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A Survey Of Variable Factors Affecting A Group Of Children In The Fifth And Sixth Grades At Harlem Elementary School, Baytown, Texas

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A SURVEY OF VARIABLE FACTORS AFFECTING A GROUP OF CHILDREN IN THE FIFTH AND SIXTH GRADES AT HARLEM ELEMENTARY SCHOOL, BAYTOWN, TEXAS

By

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DEDICATION

To my husband, Jefferson D. Walker, whose interest and encouragement have meant much in the preparation of this study.

To my parents, sisters and brothers for their devotion and inspiration.

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CHAPTER I

INTRODUCTION

In the life of a child all experiences are significant. His behavior is the result of his heredity, his environment, his biological structure, and his personal history. All of his experiences interrelate and gradually an individual personality evolves.

As a result, a teacher finds that each child under her supervision is a distinct individual -- the product of his experimental history. Each child is an interacting member of the class, influencing directly or indirectly the other members, and in turn directly feeling the result of membership in the group. Stoddard says:

> The child does not stay put. He keeps changing to something else. It is our unique responsibility as educators to do well with him where he is, while leading him to where he must go. The child himself is the story of his life, and he has not had too much to do with its writing. Only in recent years has the child been accepted as an adequate subject for study in psychology.[1]

The Statement of The Problem

This investigation will attempt to discover what variables

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[1] G. D. Stoddard, "Child Development". School and Society, Vol. 49, Jan 14, 1939. 33-38.

may be found in an unselected group of children.

1. Why is a study of variable factors important in understanding the child's growth and development?
2. How can knowledge of these factors help to improve our classroom instruction?
3. What is the relationship between home conditions and scholastic achievement in the subject matter?

The problem under consideration in this study is an effort to determine what effect, if any, the conditions of the home have upon the progress the pupils will make in their studies such as, association with parents, housing, amount of formal training of parents, conveniences for studying, cultural interests in the household, and economic stability.

This study further seeks to assemble accurate and diagnostic data, identified as a result of the investigation, which shall be analyzed in the light of the following questions:

1. Can achievement be measured by a single score, grade or category?
2. To what extent is achievement conditioned by intelligence?
3. To what extent do personality patterns influence achievement and general intelligence?

4. What degree of correlation exists between achievement and general intelligence?

5. What degree of correlation exists between achievement and personality patterns?

A fruitful approach to the study of this problem lies in the field of childhood development. The child's capacity increases materially from month to month and from year to year. This increase is due, presumably, to two factors: (1) the influence of growth; (2) the influence of experience and training, and (3) environment.

The Purpose of The Study

This study was undertaken for the purpose of revealing to the classroom teacher the variable factors prevailing within an "unselected" group in the average classroom. Although the personnel of the student group is admittedly controlled by local conditions, no selections were made within the two groups selected. In other words, this is not a study of superior, defective, average, privileged, or underprivileged children, but of all of the children who participated in the work of two classes within a given year.

The variables considered were socio-economic status, intelligence quotients, scholastic achievement, school marks of standardized tests, social adjustment, and personality traits. Standardized tests and scales were used to secure indicators of these

variables. There was also an attempt to discover what correlations existed between these variables. Other studies have been made showing relationships between socio-economic status and intelligence, intelligence quotients and grade achievement, personality and intelligence quotients, grade achievement and socio-economic background. In this investigation an attempt was made to find correlations which corresponded with those factors found in similar studies.

The study included a combination of clinical and simple statistical materials.

The Significance of This Study

This study had significance only to the extent to which it revealed the adequacy of the most commonly employed principles of understanding the factors that determined the development of children and to what extent these principles brought about: (1) The determination of specific subject matter goals on age-grade levels. (2) The value of Standardized tests in measuring pupil growth and development. (3) The teaching materials used in the attainment of these goals.

The value of this study lies in the valid information revealed which may serve as a basis for improvement in our educational system, either by remedial or new measures.

Delimitations

The subjects were members of two unselected classes of Negro children in the same building. Both were fifth and sixth grade classes during the year 1949-1950. The average chronological age was 12 years and 5 months. In grade five there were 17 girls and 19 boys. In grade six there were 5 girls and 11 boys, making a combined total of 52 cases. Children entered late, or, who did not remain for the entire semester were not included in this study.

The study was made in McNair, Baytown, Texas, a village of approximately 1500 population, and in a school with an enrollment of 226. The school has an organization of six grades with annual promotion plan. The village is an exclusive Negro community All children in the two grades were American born of American parents.

The children had the same teachers and the same daily schedule. They were in three different rooms with three different teachers every day. This included the homeroom and the homeroom teacher.

The methods used have been those which may be applied to groups in classrooms. The findings do not indicate what might be found by scientific case study methods.

No attempt has been made to consider all the factors involved in the study of achievement, but rather emphasis has been centered upon the incident of relationship existing between achievement and the factors; intelligence and objective personal traits.

In this study the major factors conditioning pupil growth and achievement considered are grouped under heads such as; (a) intellectual, (b) learning, (c) physical, (d) emotional and social, and (d) environmental factors.

Factors considered mean an element, influence, or circumstance which produces certain results.

This study analyzed, compared and interpreted data on the physical, mental, social and achievement growth, and home and community background of the Fifth and Sixth Grade Children of Harlem Elementary School.

Method of Procedure

The 52 boys and girls whose cooperation provided the data for this study were enrolled in the fifth and sixth grades of Harlem Elementary School - McNair Baytown, Texas. The testing program began the third week of the first semester.

The 52 pupils of the fifth and sixth grade classes selected for study, from the 45 different homes, represent a fair cross section of the Harlem Elementary School pupils.

The procedure consisted of collecting information pertinent to the study of each individual from the standpoint of home factors and their influence on the social and academic progress of the fifth and sixth grade pupils. The data for the study was secured through home visits, rating scales, tests, inventories principal's office and observation. The data was then analyzed in order to obtain, so far as possible, objectives and indications relating to ome of the outstanding factors in the home environment. The area included in the study was thoroughly surveyed to get first hand information on the study.

In seeking indicators of the variables considered, standardized tests and scales were used.

The socio-economic background was measured by the Pupil Background Study and the Sims Score Card for Socio-Economic Form C. This rating scale method was filled out by the pupils with help after a personal visit to the home. The intelligence quotients were determined from the Otis Group Intelligence Scales - Form B. The tests were given during the same period when children were located in the home rooms. The time and place, under which these tests were given was selected carefully in order to avoid any disturbing factors. The test designed to measure scientifically and rapidly in groups the native mental ability of children in the

fifth and sixth grade classes.

The Gray-Votaw General Achievement Tests - Form E was used to find an indicator of scholastic achievement. These were given in the third week of the semester, in the homeroom during the regular school hours. They were given in periods of 1½ hours each, on consecutive days with rest periods between the tests.

A second achievement test was given the eighth week of the last nine-week period.

The five teachers scored each child for an adjustment ranking using the Wickman Behavior Score Card. This score card is used to study the adjustment of the child to his group. The scores were obtained after two months observation of the childdren. Directions were followed carefully and the work was conscientiously done.

Aspects of Personality, devised by Pintner, was used to determine the personality traits. It is a self-rating scale, designed to discover the sources of personal and social maladjustment in pupils.

The following reading tests were administered: 1. Gates Basic Reading Test - Type A. Reading to Appreciate General Significance. 2. Gates Basic Reading Test - Type B. Reading to Predict the Outcome of Given Events. 3. Gates Basic Reading Test - Type C. Read.

ing to Understand Precise Directions and 4. Gates Basic Reading Test Type D. Reading to Note Details.

Pupil's Interest Inventory was given to determine the interests and hobbies of both groups.

The information which included grade level, chronological age, academic standing for each subject and participation in extra curricular activities were obtained from the permanent records in the school files.

Physical and Sensory Tests were made by the school nurse.

The audiometer and watch tick test was used for testing hearing. Two home nurses gave the visual tests. The regular eye testing device was used. There were no evidences of defective hearing among the group. Two pupils failed to pass the visual tests. They were advised to have their eyes tested for glasses.

Throughout the entire testing procedure, every attempt was made to create satisfactory test situations. The children were apparently under no emotional strain. They were most interested and eagerly applied themselves.

Samples of tests will be found in appendix of this study.

After the data were collected, the proper tabulations were made by means of tables and charts. The manuscript was developed from the information revealed by these tabulations. It was then possible to draw specific conclusions resulting from the study.

Survey of Related Literature

Interest in the scientific study of scholastic achievement has been accompanied by a curiosity which seeks to discover and isolate those factors which appear to have the greatest effect upon achievement.

The widespread use of a standardized tests and the emphasis placed upon educational achievement have drawn attention to the fact that the correlation between intelligence and achievement leaves something to be accounted for.[1]

Turney[2] summarizing the results of some twenty-eight investigations dealing with this relationship at high school levels reports the coefficient of correlation between intelligence and school marks ranging from .27 to .66, the median value being .49.

Terman[3] reporting on discrepancies existing between intelligence (Stanford-Benet MA) and achievement (teachers' marks), concluded in his findings that an achievement greater than mental ability was ordinarily due either to exceptional application on the part of the pupil or to the effect of favorable personality traits in influencing the teacher's judgment; that inferior work lower than mental ability resulted from a variety of causes including,

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[1]Margaret L. Rhoads, The Relation of Social, Economic and Personal Characteristics to Reading Ability, p. 5.

[2]Austin H. Turney, Factors Other Than Intelligence Affecting High School Success, p. 75.

[3]L. M. Terman, The Intelligence of School Children, pp. 124-133.

timidity, lack of self confidence, home conditions and emotional maladjustment.

Regensburg[1] conducted an extensive study of fifty children of superior intelligence based upon records from the Bureau on elaborate case studies. Twenty of the pupils were successful and thirty were failures. The two groups were equal in chronological age, in range of I. Q. and in median I. Q. Differences found between the two groups were as follows:

1. Thirty-five percent more of the Success group than of the Failure group showed:

   Extrovert behavior

   Compensatory ego-mechanism

2. Between twenty-five and thirty-four percent more of the Success group than of the Failure group showed:

   Positive constructive satisfaction in school

3. Thirty-five percent more of the Failure group than of the Success group showed:

   Introvert behavior

4. Between twenty-five and thirty-four percent more of the Failure group showed:

   Excessive school absences

   Refused to study

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[1] J. Regensburg, "Educational Success and Failure in Supernormal Children", Archieves of Psychology, No. 129, New York: Columbia Columbia University, p. 155.

Protective ego-mechanisms

Charters[1] says the relationship existing between intelligence and school marks is not enough for it to be considered "more than prima facie evidence of its existence."

He further states that according to general opinion, personality traits are large factors in achievement and that school records should include not only intelligence ratings and school marks, but ratings on personality as well. Charters finally concludes thus. "Mental and scholastic records must be supplemented by ratings on personality traits."

This problem was viewed very realistically by Hilton[2] as he stated that:

> The lack of economic ability on the part of many to find and maintain a home presents a very serious problem...Provisions for adequate housing and the correction of certain social maladjustments which interfere with home life and the proper rearing of children among the most vital problems confronting our nation today is assured only by successful homes.

Inability on the part of psychologists and others to say with certainty and with adequate proof what causes certain behaviors and reactions of individuals under certain conditions gave rise to beliefs that inherent qualities play a very impor-

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[1]W. W. Charters, Success, Personality and Intelligence, p. 143.

[2]Eugene Hilton, Problems and Values of Today, p. 303.

tant part on this question.

Thorndike[1] went a step further in this matter. He took into consideration, environment, a man's nature and chance when he stated that:

> A good home does not make good children in the sense of doing so always and in proportion to its goodness. Being treated like a slave may not debase all alike. The product of the environment is always a result of two variables, it and the man's nature.. As this world's nature selects for survival those animals which are adapted to live in it, so any individual selects, by action, attention, memory and satisfaction, the features of the environment which are to survive as determinants of his intellect and character.

In Child Psychology and Development, Thorpe[3] revealed the fact that growth is a gradual process in which the environment enters actively into the child's development. According to the older view, inner forces, over which the environment had little or no control, needed only to unfold to make a mature adult of a child. Today most students of the subject believe that the child is powerfully influenced by the experiences he encounters, and, that his development is to a considerable extent a function of the culture in which he is reared.

The development concept of child growth has done much to dispel the former belief in innate evil tendencies. It has made

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[1]Edward L. Thorndike, Educational Psychology, p. 367.

[2]Louis P. Thorpe. pp. 22-23.

society conscious of the fact that a child's ultimate character and personality are dependent upon the manner in which he is treated by the members of his home, school, and community.

Thorpe[1] calls attention to the fact that the growing child's nature is characterized by certain irreducible needs which must be met if he is to develop satisfactorily. It becomes essential to consider the influence of early home conditions upon his personal and social adjustment. It becomes imperative to know the specifications of a good home, the nature of desirable parental functioning, what child needs the home can satisfy, how children may develop happily together, and under what conditions the child will acquire a social outlook as he develops physically and intellectually.

Throughout the period of a child's development two factors are at work -- growth and learning. These factors are interdependent, they cannot be isolated in pure form, yet they can be separated for purposes of discussion. In every-day speech we continually make such a distinction. We observe that a child has grown two inches in height since we saw him last and that he has learned to recite "Jack and Jill."

