	20	21	10	8	10	10	10	10	10	10	10	10	10	10	10	10	24	26	25
STUDENT #16	20	11	10	4	10	10	10	10	5	10	10	10	3	10	10	10	0	0	23
STUDENT #17	20	13	10	4	10	10	10	10	7	10	10	10	10	10	10	10	24	21	28
STUDENT #18	20	18	10	7	10	10	10	10	10	10	9	10	10	10	10	10	24	26	28
STUDENT #19	20	14	10	9	10	10	10	10	10	10	9	10	10	10	10	10	24	26	29
STUDENT #20	20	15	10	6	10	10	10	10	0	0	5	0	3	10	10	10	4	24	24
STUDENT #21	20	13	10	6	0	0	10	10	10	10	10	10	10	10	10	10	23	20	27
STUDENT #22	20	6	10	4	10	10	10	10	9	10	6	10	5	10	10	10	24	26	14
STUDENT #23	20	8	10	2	10	0	10	10	0	10	5	10	3	10	10	10	0	0	17
STUDENT #24	20	13	10	8	10	4	10	10	9	10	10	10	3	10	10	10	48	52	25
STUDENT #25	20	15	10	3	10	6	7	10	0	10	9	10	10	10	10	10	0	0	16
STUDENT #26	20	4	10	1	10	1	0	10	1	10	2	10	3	10	10	10	0	0	8
STUDENT #27	15	14	10	3	10	4	7	10	0	10	5	10	3	10	10	10	0	0	22
STUDENT #28	20	11	10	0	10	2	0	0	0	10	0	10	3	10	10	10	0	0	9
STUDENT #29	20	3	10	1	10	0	10	10	4	10	3	10	3	10	10	10	0	0	13
STUDENT #30	20	11	10	2	10	3	10	10	0	10	3	10	3	10	10	10	0	0	17
STUDENT #31	20	4	10	3	10	1	7	10	6	10	6	10	5	10	10	10	48	52	19
STUDENT #32	15	9	10	6	10	5	7	10	7	10	7	10	3	10	10	10	24	24	25
STUDENT #33	19	9	10	3	10	3	7	10	5	10	4	10	3	10	10	10	24	20	11
STUDENT #34	19	13	10	2	10	10	10	10	9	10	7	10	3	10	10	10	0	0	16
STUDENT #35	20	15	10	1	10	10	10	10	10	10	8	10	5	10	10	10	24	23	23
STUDENT #36	19	11	10	5	10	9	10	10	10	10	10	10	3	10	10	10	24	24	24
STUDENT #37	20	16	10	3	10	10	10	10	9	10	8	10	5	10	10	10	0	0	12
STUDENT #38	20	17	10	6	10	0	10	10	0	0	4	0	3	10	10	10	24	26	29
STUDENT #39	20	11	10	0	10	10	0	0	10	10	10	10	7	10	10	10	24	26	26
STUDENT #40	20	10	10	2	10	10	10	10	7	10	10	10	3	10	10	10	0	0	19
STUDENT #41	20	13	10	4	10	10	10	10	8	10	10	10	3	10	10	10	24	26	25
STUDENT #42	17	13	10	2	10	10	10	10	4	10	10	10	3	10	10	10	0	0	14
STUDENT #43	20	13	10	5	10	10	10	10	8	10	10	10	10	10	10	10	24	26	26
ASSIGNMENT POINTS	D1 20	RD1 20	D2 10	RD2 10	D3 10	RD3 10	D4 10	D4A 10	RD4 10	D5 10	RD5 10	D6 10	RD6 10	D7 10	D8 10	D9 10	PIC 24	PROG 26	TEST 30
DAILY MEAN	19.4	12.2	9.8	4.4	9.8	6.1	8.5	9.5	5.6	9.5	7.0	9.5	4.7	8.6	9.1	8.8	14.0	15.2	20.9
DAILY RANGE	8	17	5	10	10	10	10	10	10	10	10	10	10	10	10	10	24	26	30
DAILY MODE	20	13	10	3	10	10	10	10	10	10	10	10	3	10	10	10	24	26	25

APPROVAL SHEET

The thesis submitted by Charles S. Saunders has been
read and approved by the following committee:

Dr. Jack A. Kavanagh, Director
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The final copies have been examined by the director of
the thesis and the signature which appears below
verifies the fact that any necessary changes have been
incorporated and that the thesis is now given final
approval by the Committee with reference to content and
form.

The thesis is therefore accepted in partial fulfillment
of the requirements for the degree of Master of Arts.

_4/18/84_

Date

Director's Signature