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[1] Ibid., p. 214.

When we say a child has "grown" we are describing certain physical and physiological changes that normally occur in a healthy child with the passage of time, such as an increase in height, weight, length of bones, changes in bone structure, changes in the structure of parts of the nervous system, and the like. As against this, "learning" represents a modification of behavior that has come about by virtue of experience, use, or exercise. The term "maturation" is also prominently used in the discussion of development. This term, which has many general as well as special meanings, denotes in a developmental setting, the process of ripening, of moving toward complete, or mature development. The foregoing statements indicate that "growth" and "maturation" have a meaning in common. "Maturation" denotes not solely change in physical characteristics but also the changes in function, in capacity to perform or behave, that become possible through changes in the physical characteristics of any part of the organism.

If, within broad limits, we could find at what stage in the child's development various activities and performances might best be cultivated, it would be a decided boon to both the child and his teachers. Such information would enable us to avoid efforts to force the child's development or to impose tasks or obstacles

that are beyond his powers and that may produce irritation and resistance, whereas, at a later time they might be undertaken with interest. It would also enable us to avoid the condition of supplying less opportunity and less stimulation than is needed to challenge the child's powers. Obviously, a definitive schedule for introducing various opportunities ad requirements into the child's training could never be obtained. The child does not become "ready" for a given activity at one particular day or hour, and his behavior is influenced by many variables that are difficult to weigh or define. Even so, anything that research findings can offer in this area is of value.[1]

The Staff of the Division on Child Development and Teacher Personnel[2] revealed thefacts that the various sciences concerned with human growth and behavior have demonstrated that young people during the several phases of their development, face a series of common "developmental tasks." They have to learn to walk, to talk, to dress themselves, to get along in groups, to behave as boys or as girls, to act conventionally in a thousand situations, to read, write, figure, spell, use money, respect property, accept the values that characterize American life, find

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[1] Arthur T. Jersild, Child Psychology, p. 39.

[2] The Staff of the Division on Child Development and Teacher Personnel, Helping Teachers Understand Children, p. 76.

a way of earning a living, select and win a marriage partner, fulfill civic responsibilities, and to arrive a t a satisfying explanation of the meaning of life, and of the universe. They believe that individuals naturally tend to work at these tasks when they reach the appropriate maturity levels, and that they are disturbed when they fail to accomplish any of them.

John E. Anderson[1], in tracing the evolution of child psychology made the following statements:

> With the turning of the attention of G. Stanley Hall[2] toward the child, a new method, the questionnaire, put in its appearance. Starting with Hall's inquiry into the "Content of Children's Minds", there came a deluge of questionnaires which resulted in the accumulation of a great mass of material about children, particularly during the school ages. The results were a substantial advance in our knowledge of children, the training of a number of capable students of child behavior, and the setting of the stage for the marked development which was to take place some years later.
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> Experimental child psychology can be dated in a large measure from the works of Thorndike[3] and Watson[4]. For both, the genetic approach is essential. For both, the crucial observations for a systematic approach are made upon children rather than upon adults. Further, Watson's emphasis upon objectivity of method and his dismissal of introspection made children quite as adequate subjects for psychological investigations as adults.
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> Alfred Binet was one of the first men to apply psychol-

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[1]John E. Anderson, "Changing Emphasis in Early Childhood Education", School and Society, 49 pp. 1-7.

[2]G. Stanley Hall, The Contents of Children's Minds, p. 139.

[3]Thorndike, op. cit., p. 296.

[4]J.B. Watson, Behavior: An Introduction to Comparative Psychology, p. 166-180.

ogy to the problems of the schoolroom. In 1905, he published his scale which introduced a new method of intelligence testing. This has been revised and other instruments for measuring intelligence have followed. In recent years various techniques have been devised, such as; education achievement tests, aptitude tests, and measurements of personality and conduct.

Home and school gain new significance as the institutions most influential in guiding the mental growth of children, their opportunities and responsibilities are more clearly revealed than ever before. This is particularly true of the home, for family relationships are now recognized as the fundamental formative influence in the life of the child. Authorities are for the most part in agreement that the individual family is not only the natural agency for the nurture of the children, but that it alone can provide the most favorable conditions for their growth. The infant needs individual attention and a fostering love, not only in order that his physical needs may be met, but that he may have that sense of security, which is the essential foundation and support of independent growth.[1]

In a study made on the welfare of the child by the White House Conference Committee[2], a charter setting up the needs and

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[1] Una B. Sait, New Horizons For the Family, p. 234.

[2] F. J. Kelly, Chairman, "Home and the Child", White House Conference on Child Protection.

probable solution to problems affecting the family as a whole and especially as it relates to the child was submitted and approved. The following is that charter, in part:

1. For every child spiritual and moral training to help him to stand from under the pressure of life.
2. For every child understanding and the guarding of his personality as his most precious right.
3. For every child a home and that love and security which a home provides; and for that child who must receive foster care, the nearest substitute for his own home.
4. For every child full preparation for his birth.
5. For every child health protection from birth through adolescence.
6. For every child from birth through adolescence, promotion of health.
7. For every child a dwelling place safe, sanitary, and wholesome.
8. For every child a school which is safe from hazards. sanitary and properly equipped, lighted, and ventilated.

In discussing this problem Baber[1] said, "the minimum standard must furnish everything necessary for a manner of living that will make possible a high standard of physical, mental and moral health and efficiency for adults, the full physical and mental growth and development of children, and provision for their moral welfare."

Without question it is the responsibility of the parents to provide every opportunity within their power to the assurance of the fullest development of the child's abilities and capacities. No sacrifice should be too great for the parents, if it will enable the child to have the type of home life and environment which makes for growth and achievement.

An opinion expressed on this phase of the problem at the White House Conference[2] was "it is the perrogative of parents to make any necessary and reasonable sacrifices which will give their children a better start in life and a better chance to grow to full mental, moral and physical stature than they themselves had."

Sait[3] expresses this same general idea that freedom for the child, and education by means of an environment which will insure the realization of his potentialities for wholesome physical and mental growth of his full development as an individual, is the

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[1] Ray Baber, Marriage and the Family, p. 229.

[2] Kelly, op. cit., pp. 76-78.

[3] Sait, op. cit., p. 236.

ideal of the twentieth century educational leaders.

During the first few years of life the child has little conception of his basic needs and the extent to which the home is meeting them. But as society is now organized, the home owes him certain things whether he is capable of recognizing them or not. The White House Conference on Child Health and Protection enumerated four major functions of the family in relation to the child: (1) providing a controlled environment, (2) transmitting social values, (3) furnishing orientation, and, (4) building up standard of recreation and liberation. It is important that the family acknowledge these obligations and fulfill them to the best of its ability.[1]

The significant point for consideration here is that the family provides almost the total social environment of the child at first and most of such environment for several years. This lays upon the parents the responsibility of beginning the humanizing process upon which all future development depends. For once human nature has developed, it tends to continue in the direction in which it has started.

The same thought is expressed by Groves[2] as was previously cited here by Sait and Baber, in that he not only points out this

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[1] Baber, op. cit., p. 52.

[2] Ernest R. Groves, Social Problems of the Family, p. 1.

responsibility of the parents to the children in their growth, but also the responsibility of the family to society to send it worthwhile young citizens.

The family background plays an important part in all phases of the child's life. Whatever has been, or still is, the log of the family will affect his whole personality, his behavior and his achievement. Some pupils will be inspired to achieve through their lack of opportunity, and others will become indifferent and sloven due to excessive chances for success, while the great masses will reflect in their own lives the type of family background that has been theirs.

CHAPTER II

COMMUNITY BACKGROUND

Harlem Elementary School is located in the center of McNair, about nine miles from Baytown, Goose Creek and Pelly. It is about eighteen miles from Houston, East Harris County. This Negro community was developed in the open country primarily for Negroes employed by the Humble Oil and Refining Company.

Gray loam and black soil predominate. Willow and sycamore are main timber resources. The only deposit is oil. The climate is mild and semiarid, with an average yearly rainfall of 35.65 inches. No crops are raised other than small garden plots. Rice is cultivated extensively in the surrounding area.[1]

Population

McNair is an exclusively Negro population center of about 1500.[2]

Homes

About 50 percent of the homes are well kept, fairly well furnished, and with small flower plots in the yards. The remain-

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[1] E.A. Arebia, "A Ten Year Follow-Up Study of the Sixty Graduates and Ninety-Two Drop Outs of G. W. Carver High School, Goose Creek, Texas", p. 40.

[2] Ibid., p. 42.

ing 50 percent of the homes do not have all the conveniences which make for better living.

The student's background study reveal that 85 percent of the Negroes owned their own homes, while 15 percent lived in rent houses. The study further indicated that 50 percent of the homes were equipped with bath, light, water, and gas, while 50 percent of the people used kerosene oil and wood for fuel, and the pit type toilets.

Occupations

The occupations are the same as in any small town. The men work at the Humble Oil Refinery, General Tire Rubber plant, and with the construction companies. Some men are common laborers about the town, while the women are employed as domestic help. Some men and women own and operate business. One woman works as a post-mistress in McNair sub-post office. In this survey, the most frequent occupation given by women was "housewife.".

Family Life

The background study also shows that 80 percent of the children maintained and experienced normal family life. The other 20 percent lived with one parent, or relative, or lived with a

parent who was not divorced from the legal mate, but maintained family relations with another person.

The School

The Harlem Elementary School was built more than 12 years ago. As the population increased, the principal, saw that it was necessary to build a school in the McNair Community to alleviate over-crowded conditions on the bus when transferring them to G. W. Carver High School of the same unit.

The realtor who owned the McNair settlement donated six acres of rich, level land to the Goose Creek Independent School District for Negro school children, and a building to serve as a community center for both children and adults. The first two room unit of the Harlem Elementary School was built in 1937. In 1940, two additional rooms were added. In 1949 two classrooms, a hall and new lavatories were added. Two hundred and twenty-three pupils enrolled no in grades one through six, inclusive, are housed in this one story, six-room, brick structure. There are seven teachers in the school, six women and one man. One custodian is employed on a half-time basis.

The school serves as a community center for the students and parents, since most of their social and religious activities are held on its spacious campus.

Organizations

The churches in McNair are of many denominations. The Parent-Teacher Association was organized shortly after the school was built. This organization is very active and has done much toward helping the school.

Fraternal organizations are progressive in McNair. The spirit of rivalry has in reased the membership in these organizations and has caused them to grow.

The Boy and Girl Scout organizations are very active in community programs and projects.

The McNair Progressive Club, a recently organized club, is an outgrowth of the NAACP

Recreation

The type of recreation that McNair affords is very limited. The only theater for Negroes is owned and operated by a Negro. However the latest movies are shown weekly. The study revealed that a large number of homes have radios, another item that was revealed in the study was that parents provided on an average of two magazines for their children. Perhaps the two items mentioned above offer some of the most current and more recreational advantages that the child might have.

CHAPTER III

SOCIO-ECONOMIC STATUS OF THE GROUPS

For a clear understanding of a child, we must look not only at the child but at the home from which he comes. The source of behavior is in the home, and the socio-economic level is one of the determining factors in behavior.

Various attempts have made to determine the means of influence within this factor. Hardy[1] found on the whole, a small but marked and significant difference with respect to adjustment of children in different social and economic levels. Implications of his findings show a higher socio-economic status for the well adjusted child than for the maladjusted.

Francis and Fillmore[2] further analyzed this factor. They found that, generally speaking, the physical environment of the home, recreational space, and neighborhood opportunities had apparently little influence on their own account. The influence of the social environment is felt through the parent's attitudes. Parent attitudes were found to have a positive correlation with the personality of the children. By attitudes is meant "attitude toward the school, discipline, allowance, and recreation."

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[1]Martha C. Hardy, Aspects of Home Environment in Relation to Behavior at the Elementary School Age, p. 206.

[2]K. V. Francis and E. A. Fillmore, "The Influence of Environment Upon the Personality of Children." Studies in Child Welfare, Vol. 9, No. 2, p. 71.

Parallel with attitudes as the factor of intelligence, they found intelligence to be also a major issue as to rich or poor socio-economic conditions.

Maller[1], in his study involving all the fifth grade children in New York City, found a significantly positive correlation between mental ability and desirable economic status. Sirkin's[2] investigation likewise shows a positive and significant correlation (.40) between social status and intelligence of pupils belonging to the same school grade. He found that the mean intelligence score rose with the rank of the environmental level.

If we accept these, then parental attitudes which parallel both intelligence and socio-economic conditions, is the fundamental criterion of the existing relationship between the ocial and economic status and behavior development of the child.

We accept, without question, the fact that social and economic inequalities do exist. In an attempt to determine the factors that measure this inequality, the socio-economic status was measured with the aid of Sims Score Card of Socio-Economic Status, Form "C".

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[1] J.B. Maller, Mental Ability and Its Relation to Physical Health and Social Economic Status, p. 101.

[2] M. Sirkins, "The Relation Between Intelligence, Age, and Home Environment of Elementary School Pupils", School and Society, Vol. 30 (April 12, 1929), pp. 304-308.

As a result of the score card, home conditions need no longer be recorded as average, poor or good, but may be given numerical rating.[1]

This study revealed the social adequacy of the families. Only such items as were included in quality of the neighborhood; education occupation, civic status; material status of the home, and cultural and social influence were combined to determine the degree of adequacy.

In a like manner, extreme inadequacy was the lowest level where there was economic dependency and social conflicts.

A family with a rating of "adequacy" is economically independent; there is steady employment and no contact with social agencies. The family life is stable. The family is adequate but there is little participation in activities outside the home.

Sims Score Card for Socio-Economic Status scores the "quality of the neighborhood" as included in the total score.

The study revealed that both parents completed the sixth grade. The father is a common laborer, who earns between $2000 and $2500 a year.

The material status, as scored was a little below average. By analysis, it was found that the home contained a washing machine, bath tub, electric iron, telephone and radio. Since 30 of

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[1] Ibid., p. 1.

the 45 families have automobiles there was a car in every typical home. It was also found that two magazines were regularly taken in the home, and a library of from one to twenty-five books. The average family occupied five rooms.

The study showed that the average child came from a home where parents attended religious services regularly.

There is a definite trend toward minimum social and cultural influences in the families studied. Hardy[1] cites the fact:

> There are advantages and disadvantages incurred from extreme participation by parents in society and civic organization of the community. But, from the comparative findings of his study it seems unlikely that the maladjusted children had had any less favorable experience than the well adjusted with respect to those situations which grow out of parents' participation or non-participation in social activities outside the homes.

A pertinent summary in discussing culture in the background of the child is given by Crichton - Miller[2]:

> The teacher has two standards to attain: one, objective - examination results; the other, subjective - culture. He cannot scrap the examining system, but must infuse a maximum of culture, of that intangible something that never pays. This requires that many parents should be made to value culture more than they do at present. Here parent-teacher cooperation is of the highest importance. For only culture can make us spirit really and intellectually independent. Nothing utilitarian ultimately furthers this independence, freeing us

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[1] Martha C. Hardy, Aspects of Home Environment in Relationship to Behavior at the Elementary School Age, p. 215.

[2] Hugh Crichton-Miller, "The Home Background of the Pupil", Mental Hygiene. 16: 23-25, Nov. 1932.

from the need of meretricious external stimuli and enabling us to live a life of our own.

In a study by Thomas[1] on the relationship of socio-economic status of the home to pupil achievement, it was found that intelligence was only one factor that influenced the progress of pupils in school. It was also reported that the study made it clear that the social and economic conditions in the home were also influential factors relative to pupil progress.

Although scientific studies, directly concerned with improvement of home conditions for the purpose of better or greater scholastic achievement, it is somewhat apparent from this study that investigatio s and authorities generally believe that:

1. Home conditions affect social behavior and achievement.
2. General intelligence is somewhat dependent upon home conditions.
3. Juvenile delinquency and truancy are positively related to socio-economic status.
4. Emotional stability or instability is influenced by conditions in the home.
5. Health conditions so necessary to achievement are

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[1]Tena S. Thomas, "The Relationship of the Socio-Economic Status of the Home to Pupil Achievement" (Unpublished Master's Thesis, The University of Southern California, Los Angeles, 1942), p. 63.

dependent upon adequate housing and sanitation provided by the family.

6. Poverty is a factor in maladjustment of children in school and all life situations.

7. Environment has a small positive relationship between general intelligence and behavior.

Home Life of Selected Pupils

The pupils about whom this research was made live in McNair, Baytown, Texas, an industrial city in the state of Texas. The Humble Oil Refinery and General Tire Companies are the principal sources of employment for the heads of families. Despite the fact the income level is above the average American family in most instances, the general scale of living is low. Home ownership is above the minimum, but formal education is far below. The latter may be attributed to the fact that the population is somewhat of a migratory nature. This factor, along with limited recreational facilities, the prevalence of numerous night clubs and dives, and the absence of programs for cultural growth, make the position of the teacher an unusual one. It becomes the duty in the classroom to provide a wholesome life for the child at school as well as to give him sufficient encouragement to alter his home and community situation.

CHAPTER IV

THE RELATIONSHIP OF INTELLIGENCE, ACHIEVEMENT, AND PERSONALITY OF PUPILS

Intelligence and Achievement

The experimental work of Thorndike[1] in America and Spearman[2] in England upon the nature of the measurement of intelligence has given education a solid scientific basis upon which to build.

Intelligence tests provide a fairly accurate measure of the abilities of each pupil, prevent the complacent assumption on the part of teachers who assign permanent dullness to pupils whose achievement is "low" because of unfortunate circumstances.[3]

The intelligence quotient of a pupil is often termed his academic quotient. Instead of concluding that the pupils are dull in every respect and of assuming a patronizing attitude toward such pupils there should be concern for increasing and enriching the experiences of pupils with low I.Q.'s.

A search should be made for ways where "brightness" can be shown. The need perhaps is not easier academic work but harder work of a different kind, especially that which requires mechanical-mindedness or social-mindedness.[4]

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[1] Edward L. Thorndike, The Measurement of Intelligence, pp. 62-70.

[2] C. Spearman, The Nature of Intelligence and the Principles of Cognition, p. 58.

[3] W. A. Saucier, Introduction to Modern Views of Education, p. 404.

[4] Ibid., p. 405.

Pupils with low mental ability scores and low academic achievement scores sometimes excel in the fields of their special interests and aptitudes.

Personality and Achievement

It has long been observed that intelligence scores alone do not predict academic achievement.[1] Many students have been known to achieve higher academic scores than their mental ability scores indicated. Here perhaps, personality factors influence school achievement. Such students, agressive, ambitious and self-confident, worked harder and more effectively than did other members of their group, hence, their achievement scores ranked higher.

On the othr hand, there are pupils rating high on the intelligence test who fail to work up to the level of their mental abilities. Many such pupils are timid, regressive and emotionally unstable, having been conditioned by home influences and social environment.

Others are intellectually superior students who find themselves classified within a group of average pupils, hence geared to the mental speed of the average pupil. Such pupils become bored, listless and indifferent. Finding no challenge

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[1] Ross Stagner, Psychology of Personality, p. 115.

in the work they perform they often exhibit indifferent attitudes.

Then there are the intellectually handicapped pupils, who are held back by a lack of ability which is entirely beyond their control. Criticism and sarcasm become their lot both at home and at school. Their reactions may become passive or active. If passive, they exhibit inferiority attitudes which prevent their school progress; if active, they exhibit self-protective mechanisms, withdrawal attitudes which also condition progress in any field. Stagner[1] points out that studies of delinquents indicate that in many cases the leaders of gangs of petty thieves and vandals are pupils who, because of constant invidious comparisons and ridicule, gave up striving for success in the classroom and turned their efforts elsewhere. While grades or scores are not directly determined by personality yet it is sometimes very apparent that personality may have an important influence upon the pupil's use of their abilities or upon the degree to which they "live up" to their mental possibilities.

Since the evaluation of any achievement is significant only in relation to its specific objectives and common interests, a study of pupil achievement must be considered in terms of educa-

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[1] Ibid., p. 164.

tional objectives. It is necessary, therefore, that the school increase its opportunities for pupils by providing vital educational experiences both inside and outside the classroom, and that it encourages the activities of all agencies which bear relationship to the development and achievement of its pupils. [1]

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[1] Paul B. Jacobs and William C. Reavis, Duties of School Principals, p. 251.

CHAPTER V

ANALYSIS AND FINDINGS OF VARIABLE FACTORS

Just as there are personal characteristics to distinguish one individual from another, there are also social characteristics to distinguish one group from another. Some of these group characteristics that one should consider to be significant in studying a problem of this nature are sex, age, and general family life. The social characteristics which distinguish one group from another are many and varied. However, this study included classification and scores made from intelligence tests, achievement tests, socio-economic tests, personality tests, interest inventories, reading tests, pupil background study, and physical and sensory tests.

The opportunity to test the hypothesis rests on the possibility of the comparison of these characteristics with scholastic achievement. The Table below shows that there are more females than males in the fifth grade. The number of fifth grade pupils was 36, or 47.3 percent males, while 52.7 percent were females. The total number of sixth grade pupils studied was 16, of this number 68.3 percent were males and 31.7 percent were females.

TABLE I
DISTRIBUTION OF FIFTH AND SIXTH GRADE PUPILS ACCORDING TO AGE, SEX AND GRADE

Age	MALE Grades		FEMALE Grades		TOTAL Grades	
	5	6	5	6	5	6
10-6	2		3		5	
11-6	10	1	8	0	18	1
12-6	1	1	5	1	6	2
13-6	2	3	3	3	5	6
14-6	1	4	0	1	1	5
15-6	1	1	0	0	1	1
16-6	0	0	0	0		0
17-6	0	1	0	0	0	1
TOTAL	17	11	19	5	36	16

Significant to the study is the matter of age. It was found that in the fifth and sixth grades there was an age span from ten to seventeen years. The ages according to sex and grade are presented in Table III.

It can be seen that the largest number of pupils are over ten years of age. This number represents 42 or 79.8 percent of all cases studied. 34.6 percent of the total were eleven years of age. 11.4 percent were twelve, 9.6 percent were thirteen, 1.9 percent were fourteen, 1.9 percent were fifteen, 0.0 percent sixteen, and 1.9 percent were seventeen years of age. In both grades, regardless of sex was found the normal age and grade distribution.

A representative sampling of 52 pupils selected for study out of a total of 223 pupils enrolled is shown in Table III. This group comprised pupils of the fifth and sixth grades only. The sex distribution of the pupils of these grades is shown in Table III.

TABLE III
DISTRIBUTION OF SELECTED
PUPILS BY CLASS AND SEX

Grade	Percent	Percent		TOTAL
		Male	Female	
5	69.3	47.3	52.7	100.0
6	30.7	68.3	31.7	100.0

TABLE IV
RESULTS OF OTIS GROUP INTELLIGENCE TESTS
ADVANCED FORM B - FOR GRADES 5 AND 6

Distribution by Grades of 52 Pupils			
I. Q.	Grade 5	Grade 6	Total
120-125	1	1	2
110-119	3	2	5
90-109	17	8	25
75- 89	10	4	14
50- 74	5	1	6
Total	36	16	52
Median	17	8	
Range	59-125	50-120	

The Otis Intelligence Tests was given to 52 pupils in which 5 scored in the high average range; 2 showed superior average range; 25 low average; 14 inferior and 6 very inferior as shown in Table IV.

When intelligence and reading tests were given a fairly marked tendency for reading scores to agree with intelligence scores were found. Children with severe reading disabilities had average or low average general intelligence according to the results of this test.

Table V shows the distribution of intelligence quotients for grades 5 and 6. It was found that in the fifth grade 2.7 were very superior, 8.3 were superior, 47.2 were average, 27.7 were dull normal and 13.8 were dull.

It was also found that in the sixth grade 6.2 were very superior, 12.5 were superior, 50.0 were average, 25.0 were dull normal and 6.2 were dull in grade 6.

TABLE V
DISTRIBUTION OF INTELLIGENCE QUOTIENTS FOR
GRADES 5 AND 6

Classification	Grade 5	Grade 6
Genius		
Very Superior	2.7	6.2
Superior	8.3	12.5
Average	47.2	50.0
Dull Normal	27.7	25.0
Dull	13.8	6.2

TABLE VI
RESULTS OF GRAY-VOTAW ACHIEVEMENT TEST FOR GRADES 5 AND 6
TEST SCORES

Score Interval	Grade 5			Grade 6		
	Total Range	Male	Female	Total Range	Male	Female
90 - 94	2	1	1	1		1
85 - 89	4	1	3	2	1	1
80 - 84	7	5	2	1	1	0
75 - 79	3	2	1	2	1	1
70 - 74	2	1	1	1	1	0
65 - 69	5	2	3	2	1	2
60 - 64	3	1	2	4	3	
55 - 59	2	1	1	1		
50 - 54	1	-	1		1	
45 - 49	2	1	1	1	1	
40 - 44	2	1	1			
35 - 39	3	1	2	1	1	
Total	36	17	19	16	11	5

Table VI shows scores as low as 35 and as high as 94. This was evident in both grades 5 and 6. The highest scores were made in Grades 5 and 6 by females. These scores fell between 90 - 94.

The mean score for fifth grade males was 82 while the mean score for fifth grade females was 87. The sixth grade males made a mean score of 64, while the mean score for females is 69. Thus, it can be seen that in both instances the females made higher scores than males.

In May, the Gray-Votaw General Achievement Test was given. A slight improvement of 15% over the first achievement test was shown while 10% showed no improvement.

There are many factors and conditions in the school which may be conducive to disabilities. Teachers' personalities, their relationship to children, methods of teaching, school policies in promotion, material available, size of classes and many other factors should be considered as possible causes of severely retarded pupils.

A number of other social factors have been investigated through the child's background study which revealed the child's reading ability, physical health, emotional reactions, as well as their economic status, the language spoken in the home, neighborhood conditions, and ordinal position of the child in the family.

Table VII, page 45, shows 75% of the students were of low average reading ability. Only 25% of the children indicated normal reading ability. The test further revealed that the students were retarded students whose reading ability was on a par with their ability in other subjects.

The data on the Student's Background Study and Interest Inventory revealed that two-thirds of the children had undesirable home and social life. It was further revealed that the parents of these children are too busy to give their children much personal attention. It was also found that the parent never read stories or attended the movies with their children.

It is not the wealth that counts for child development of the home, but, the intellectual and social environment with which he child is surrounded.[1]

TheInterest Inventory of these pupils show that 75 percent of the children read comic books in preference to all others. Magazines checked were those that required very little reading, such as, Life magazine was preferred by 23 pupils and Look magazine was favored by 29 pupils.

As for hobbies, also included in the inventory, the study revealed that 25 percent liked to read; 20 percent liked to play games; 5 percent liked to play musical instruments; 95 percent liked to listen to the radio programs; 10 percent liked to build things; 20 percent liked to study and 10 percent preferred collecting, while 5 percent had no hobbies.

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[1]A.J. Harris, How To Increase Reading Ability, p. 33.

This study further revealed few traits, desires or attitudes conducive to normal students.

The attitudes which the child brings to school and interest in his work have much to do with his progress.[1]

The general cultural or intelligence level of a child's home is the most important determiner of the adequacy of his background of knowledge and experiences. The young child whose parents are intelligent, grows up in a home which provides many opportunities for favorable development. He is surrounded by adults who speak good English with a rich vocabulary, and naturally tends to develop to the same kind of broadening experiences. Books and magazines in the home attract him with their bright pictures, and the stories which are read or told to him, tend to develop an early interest in books and reading. Such a home is valuable in providing the child with a background of knowledge that will aid him in reading.[2]

Observation and study of pupils' behavior traits in the classroom revealed children who are usually quiet, are absorbed in thinking, or passive day dreaming, while on the other hand are those whose emotional difficulties take the form of restlessness, nervous habits, irritability, and mixbehavior. These children sometimes seem as if they must keep moving. Their lack

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[1] Ibid., p. 72
[2] Ibid., p. 34

TABLE VII

SCORES FOR GRADES FIVE AND SIX ON THE GATES BASIC READING TEST

	GRADE V					GRADE VI				
	Type					Type				
Grade Score	A	B	C	D	Avg	A	B	C	D	Avg
Over 12.4	1	3	5	6	3.5	1	1	2	2	1.5
12.0 - 12.4	3	2	5	5	3.7	1	2	2	2	1.7
11.5 - 11.9	2	2	2	3	2.2	2	2	2	3	2.2
10.0 - 11.4	3	2	2	3	2.5	0	1	2	3	1.5
10.5 - 10.9	5	3	3	2	3.2	1	1	2	1	1.2
10.0 - 10.4	5	3	3	3	3.5	1	2	1	1	1.2
9.5 - 9.9	1	3	2	2	2.0	0	1	1	1	.7
9.0 - 9.4	1	3	3	3	2.5	1		1	1	.7
8.5 - 8.9	2	2	2	2	2.0	1				.2
8.0 - 8.4	1	3	3	1	2.0	1				.2
7.5 - 7.9	2	1	1	1	1.2	1				.2
7.0 - 7.4	1	1	1	1	1.0	1	1	1		.7
6.5 - 6.9	2	1	1	1	1.2		1		1	.5
6.0 - 6.4	1	1	1	1	1.0	2	1	1	1	1.2
5.5 - 5.9	1	1	1	1	1.0					
5.0 - 5.4	1	1	1		.7	1	1	1		.7
4.5 - 4.9	1	1			.5					
3.5 - 3.9	1	1			.5	1	1			.5
3.0 - 3.4	1	1			.5	1	1			.5
Below 3.0										

Median - 10.0
Total Range - 9.4

Md. - 8.9
R. - 9.4

of self-control, inability to concentrate, and short attention span prevent effective learning.

Table VII shows the results of the Gates Basic Reading Test[1], which was administered to a fifth and sixts grade class for each nine weeks period. The test measures the following types of reading: (1) reading to get the general significance of a passage; (2) reading to predict outcomes; (3) reading to follow directions, and (4) reading to note details. These reading tests, were given at the end of each nine week period, indicate that the pupils of both, this fifth and sixth grade class, were reading with average ability. It can be seen that in all of the phases of reading there were marked differences in the abilities of the pupils. In the fifth grade class was a child who read to get the general significance somewhat more poorly than does the average child just beginning the third grade. A range of over five and one-half years in ability to read to get the general significance was found among these pupils who were just completing their fifth year in the elementary school. In the sixth grade class, the range is somewhat greater in the reading comprehension ability. There was a child, in the sixth grade class, who read about as well as the average child half way through the third grade, and there was another child who was reading equal to, or somewhat

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[1]Gates Basic Reading Test, Teachers College, Columbia University, New York, 1939.

better than, the average child just beginning the twelfth grade. The range within this group in this ability was approximately eight and one-half years. In the other tests of reading, there was a somewhat similar range of ability. Children learn to read at vastly different rates of growth. Children do not grow in reading ability at the same rate.[1]

They enter school with markedly different capacities for learning to read. As they progress through t e reading program, differences in the rates of growth become more apparent.

Table VIII reveals the socio-economic status of fifty-two pupils in grades five and six. The Table shows the nature of the home conditions of the subjects in this study. The mean scored socio-economic status of grades five and six was 10.2. The range is 14.2.

In a study by Thomas[2] on the relationship of socio-economic status of the home to the pupil achievement, it was found that intelligence is only one factor that influences the progress of pupil in school. It was also reported that the study made it clear that the social and economic conditions in the home are clear influential factors relative to pupil progress.

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[1] Ibid.

[2] Tena S. Thomas, "The Relationship of the Socio-Economic Status of the Home to Pupil Achievement", (Unpublished Master's Thesis, The University of Southern California, (Los Angeles, 1942), p. 63.

TABLE VIII

DISTRIBUTION AND FREQUENCIES OF SOCIO-ECONOMIC STATUS OF FIFTY-TOW PUPILS IN GRADES 5 AND 6 -HARLEM ELEMENTARY SCHOOL

Class Interval	Frequency	Corres-ponding Percentile	Suggested Rating	Corresponding Level of Socio-Economic Status
24.5	1	88.5	8	Very High
17.6	1	78.8	7	High
13.2	10	65.5	6	Medium High
10.2	20	50.0	5	Medium
7.5	12	34.5	4	Medium Low
5.1	6	21.2	3	Low
3.2	2	12.5	2	Very Low
	N	52		
	Mean	10.2		
	Range	14.4		
	Mode	10.2		

Achievement

Children in the Goose Creek Independent School District are permitted to enter school for the first time at the age of six years by September first. Therefore, if a child progresses at the usual rate of one grade each year, he will be somewhat between

nine years and six months and ten years and six months when he reaches the fifth grade, and between ten years and six months and eleven years and six months whenhe reaches the sixth grade. Between these ages, he enters the grade and is considered at average grade level when he enters.

The percentage of pupils located above grade, below grade, and at average grade level for their chronological ages, is shown in Table IX

TABLE IX
GRADE LEVEL OF PUPILS

Pupils	Grade 5		Grade 6	
	No.	%	No.	%
Above Grade Level		00.0		00.0
Below Grade Level	31	86.1	15	93.8
Average Grade Level	5	13.9	1	6.2
Median		11		13
Range		5		6

The problem of retardation is more extensive than is often recognized by the teacher.

Louttit[1] summarized various studies and found evidence to the effect that by the fifth or sixth grades approximately 7 per-

[1] C. M. Louttit, Clinical Psychology, p. 137.

cent of the children are retarded two or more years.

The percentage of retardation in this study are distributed in this manner:

Pupils	No.	Percentage Grade 5	Grade 6
One-half year retardation	0	0	0
One year retardation	20	50.0	12.5
Two and three years' retarded	26	36.1	81.2

The clinical method of approach to the problem of retardation is valuable not only to the administration but is fundamentally important to the child.

The first task is to determine the cause or causes of the retardation. Louttit classified the possible reasons into three groups: (1) those factors primarily concerning the child, (2) those in which the school, in its system or personnel, is at fault, and, (3) those in which the home conditions play an important part.

The large percentage who are retarded one-half or even one year may be largely due to the entrance requirements, changing

schools, and parents hesitancy to enter children when school opens. Those who are retarded two or three years will be discussed later. Causes related to poor work are more accurately determined by clinical study of mental age and achievement.

It has been generally accepted that the mental stimulation of environment affects the intelligence. Wellman[1], states: "regardless of the concept of intelligence accepted, we can predict behavior from an I. Q. for a period of time."

An Intelligence Test tells us all the things ever told us about the child's school achievement, intelligence, interests, forms of play, personality characteristics, and mental ability in other respects, provided we do not try to stretch the predictions too far away in time from the I.Q. measurement. A child's Intelligence Quotient can be, and often is, raised or lowered; therefore, valid predictions cannot be made over a number of years without a knowledge of the future environment.

In this study we are interested in the Intelligence Quotient of today and prediction for a relatively short time.

By common acceptance an I. Q. of 110 on the Otis Group Intelligence Scale is taken as the minimum performance indicating superiority. This is a usable I. Q. An I. Q. of 110 and better, will include approximately twenty-seven percent of the school population.

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[1] Beth L. Wellman, "Our Changing Concept of Intelligence", Journal of Consulting Psychology, Vol 2, (July-Aug., 1938), pp. 97-107.

The dull-normal children are unable to progress normally year by year and, therefore, become retarded. Conditions other than intelligence are deciding factors in success with children in this group.

Ingram[1] related:

> With favorable home environment, a specially adopted school program, good physical condition, and an understanding parent and teacher, the average child in this group can make very satisfactory adjustments.
>
> Their rate of mental development may be slow and their learning capacity limited, yet the individual teacher can do much to help them achieve limited success. They may be expected to complete the seventh grade with special attention.

The lowest groups have mental limitations definite and extreme enough to cause them to fail in school with normal children. If these children are to become even partially selfsupporting they will require a special program of education. Children with I. Q.'s of 50, 60, or 70 will probably never complete work beyond the second, third, fourth, fifth and sixth grades respectively.

Different groups imperceptibly into each other and the interpretation of an intelligence score goes beyond the I. Q. Test. Recognizing these factors, the groups between 80 and 110 may be called average or normal.

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[1] Christine Ingram, Education of the Slow-Learning Child, pp. 134-136.

Louttit[1] says that between I. Q. of 60 to 70 a final diagnosis of feeblemindedness must rest upon social history while an I. Q. below 60 is usually usable and indicates some degree of feeblemindedness.

For convenience, Ingram's[2] classification for slow-learning children is used. Measured by intelligence tests, the borderline or dull-normal range approximately from I. Q. of 75 to 89. Those mentally retarded range from 50 to 75. The latter group constitutes approximately 15 to 18 percent respectively of the Harlem School population.

Social Adjustment

Our modern civilization is rich, stimulating, and enticing. It is also distracting and confusing. Modern environment is complex and we mus find the remedies within ourselves.[3]

Our social order is created for us, and, if we accept it in terms of behavior that is effective and socially acceptable, we are said to be socially adjusted. The maladjusted person is one who finds difficulty in accepting this social order. To be adjusted we must develop social habits and act along fairly well-defined lines laid down by the group. Undesirable social relations are indications that s mething is wrong with the indi-

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[1] Louttit, op. cit., p. 698.
[2] Ingram, op. cit., p. 136.
[3] F. E. Howard and F. L. Paty, Mental Health, p. 551.

vidual, the environment, or both. If the behavior of the child is to be interpreted, it must be interpreted in terms of his environment. The adjustment depends not only upon the individual but upon the conditions under which he lives.

Louttit[1] said that children are led to particular patterns of behavior through: (1) limitations, physical or mental, (2) habits or direct learning, that is opportunity, motivation, and satisfaction and (3) indirect substitutions and compensations.

The entire responsibility for behavior in the pre-school child rests with the home and the parents. It is during this period that many habits and attitudes are begun that are often retained throughout life. As a preparation for later adjustments, the home must give him security, independence, and a principle of "give and take" toward his fellowmen.

Stagner[2] in a study of the economic aspect and personality said:

> We feel justified in saying that poverty has not been revealed as a factor making for improved personalities. On the Contrary, there is evidence that children, reared in homes which are lower economically than homes which they are compared, tend to develop traits of nervousness, or emotionality, introversion, inferiority feelings, and social passivity or seclusiveness.

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[1] Louttit, op. cit., p. 695.

[2] Ross Stagner, "Economic Status and Personality", School and Society, Vol. 42, pp. 551-52.

From this study in the higher social status, we find the extrovert, the domineering type.

Carberry[1] called attention to this fact. The degree of adjustment ascribed to a person is determined by the behavior observed, the situation in which it is observed, and the limitations of the observer. That is, the relatively inaccurate and unreliable nature of human judgement and opinion.

Argelander[2] points to some facts concerning the dependence of judgements of human character on the personality of the judge in his functions as observer, interpreter, and evaluator. He said that the social status of the judge and judged, existing personal relations, and the tendency to ascribe certain traits to one sex are influencing factors. Also, the observer usually knows the person judged chiefly from a certain sphere of life; example, the teacher-pupil relationship. Here certain behaviors may prevail, but it would be most inaccurate to term that behavior a constant trait. The tendency to ascribe to an individual all the traits of character signified by one observed act is another source of error which he mentions.

Carberry[3] realized the limitations of human nature but points to the fact that while different ratings by different

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[1]M.A. Carberry, An Attempt to Determine the Consistency of Judgements Regarding the Adjustment Status of Children Examined by a Child Guidance Clinic, Journal of Juvenile Research, 19: 75-92. April, 1935.

[2]Annelies Argelander, "The Personal Factor in Judging Human Character and Personality", Character and Personality, 5: 285-95, June, 1937/

[3]Carberry, op. cit., p. 36.

people seem to indicate inconsistencies, yet a child may be adjusted in one situation and not in another.

The fact that these two judgements differ may mean that a more complete picture of the child has been painted, rather than that one of the raters has erred.

Rogers[1] calls attention to the fact that the adjustment score, especially individual scores, are valueless unless interpreted by a person trained in the work.

No attempt is made in this study to interpret individual ratings. It is a study of a number of individuals and their adjustments within their group. The score for the hypothetically well-adjusted child is approximately 100 on the Wickman scale. This means that the lower the score, the poorer the adjustment of the individual, while the higher the score the better the adjustment of the individual. The score for each child was secured by totaling the ratios given to them by the five teachers who rated them. (All adjustment scores need hereafter are average scores.)

Stagner[2] found evidence that unstable, maladjusted students do less well in proportion to their intelligence than do those

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[1] C. R. Rogers, Measuring Personality Adjustment in Children 9 to 12 Years of Age, p. 45.

[2] Stagner, op. cit., pp. 648-60.

well-balanced, and that there is a closer correlation of capacity and achievement in stable groups.

All those in both groups, who scored above the seventy-fifth percentile are emotionally stable and are average or superior in intelligence and are below grade, average grade, or above in achievement. Of those who scored below the seventy-fifty percentile, forty-six percent are average or superior in intelligence and below in achievement, while twenty-nine percent are inferior in intelligence and below grade level in accomplishment.

In this study the distribution of the adjustment ratings are similar for both grades. Twenty-nine percent have an average score of 100, forty-five percent have an average score between 90 and 100, and twenty-six percent below 90. Relationships between the adjustment scores and intelligence and socio-economic scores are shown by the following correlations, all of which are positive.

Item	No.	Range	
		Grade 5	Grade 6
Intelligence	52	59-125	50-120
Socio-Economic Status	52	10.2	10.2

In this study, Grade 5 is slightly higher in intelligence scores than Grade six and is the same in socio - economic status ratings.

In diagnosing maladjustment, information concerning the status of the child in school is essential.

Strang[1] reminded us that:

> The causative factor is not the intelligence level percent but rather the relationship between the individual's intellectual endowment -- what he is actually capable of achieving and what the school and home expects to maintain with his classmates.

The children retarded two or three years are all marked as poorly adjusted ratings ranging between 50 and 89 by three or more teachers.

Just what the relationship is between teachers' marks and adjustment of the child is difficult to determine. Positive correlations were found between both grades. The correlations were .65 and .79 respectively. It may mean tht those who are well-adjusted tend to make good marks because of their adjustment, or, good marks may be an important causative factor in adjustment. Again, there may be a slight tendency for the teachers to be prejudiced and to unconsciously rate higher the children who make good marks.

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[1] Ruth Strang, An Introduction to Child Study, p. 679.

TABLE X
ADJUSTMENT SCORES FOR GRADES FIVE AND SIX

Section I 100	Section II 90 - 100	Section III Below 90	Total
11	22	19	52

The scores of both grades were distributed into three sections and an attempt was made to characterize the sections. Section I is composed of those whose scores are 100, Section II is composed of those whose average scores are between 90 and 100. Section III contains those below 90. The ranking of the individual pupils in adjustment, intelligence, grade equivalents, and socio-economic status has been charted in Chapter VI.

Section I is characterized by general consistency. The highest ranking for both individuals and variables are found here. General inconsistency for variables and individuals is found in Section II. There are wide ranges and much overlapping. This is of course expected for intermediate groups. In Section III consistency is agin indicated but the rankings are the low ones. The inconsistencies are among those who have average intelligence scores. Children whose intelligence scores rank low and other

corresponding variables have greater obstacles to overcome and less means at hand to overcome them.

On the surface, their behavior is due to limitations and direct learning. There might be an indirect or direct reason for the behavior of those which average intelligence is noted.

It may be concluded that adjustment is correlated with intelligence, socio-economic status grade placement and achievement. The relationship is closer between intelligence and behavior than between socio-economic status and behavior. As a group, those who scored high in adjustment were consistent in the rankings with other variables; those who scored medium were inconsistent and there was much overlapping; and, those who scored low were generally low and consistent. Teachers were found to vary in their ratings and also had a tendency to rate girls higher.

Personality Development

Personality is the sum of all factors that make the individual what he is. It is the sum of his tendencies to react to certain situations. In order to meet situations, he must

depend upon his capacities - mental, physical, emotional and social. Individuals require the satisfaction of two fundamental urges: (1) craving for success and development, and (2) need for security. In attempting to satisfy these the child manifests many phases of behavior. His behavior is symptomatic of the satisfaction or dissatisfaction gained. His personality is the sum of the ways in which he has learned to satisfy his needs.

If his emotional needs are satisfied and he is in harmony with himself and his environment, his personality is said to be integrated. Life presents many obstacles, and sometimes we attempt to overcome them and maintain our self-defences through rationalization. This is a fundamental human trait which Howard and Party[1] call psychological self-preservation. When the personality is face to face with a stimulating situation, there is really only one dimension along which it can move with respect to that situation; viz., it can approach or it can withdraw. The behavior of the personality may vary in degree or strength of activity.[2]

Table XI shows the results of a Personality Test for 52

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[1]Howard, op. cit., p. 551.

[2]Stagner, op. cit.,p. 551.

TABLE XI
RESULTS OF A PERSONALITY TEST FOR 52 PUPILS IN GRADES FIVE AND SIX

Step Intervals	Section I. A-S BOYS Tallies	GIRLS Tallies	Sec. II. E-I BOYS Tallies	GIRLS Tallies	Sec. III BOYS Tallies	E GIRLS Tallies	Percentile Rank
34-35							95
32-33					2	1	90
30-31					4	2	85
28-29		1	2	1	2	1	80
26-27	3	1	4	1	2	2	75
24-25	2	2	4	4	5	3	70
22-23	4	1	7	3	3	3	65
20-21	3	6	4	5	1	3	60
18-19	6	2	1	3	1	4	55
16-17	1	4	2	5	3	2	50
14-15	3	4	3	3	2	2	45
12-13	2	1			2		40
10-11	1	1			1	2	35
8-9	1	1					30
6-7	1	1					25
4-5							20
2-3							15
0-1							10

ASPECTS OF PERSONALITY
Section I - Ascendance - Submission
Section II - Extroversion - Introversion
Section III - Emotionality

pupils in Grades 5 and 6. The study shows 16 made high scores above the seventy-fifth percentile which indicates ascendance, or extroversion, or emotional atability, respectively.

It shows 2 made low scores below the twenty-fifth percentile which indicates submission, or introversion, or emotional instability, respectively.

How the pupil reacts depends upon direct learning, indirect substitutive mechanisms, and physical and mental limitations.

Pintner[1] says:

> In general, the causes of behavior maladjustments fall into three main categories. The first category includes the physical, nervous, and sensory factors influencing the child. The second category concerns the social and the cultural forces affecting the child. The third category includes the temperament and personality traits of the child.

According to Pintner the aspects of personality are divided into three sections: namely, ascendance or submission, extroversion or introversion, and emotional stability.

A high score - 15 above the seventy-fifth percentile- indicates ascendance, extroversion, or emotional stability respectively. A low score - 15 below the twenty-fifth percentile -

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[1]Rudolph Pinter and J. B. Moller, Aspects of Personality, Manual of Directions.

indicates submission, introversion or emotional instability, respectively.

Ascendance-Submission, Extroversion-Introversion, and Emotional Stability are scales with these qualities extreme in degrees.

Those in both groups who scored above the seventy-fifth percentile were average or superior in intelligence and average or above in achievement (25 percent). Those who scored below the seventy-fifth percentile are average in intelligence and below in achievement (45 percent), while 25 percent are inferior in intelligence and below grade level in accomplishment.

In this study there is evidence of relationship between intelligence scores and extroversion -introversion. There is a positive relationship between intelligence scores and emotional stability for both grades. The study revealed 100 percent of the superior, and none of the inferior scored above the seventyfifth percentile on emotionality. 45 percent of the inferior scored below the seventy-fifth percentile. The scores both above and below are equally divided between the boys and girls.

CHAPTER VI

COMPARISON AND INTERPRETATION OF SCORE RESULTS

In an attempt to justify the discussions that have been made in this study, use of the findings from similar investigations made by leading educators have been set up as guiding principles in the evaluation.

Carson[1] made a study on the influence of the home factors on the social adjustment of the school child. In the study of 600 children of Galveston, Texas, it was revealed that the majority of the children who were well-adjusted came from homes of the middle or upper comfort levels. A majority of the poorly adjusted and the problem cases came from homes in the lower comfort and poverty levels, and the percentage of poverty increased in direct proportion with poor adjustment. A relation between education of parents and social adjustment of the child was obvious. The social adjustment of the child rose with the education of the parents.

Shodak[2] investigated intensively the mental growth of sixteen children who had definitely feeble-minded mothers.

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[1] M. M. Carson, The Influence of the Home Factors on the Social Adjustment of the Child in School, Master's Thesis, Colorado University, Boulder, Colorado 1940, pp. 68-75.

[2] G. D. Stodak, "The I.Q.: Its Ups and Downs", The Educational Record, Vol. 12 (Jan., 1949), pp. 44-47.

The feeble-mindedness of these mothers was determined not only by intelligence tests, but by their degree of adjustment in school, home, and community. The children of these mothers were placed in homes somewhat above the average, economically and socially. These children were tested at two year intervals until they were eight years old. They had an average I. Q. of 116. "It was evident", Shodak states, "that children of definitely moronic mothers and laboring class fathers, if placed early in good foster homes, will turn out to be above average in mental ability." Later this number was increased to thirty, the findings remained similar.

Newman[1] reported an investigation of identical twins reared apart. It was found that the twin having a favorable environment made greater social and academic progress than the twin having an unfavorable environment.

Freeman and Burks[2] made a study of orphan children placed in foster homes. The study revealed that when young orphan children were placed in good foster homes there was a slight rise in their I. Q.s. Further, since it was obvious that the child's reading ability could be materially improved by improved environment, and since his ability to read largely determined his score on a group intelligence test involving reading, the environment

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[1] Newman, op. cit., p. 20.

[2] Ibid., p. 21.

could be used to raise very noticeably the child's I.Q. if it was determined by a group intelligence test.

Donaldson[1] said that, "high intelligence usually implies a rich network of blood-vessels supplying the brain with a high quality of thought-fuel." This means that in extended periods of malnourishment the brain, being inadequately supplied with blood, does not develop normally. Low intelligence is the result.

Pressey[2] pointed out and case studies have shown that most undernourished children show improvement in mental efficiency after they were fed properly. The fact seemed to justify the conclusion that malnutrition and real lack of intelligence go hand in hand.

As a result of the findings from other investigations these factors were used to guid this study obtained from interest inventories and socio-economic tests:

1. Marital status of parent
2. Industrial status of parents
3. Educational history of parents
4. Re creational and cultural advantages for the children in the home
5. Parental guidance in the home
6. Parents attitudes toward modern educational tendencies

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[1]Henry H. Donaldson, "Physical Condition and Intelligence", Literary Digest (June, 1944), p. 16.

[2]Ibid., pp. 45-48.

From the facts given by other studies, these factors were similar in nature, and have been used as standards in the evaluation.

The analysis of the findings of this investigation leads to some significant conclusions. Table XII gives the distribution of chronological ages; intelligence quotients, determined by Otis Intelligence tests, academic averages of school marks; and adjustment inventory scores of the total 52 cases studied.

TABLE XII
DISTRIBUTION OF CHRONOLOGICAL AGES, INTELLIGENCE QUOTIENTS, ACADEMIC AVERAGES, ADJUSTMENT INVENTORY SCORES OF THE 52 PUPILS

	Chronological Age	N	Intelligence Quotient	N	Academic Average	N	Adjustment Inventory Scores	N
	10 - 6	5	120-125	2			100-110	11
	11 - 6	19	110-119	5	4.0 - 4.9	15	90-100	22
	12 - 6	8	90-109	25	3.0-3.9	25	80-89	10
	13 - 6	11	75-89	14	2.0-2.9	8	70-80	7
	14 - 6	6	50-74	6	1.0-1.9	4	60-70	1
	15 - 6	2					50-60	1
	16 - 6	0						
	17 - 6	1						
Mean	12 - 9		90-109		3.09		95	
Range	10 - 6		50-125		1.0 - 4.9		50-100	52

A survey of the tables revealed significant and interesting data. In relation to personality patterns, 13 pupils or 25 percent of the above average groups are rated as having well-adjusted personalities; in the average group, 23 pupils or 44 percent have well-adjusted personalities; and in the below average group, 10 pupils or 19 percent exhibit well-adjusted personality patterns, therefore, the above average and average groups appear to be well-adjusted emotionally. There are those pupils in each group whose personality patterns are unsatisfactory.

However, in Groups I and II there appears to be fewer cases of maladjusted personalities.

In observing Table XII, one is impressed with the fact that when personality patterns are "desirable" academic averages are higher, and when personality patterns are "undesirable" academic averages appear lower. This tendency perhaps is partly due to the effect of favorable personality patterns influencing the teacher's judgment with reference to academic training.

Table VIII shows the similarity of the total socio-economic scores while Table IV gives a difference of I.Q.'s for both grades.

The children who rated above 110 I.Q. in both grades included all those whose parents completed the eighth grade and fathers and mothers read widely. Only three fathers were semi-skilled laborers.

Those who rated below 89 I. Q. were, with four exceptions, children of parents who did not go beyond thefourth grade, and their fathers were unskilled laborers.

The children who rated between 90 - 110 I. Q. came from homes of fair social level and the father's occupations were widely scattered. These findings are in agreement with more extensive studies.

Those with I. Q.'s below 89 were 2 or 3 years retarded in achievement.

The scholastic achievement of these children has been indicated by both the results of standardized tests and semester grades.

While the percentages for those "below grade" in both groups are large, most of the cases are retarded one or two years. The percentages of those who are two or more years retarded vary little from the approximate seven percent of the nation's fifth and sixth grades who are also retarded two or three years.

The number of children in the superior group is less than the average percentages in both grades.

The mean chronological age of the group is 12 years and nine months. Consequently, the group appears to be average for its age with reference to grade. The mean of 3.09 for academic averages indicates that this group rates average with reference to pupil achievement. The mean I. Q. of 95 and the group score of 74.2 on the adjustment inventory indicate that the group is below average in these two factors.

Academic averages recorded in Table XII show that 15 pupils received averages from 4.0 - 4.9. In terms of letter symbols the value assigned to such averages would be the letter "B", described as "above average"; 25 pupils received averages from 3.0 - 3.9, value given would be the letter "C", described as "average"; 8 pupils received averages from 2.0 - 2.9, value given would be the letter "D", described as "below average"; and 4 pupils received averages from 1.0 - 1.9, described by the letter "F" as "failure."

The pupils, therefore, with reference to academic averages, on the basis of values and descriptions given to the letter symbols, may be divided into three groups. Group I, whose academic scores are described by the letter "B", shall be designated as "above average group"; Group II, whose academic averages are described as "average group"; and Group III whose academic averages are described by the letter "D" and "F", shall be designated as "below average group."

TABLE XIII
CORRELATION OF INTELLIGENCE QUOTIENTS AND ACADEMIC AVERAGES OF THE 52 PUPILS

Intelligence Quotient Range	Mean	Academic Averages Range	Mean	Coefficient of Correlation
50 - 125	95	1.0 - 4.9	3.5	= .64

$$r = \frac{2xy}{N\pi_2}$$

Utilizing the PearsonProduct Momemt Method for computing the correlation, a positive coefficient of correlation .64 was found between intelligence quotients and academic averages as shown in Table XIII. This positive correlation indicates a relationship existing between the intelligence and academic averages of the group studied.

TABLE XIV
CORRELATION OF INTELLIGENCE QUOTIENTS AND SOCIO-ECONOMIC STATUS SCORES

Intelligence Quotient Range	Mean	Socio-Economic Status Range	Mean	Coefficient of Correlation
50 - 125	95	3.2-24.5	10.2	= .23

Table XIV indicates the coefficients of correlation which exist between Intelligence Quotients and Socio-Economic Status (.23).

The data in this study indicated that the home life of a child is most important in many aspects, such as his emotional stability, sociability, interest in cultural activities, correct behavior and courtesies to others. The data do not, however indicate that the conditions of the home affect the achievement of the pupil. It is true that due to poor home conditions, many other undesirable factors enter and thus influence the child. Some of these factors are so closely woven into the general pattern, that it is difficult to distinguish them from the primary causes.

A comparison of correlation between the adjustment inventory and academic averages provided a positive (coefficient of correlation) .50, according to the Pearson Product Moment Method. This coefficient indicates a relationship between the personality patterns and academic averages of the group investigated.

TABLE XV

CORRELATION OF ADJUSTMENT INVENTORY AND ACADEMIC AVERAGES OF THE 52 PUPILS

Adjustment Inventory		Academic Averages		Coefficient of Correlation
Range	Mean	Range	Mean	
50 - 100	74.2	1.0-4.9	3.51	= 50

CHAPTER V
SUMMARY AND CONCLUSIONS

Summary

All children in a classroom are essentially alike in one fundamental characteristic. They require the satisfaction of two basic urges: the craving for success and development and the craving for security. The manner in which these cravings have been satisfied, the degree to which they are satisfied, and the attitudes developed make each child a complex individual with behavior symptomatic of the satisfaction or dissatisfaction gained. This study has attempted to reveal to the classroom teacher the significance of the variables considered in relation to each other and to the development of behavior in children.

1. Research shows a higher socio-economic status for the well-adjusted child than for the maladjusted. 2. Parents" attitudes were found to have a high positive correlation with the personality of the child. 3. The mean intelligence score of the child and the occupational status of the father rise with the environmental level. There is also a positive relationship between education of the parents and the intelligence of the child.

4. Superior children tend to come from superior homes.

5. Inferior children tend to come from inferior homes.

6. Children of average intelligence are not as a rule homogeneous in any other trait except intelligence.

7. The study reveals that pupil growth and achievement are capable of being conditioned by such major factors as: (a) intellectual, (b) learning, (c) physical, (d) emotional social, (e) and environmental.

8. It finds a close relationship between intelligence, socio-economic status, and social adjustment.

9. Teachers' marks correlate positively with intelligence scores and achievement as determined by standardized tests.

10. Social adjustment is correlated with intelligence, socio-economic status and academic averages.

11. The relationship is closer between intelligence and behavior than between socio-economic status and behavior.

12. Teachers are found to vary in their ratings of high, medium, and low in social adjustment, and also have a tendency to rate girls higher.

13. Personality is extremely complex and personality tests are often inadequate because they cannot measure intangible influences within the variables. All of the variables influence directly or indirectly the personality of each child in the room.

14. There is a closer correlation between capacity and achievement in stable groups of children than among maladjusted groups.

15. Intelligence and achievement alone cannot determine the degree of adjustment of the child.

Conclusions

From the data revealed in this study, certain apparent conclusions should be reached.

A study of pupil achievement should be made in the light of the recent scientific trends found in educational thought.

Achievement is capable of being conditioned by a number of factors. Achievement involving many phases of individual effort cannot be measured as a mechanical process. Interest in the scientific study of pupil achievement should seek to discover and isolate any factor which appears to influence or condition achievement.

Evaluating achievement on the basis of personal opinion is no longer recognized as scientific procedure. Measurement should perform the same function in educational evaluation that it performs in any other field of science.

Techniques employed in the evaluation of pupil achievement should be developed largely through the study of individual cases. Even though some of the apparent causes of low achievement have been objectively observed, the underlying specific causes

of lack of achievement of each pupil should be scientifically observed and determined.

All students possess something upon which to build. In some, it is the ability to attain a high scholastic rating, in others special abilities in certain fields.

Pupils possessing low intelligence quotients, maladjusted personalities and low academic averages should be made to realize that they are capable of some degree of achievement. Participation in activities would furnish a medium for achievement.

Personality may have an important influence upon the pupils' use of their abilities or upon the degree to which they live up to their potential possibilities.

Recommendations

As a result of the conclusions drawn from this study the following recommendation are suggested:

1. Parents become better acquainted with newer methods and procedures of education.

2. Parents and teachers cooperate more closely and effectively toward contributing to the needs, interests, and development of the child.

3. That administration of the school make provision for more adequate library facilties and materials for the pupils.

4. Further and more extensive study of home factors be made.

5. That a program of measurement of achievement be organized to provide guidance.

A more comprehensive study of this type be made in order to provide more intensive and extensive data.

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Sims Score Card For Socio-Economic Status.

APPENDIX

PART I. PUPIL BACKGROUND STUDY

1. Name_____Age_____Date of Birth_____

2. Grade_____Address_____

3. Father's Name_____Address_____

4. Father's Occupation_____

5. Mother's Name_____Address_____

6. Mother's Occupation _____

7. Number of Brothers_____ Ages_____

8. Number of Sisters_____Ages_____

9. How many rooms to the home?_____

10. Do children have separate rooms?_____

11. Do girls and boys have separate rooms?_____

12. Modern conveniences: a radio_____; a piano_____; a telephone_____; an automobile;__newspaper_____; magazines_____; bathing_____; lighting_____; heating_____.

13. Marked talents of members of the family or relatives _____

_____ Education _____

_____.

14. Attitude of family toward school and attendance of school

_____

15. What do you want to be when you grow up?_____

16. What do your parents want you to be?_____

17. Do you plan to go to college?_____

18. Do you like many friends?_____

19. Do you like to be with small groups?_____

20. Are you happiest when alone? _____

PART II. INTEREST INTERVIEW

1. What do you like to do during your spare time?_____

2. What do you usually do after school? _____

   In the evenings? &_____On Saturday?_____

   On Sunday?_____

   Are you a member of a club?_____ What club?_____

3. Do you attend Sunday School regularly?_____

   Name of church?_____

4. Do you take any special lessons?_____ Which of your tools or toys do you like best?_____ Do you let other children use your things?_____What tools or toys would you like to have?_____

5. How often do you go to the movies?_____ With whom do you go?_____Which is best movie you ever saw?_____

6. What kind of movies do you like best?_____

   Who is your favorite movie actor?_____

   Who is your favorite movie actress?_____

   Have you ever been to a farm?_____A circus?_____ A zoo?_____

   An art museum?_____An amusement part?_____ A concert?_____

PART III. PHYSICAL AND SENSORY TESTS

1. Physical Examination

   Heart_ _____Lung_____ _Teeth_____Vitamin Deficiency_____

   Tonsils_____Malnutrition_____Adenoids_____ _____

   Glandular disturbance_____Other Defects_____

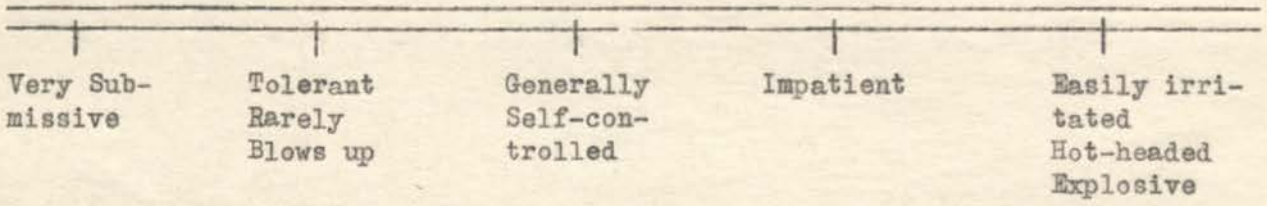
   Visual Problems

   Ames Test or Snellen Chart_____Speech deficiencies_____

   Preferred hand_____Preferred eye_____

WICKMAN BEHAVIOR RATING SCALE

How does he react to frustrations or to unpleasant situations?



ASPECTS OF PERSONALITY

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For Grades 4 to 9 Inclusive

Name.....Date.....19...

Grade.....Age....yrs....mos. Teacher.....

School.....City.....State.....

SECTION	ASPECT OF PERSONALITY	SCORE	PERCENTILE RANK
I	Ascendance-Submission		
II	Extroversion-Introversion		
III	Emotionality		

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SECTION I

I

1. When some child tries to push into line ahead of me, I am not afraid to tell him to get back..... S D 1
2. I try to be the first one to get on a streetcar..... S D 2
3. I am among the first to yell at a game..... S D 3
4. I try to get a seat in the streetcar or train before someone else does..... S D 4
5. I get angry when the class leader is too "bossy."..... S D 5
6. I am usually doing the talking in any crowd..... S D 6
7. I find it hard to talk before other children..... S D 7
8. I talk back to a friend who is "bossy."..... S D 8
9. I like to show people around to meet other people..... S D 9
10. If there are pieces of salt in my ice cream, I tell the storekeeper about it..... S D 10
11. I tell the groceryman that it is my turn when the grocer tries to wait on someone else first..... S D 11
12. I try to get the storekeeper to sell me candy at a cheaper price..... S D 12
13. Even though I don't understand what the teacher says, I don't ask her to say it again..... S D 13
14. I do almost everything other people tell me to do..... S D 14
15. I am often against what people say..... S D 15
16. I stick to what I've said even if other children don't like it..... S D 16
17. I don't mind when other children get ahead of me in line..... S D 17
18. I have a lot of nerve..... S D 18
19. I always want to have my way with other people..... S D 19
20. I try to get my own way even if I have to fight for it..... S D 20

(Go right on to the next page.)

21. I think that friends who don't agree with me are stupid..... S D 21

22. I raise my hand so that the teacher will call on me to go on an errand..... S D 22

23. I do not like to be the leader in games..... S D 23

24. I start the fun at a quiet party..... S D 24

25. I do not like to start a new game among my friends, but I let someone else do it..... S D 25

26. I like to be the first in line when I play a game..... S D 26

27. I get the boys and girls together for parties, clubs, and teams..... S D 27

28. I don't like to ask questions in class..... S D 28

29. I want to lead the class..... S D 29

30. I like to stick up for my rights..... S D 30

31. I like to talk with someone else about my work..... S D 31

32. I like to go from one group of children to another and talk..... S D 32

33. When I make up my mind not to do a thing, I just won't do it..... S D 33

34. I always want to be with my father and mother..... S D 34

35. I feel sure I can do things I want to do..... S D 35

(Go right on to the next page.)

I

Score.....

SECTION II

II

1. I do not like to have people ask me questions about myself. S D 1
2. I like baseball and football better than quiet games. S D 2
3. I would rather go to a party than stay at home. S D 3
4. I would rather play with other children than play alone. S D 4
5. I have many friends. S D 5
6. I do not make friends easily. S D 6
7. I like to go to school early because I have many friends waiting for me. S D 7
8. I like to make new friends. S D 8
9. I like friends more than books. S D 9
10. I find it easy to start speaking to a new pupil. S D 10
11. I keep quiet when I am with other people. S D 11
12. I like to spend my vacation at some quiet place. S D 12
13. I do not mind when people say bad things about me. S D 13
14. I like to spend money. S D 14
15. I can be scolded without feeling hurt. S D 15
16. I make up my mind quickly. S D 16
17. I like to be in assembly plays. S D 17
18. I like to have people look at me when I am working. S D 18
19. I like to read before the class. S D 19
20. I do not like to work alone. S D 20
21. I make up my mind without much thinking. S D 21
22. I like to go camping rather than read about it. S D 22
23. I would sooner say than write what I think. S D 23

(Go right on to the next page.)

24. I like to think a great deal..... S D 24

25. I want to work alone because I don't want other people to be praised for my ideas..... S D 25

26. I feel at home at parties..... S D 26

27. I would rather play checkers than play ball..... S D 27

28. I like to belong to clubs..... S D 28

29. I like to play rough sports..... S D 29

30. I like to tell my friends all about things that happen to me..... S D 30

31. I worry about the little mistakes I make..... S D 31

32. I like to read poetry..... S D 32

33. I think of smart things to say afterward, when it is too late..... S D 33

34. I like to take charge of things for the teacher..... S D 34

35. I like to go around classes, collecting money for the Red Cross..... S D 35

(Go right on to the next page.)

II

Score.....

SECTION III

III

1. I like to go to the movies.	S	D	1
2. I think most children like to make fun of me.	S	D	2
3. I get angry about nothing.	S	D	3
4. I get so angry I can't talk.	S	D	4
5. I fall and trip over things.	S	D	5
6. I like to listen to the radio.	S	D	6
7. I find it hard to forget my troubles.	S	D	7
8. I often talk to myself.	S	D	8
9. I like animals as pets.	S	D	9
10. I often have ideas run through my head, so that I cannot sleep.	S	D	10
11. I never tear pages from my school or library books.	S	D	11
12. I often giggle and laugh for no reason at all.	S	D	12
13. I often cry without good reason.	S	D	13
14. I make believe I am somebody else.	S	D	14
15. I am always afraid that sad things will happen to me.	S	D	15
16. I do not talk during fire drill.	S	D	16
17. I think that I was happier when I was a baby.	S	D	17
18. I always cross the street at the corners.	S	D	18
19. I often think people follow me at night.	S	D	19
20. I think that my friends are against me.	S	D	20
21. I often find it hard to breathe.	S	D	21
22. I feel tired most of the time.	S	D	22
23. I often feel sick when I have to go to school.	S	D	23
24. I worry about getting sick.	S	D	24
25. I don't like to be absent.	S	D	25

(Go right on to the next page.)

26. I am afraid to sit in a small room with the door shut.... S D 26

27. I am very much afraid of water..... S D 27

28. I wish to do the right thing, but sometimes I can't get myself to do it..... S D 28

29. I cannot stand even a small noise..... S D 29

30. I am afraid of thunder..... S D 30

31. I feel that I haven't a friend..... S D 31

32. I like my school because it is clean..... S D 32

33. Everything gets on my nerves..... S D 33

34. I often feel sad for no reason at all..... S D 34

35. I say one thing and do another..... S D 35

36. I like to tease my friends until they cry..... S D 36

37. I like this Same–Different game..... S D 37

38. I believe almost anything that anybody tells me..... S D 38

39. I cry when I am in trouble, because then people pity me. S D 39

40. I can't forget a wrong that's been done me..... S D 40

41. I think that everybody keeps away from me..... S D 41

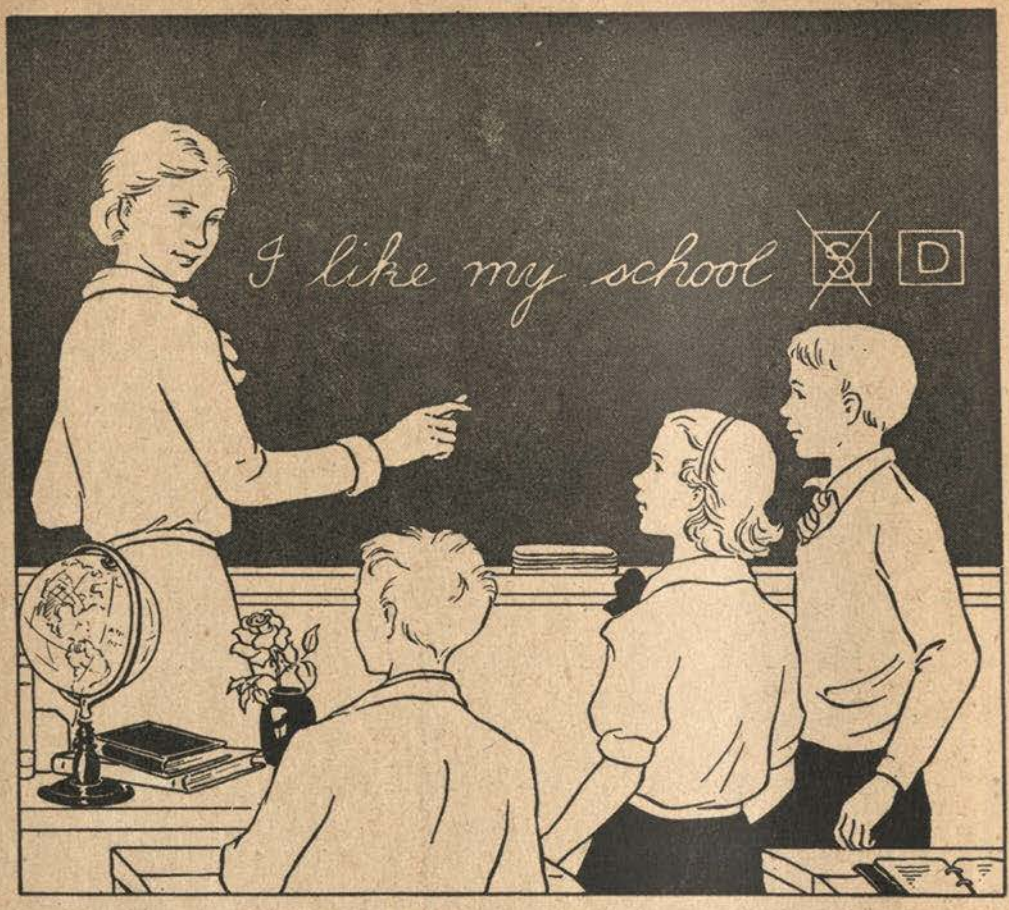
42. I think my teacher is always watching me..... S D 42

43. I think my parents pick on me too much..... S D 43

44. I feel I get blamed for things I did not do..... S D 44

III

Score.....



Here is a picture of some children playing a game called *Same-Different.* In playing this game the teacher writes a sentence on the blackboard, such as "I like my school." Then she asks all those children who feel the same way to raise their hands. Next she asks all those who feel different to raise their hands. Someone counts the hands and keeps score. The teacher writes a number of these sentences on the board, and for each one she asks those who feel the same to raise their hands and then she asks those who feel different to raise *their* hands.

We are going to play this game, too; only this time you will find all the sentences written in this booklet. Read each sentence carefully. Ask yourself whether you feel the same or different. If you feel the same, cross out the little square at the right which has the letter S in it, like this:

"I like my school." ~~S~~ D

If you feel different, cross out the square with the D in it, like this:

"I like my school." S ~~D~~

Read every statement, decide how you feel about it, and then cross out the square which tells how you feel.

There are no right or wrong answers, since many people feel different about these matters.

Sims Score Card
Form C

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SIMS SCORE CARD FOR SOCIO-ECONOMIC STATUS
Form C

Score.....

1. Name.....
2. Age.....Years and.....Months
3. Grade..... Date.....
4. Have you spent two years in any grade?.....If so, what grades?.....
5. Have you skipped any grades?.....If so, what grades?.....
6. Home address: City..... State.....
7. How many years have you lived in this town?.....
8. Have you attended schools in any other towns?.....If so, name them.....
9. Name of your School.....

Don't answer any of the questions below until you are told what to do.

If you have brothers or sisters in this school, write their names and grades on these lines:

Name..... Grade.....

Name..... Grade.....

In the Following Questions Underline the Correct Answer:

Are you a Boy? a Girl? (Underline correct answer)

Are you living at home with your parents?.....Yes No

Are you living in the home of someone else, such as a relative, adopted parent, guardian, etc.?.....Yes No

Are you living in an institution, such as an orphan asylum or a home for children?.....Yes No

Underline the Right Answer

1. Have you a telephone in your home?.....**Yes** **No**
2. Is your home heated by a furnace in the basement?.....**Yes** **No**
3. Do you have a bathroom that is used by your family alone?.....**Yes** **No**
4. Do you have a bank account in your own name?.....**Yes** **No**
5. Did your father go to college?.....**Yes** **No**
6. Did your mother go to college?.....**Yes** **No**
7. Did your father go to high school?.....**Yes** **No**
8. Did your mother go to high school?.....**Yes** **No**
9. Does your mother (or the lady of the home in which you live) regularly attend any lecture courses of which you know?.....**Yes** **No**
10. Do you have your own room in which to study?.....**Yes** **No**
11. Do you take private lessons in music?.....**Yes** **No**
12. Do you take private lessons in dancing?.....**Yes** **No**
13. Does your mother belong to any clubs or organizations of which you know?.....**Yes** **No**
    If you know of any, write the name of one of them on this line (.....)
14. Do you belong to any organizations or clubs where you have to pay dues?.....**Yes** **No**
    If you do, write the names of the organizations that you belong to on these lines (.....
    .....
    .....)
15. Does your family attend concerts?
    Never **Occasionally** **Frequently**
16. Where do you regularly spend your summers?
    At Home **Away from Home**
17. How often do you have dental work done? (Underline only one)
    Never **When Needed** **Once a Year** **Oftener**

18. How many servants, such as a cook, a housekeeper, a chauffeur, or a maid, do you have in your home?

None **One Part Time** **One or More All the Time**

19. Does your family own an auto which is not a truck?

None **One** **Two or More**

If your family does own an auto, write the make of the auto on this line (.....)

20. How many magazines are regularly taken in your home?

None **One** **Two** **Three or More**

If any are taken, write the names of three of them—or as many as are taken—on these lines (.....
.....)

21. About how many books are in your home? (Be very careful with this one. A row of books three feet long would not have more than twenty-five books in it.)

None **1 to 25** **26 to 125** **126 to 500** **More**

22. How many rooms does your family occupy?

2 3 4 5 6 7 8 9 10 11 12 More

How many persons occupy these rooms?

2 3 4 5 6 7 8 9 10 11 12 More

23. Write your father's occupation on this line (.....)

Does he own **Part** **All** **None** of his business? (Underline)

Does he have any title, such as president, manager, foreman, boss, etc.?.....**Yes** **No**

If he does have such a title, write it on this line (.....)

How many persons work for him? (Underline the right number)

None **1 to 5** **5 to 10** **More than 10**

Total Credits..... ÷ No. Answered..... = Score.....

THE GRAY-VOTAW

General Achievement Tests

STANDARD EDITION

Intermediate Test: Grades 4-6

FORM E

By

HOB GRAY, University of Texas
and DAVID F. VOTAW, Southwest
Texas State Teachers College

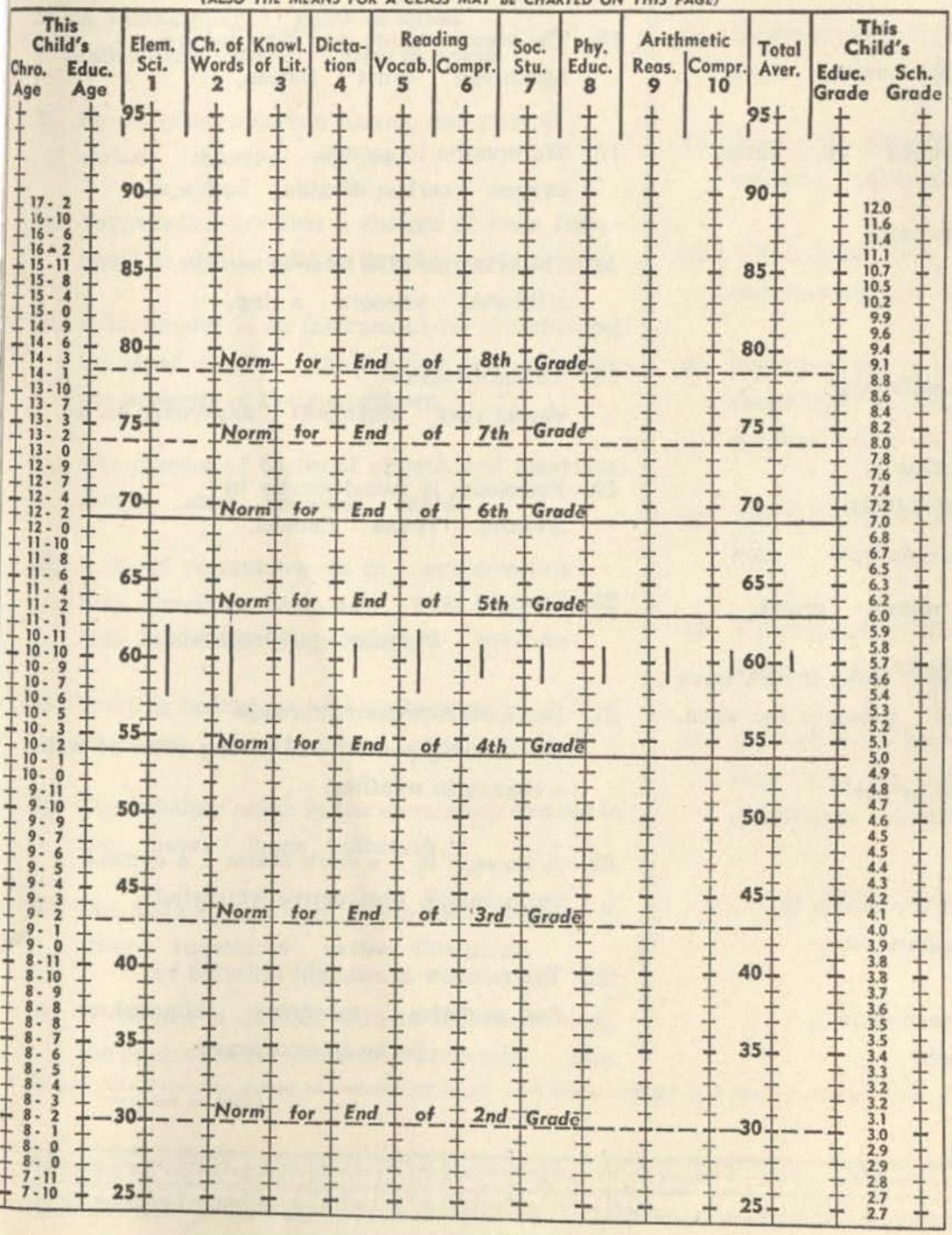
Name_____ Grade_____ Boy or Girl_____ Date_____

What is your age?_____ When is your next birthday?_____

Name of your town or district_____ Name of your building_____

INDIVIDUAL EDUCATIONAL CHART

(ALSO THE MEANS FOR A CLASS MAY BE CHARTED ON THIS PAGE)



Test	Score
1. Elemen. Science	
2. Choice of Words	
3. Literature	
4. Dictation	
5. Reading: Vocab.	
6. Reading: Comp.	
7. Social Studies	
8. Phy. Educ.	
9. Arith. Reas.	
10. Arith. Comp.	

10)_____

Total Average - - - _____

Educational Grade _____

Educational Age - _____

1. The educational grade and age scales on this Profile Chart indicate the norms for this test.
2. Ages above 15-11 and below 11-1 are extrapolated.
3. The short vertical lines are probable errors of the estimated true scores.
4. The scale of scores for all of the tests has been equated. Thus uniform achievement will be indicated for a child if the line connecting his ten score-points is approximately horizontal.

Directions printed in manual must be followed in administering this test if results are to be compared with norms.

DIRECTIONS: Draw a line under the word or group of words that makes the statement true. Do not skip any of the items. Let this sample guide you.

Sample: A turkey is a
fish **fowl** plant.

1. Earthworms live in water soil rocks.

2. The telephone transmits
heat light an electric current.

3. Coal is found in the ground oil water.

4. Dye is commonly used to color
cloth metal wood.

5. Linen is made from
sheep's wool flax camel's hair.

6. Mushrooms are very similar to
cabbages carrots toadstools.

7. Cotton is
made from chemicals mined grown.

8. Furniture is varnished to make it cost more
give jobs to the painters preserve the wood.

9. The X-ray takes pictures of our
faces bones hair.

10. The engine of an automobile is run by
steam crude oil gasoline.

11. Starch is the principal element in
eggs potatoes spinach.

12. An earthquake is caused by the
effects of a tornado burning of volcanoes
slipping of the earth's crust.

13. Water may be impure because of the presence of
steam bacteria minerals.

14. Linoleum is used to cover the
bed yard floor.

15. The steam engine was invented by
Lindbergh Watt Edison.

16. We breathe to secure
oxygen carbon dioxide hydrogen.

17. The principle of a lever is used in
a thimble scissors a ring.

18. Vitamins make
cheeks rosy teeth soft fingernails hard.

19. Petroleum is found mostly in
Arizona Texas Canada.

20. Sponges grow
on trees in water underground.

21. Barometric pressure foretells
the freezing point the boiling point of water
a change in weather.

22. A tornado is a snow storm a cyclone
an intensive, destructive whirlwind.

23. The rainbow is sunlight reflected by
dust particles raindrops atmosphere.

(Go on to next page)

Difference	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Score	24	24	25	25	26	26	27	27	28	29	30	31	32	34	36	38	40	42	44

24. Coal is formed from **decayed plants** carbon combined with wood air.

25. Electricity is **the flow of electrons** resistance **an element.**

26. The heat of vaporization is the calories required to **melt ice** **vaporize water** **freeze water.**

27. A falling body **gains in speed** falls at same speed **loses in speed.**

28. Plants take up carbon dioxide and give off carbon **chlorine** **oxygen.**

29. Vaporization involves a change of form from **liquid to gas** **solid to liquid** **solid to gas.**

30. A barometer is an instrument for determining **the speed of wind** **the freezing point of water** **the pressure of the atmosphere.**

31. The process of bacterial growth and reproduction is **slow** **medium** **rapid.**

32. A direct current travels in **one direction** **both directions alternately** **both directions simultaneously.**

33. Floating bodies are held up because of **buoyancy** **size of object** **shape of object.**

34. The exhaling organ in the circulatory system is the **heart** **lungs** **stomach.**

35. The main solvent used in the paint industry is **ether** **turpentine** **carbon disulphide.**

36. When coal is distilled without exposure to air, the product left is **benzene** **petroleum** **coke.**

37. Lubricating oil comes from **heavy oil** **very light oil** **light vaporized oil.**

38. A constellation is a **sun** **group of stars** **group of moons.**

39. The pendulum is found in **clocks** **separators** **musical instruments.**

40. In the process of digestion starch is changed to **sugar** **salt** **soda.**

41. One of the first treatments of crude oil is **aëration** **distillation** **watering.**

42. When bread rises **hydrogen escapes** **oxygen escapes** **carbon dioxide escapes.**

43. Light or heat is absorbed most readily on a **rough dark surface** **smooth bright surface** **polished white surface.**

44. Soil is fertilized by **corn** **leguminous plants** **cotton.**

45. The principle of the inclined plane is used in the **pulley** **screwjack** **wheel and axle.**

46. Salt will lower the freezing point of water more than sugar will because of **dissolution** **osmosis** **ionization.**

Number right ( ) + 10 - - _____

Number wrong ( ) + 2 - - _____

Difference - - - _____

Score - - - - - _____

(Note: The *Difference* should be rounded off to the next higher integer if a fraction arises in it. Also, a negative *Difference* should be recorded as zero.)

19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
46	48	50	52	53	55	57	59	60	62	64	66	67	68	70	72	74	75	77	78	80	81	82	84	85	86	87	88	89	90	90	91	92	93	94	95	95	96

DIRECTIONS: Draw a line under the word or the group of words in bold face type that makes the better sentence. Do not skip any of the items. Let this sample guide you:

Sample: Mr. Smith is a good
man **fellow.**

1. I **saw** **seen** smoke coming out of the chimney.
2. **Me and Bob** **Bob and I** ran a race to the bridge.
3. **The postman** **The postman he** did not stop at our house.
4. Please put the pencils in **that** **that there** box.
5. I **come** **came** to your house yesterday.
6. I am the man to **who** **whom** you wrote.
7. **This** **This here** is my room.
8. She **must** **has got to** study more if she expects to be promoted.
9. I am sure that you **got him told** **made him understand.**
10. Do you **intend** **aim** to play basketball this year?
11. She has a **nice** **pleasant** smile.
12. Miss White **taught** **learned** us some Christmas songs.
13. **Can** **May** you turn handsprings?
14. The accident made me **sort of** **rather** nervous.
15. This is **all the far** **as far as** I have studied.
16. Do you think the radiator is **frozen** **froze?**
17. Mother won't let me go **without** **unless** I do my work first.
18. I didn't **go to** **intend to** **strike your elbow.**
19. The old man **paid** **paid up** all of his debts before he died.
20. The rapid questioning of the judge **bothered** **confused** the witness.
21. Dick was **hacked** **embarrassed** at the mistake he had made.
22. You look better **than you did** **than what you did** last week.
23. That surely was a **dumb** **stupid** mistake.
24. **Who** **Whom** are you?
25. The doctor came **immediately** **in a hurry.**
26. A little boy was **drowned** **drownded** in that lake last summer.
27. If I **was** **were** you, I would notify the police.
28. It was a difficult task, but he **put it over** **succeeded.**
29. My father **runs** **manages** his business honestly.
30. We are not so eager to go as **they** **them.**
31. John's theme was **the best** **the best of any** in the class.

(Go on to next page)

Difference	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Score	25	26	27	27	28	29	30	31	32	32	33	34	35	36	37	39	40	41	42	43	45	46	47	48	49	50	51	52	53	54	55	56	57

32. Robinson Crusoe lived **alone by himself** on an island.

33. She looked at me **strange strangely** when I said that.

34. This flashlight is **worthless no good.**

35. The Eskimo dog pulled the sled **easy easily.**

36. Our **relatives kinfolks** usually visit us at Christmas.

37. Tony was given the medal, for it was **he him** who rescued the drowning child.

38. Horace looked **like as if** he wanted to laugh.

39. They live **somewhere some place** in Colorado now.

40. Uncle Dan treated the old man **kind kindly.**

41. These facts will help us **considerable considerably.**

42. Don't you think Mr. Smith is looking **terribly very** old since his illness?

43. Tom felt **strange strangely** in that lonely place.

44. **There was There were** only a few apples in the basket.

45. John said that it was not **he him** who shot the bird.

46. Bring me the **balance remainder** of the papers.

47. The tank **burst bursted** when it froze.

48. Lindbergh has already **began begun** his homeward flight.

49. He **laid lay** down in the snow and rested.

50. **Sit Set** the basket on the step.

51. **Who Whom** have we left out?

52. **Who Whom** did you invite?

53. Don't you like to read **boys' boy's** books?

54. **Who Whom** should we obey?

55. Which do you like **better best,** ice cream or apple pie?

56. Which is the **older oldest,** you or Ben?

57. Fresh fruits and vegetables are **healthy healthful** foods.

58. She likes Hilda better than **any any other** friend she has.

59. No one **suspected suspicioned** that he was a spy.

60. Jim and Sam played against Tom and **I me.**

Number right ( ) + 10 . . _____

Number wrong . . . . . _____

Difference . . . _____

Score . . . . . _____

33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95

DIRECTIONS: Draw a line under the word or group of words that makes the statement true. Do not skip any of the items. Let this sample guide you.

Sample: Captain Kidd was a famous pirate policeman sailor.

1. The wolf met Little Red Riding Hood as she was on her way to church to visit her grandmother to a ball.
2. The Indian sign of peace was smoking a peace pipe waving the white flag of peace exchanging gifts.
3. When an acorn fell on Henny-Penny's head, she thought it was a grain of corn the sky a drop of rain.
4. The wise little pig built his house of straw sticks bricks.
5. Robin Hood and his band dressed in suits of Lincoln green in skins of animals in shining armor.
6. "A Child's Garden of Verse" was written by Robert Louis Stevenson Henry W. Longfellow Charles Kingsley.
7. Franklin experimented with electricity by using a kite and a key a black cloth and a white cloth a lump of beeswax.
8. Paul Revere rode through the town of Philadelphia Lexington Plymouth.
9. Jupie was a canary cat dog.
10. William Tell's home was in Switzerland Italy Austria.
11. Heidi lived in the Alps mountains the Andes mountains the Appalachian mountains.
12. Robinson Crusoe knew that he was not the only person on the island, because he saw a ship an arrow a footprint.
13. The man who was unharmed in a den of lions was Samuel Darius Daniel.
14. In "The Magic Forest" Jimmy was tortured killed loved by the Indians.
15. The author of "The Star-Spangled Banner" is Francis Scott Key Stephen C. Foster John Howard Payne.
16. Pinocchio's father was a merchant a tailor a wood carver.
17. Smoky was a dog a horse a monkey.
18. In "Stories of Colonial Children" the Indians were frightened away by Colonel Allen by Mr. Dustin by jack-o'-lanterns.
19. In the race between the hare and the tortoise the result was a tie the hare won the tortoise won.
20. The Princess who could not cry shed her first tears because she was hungry she was frightened she was peeling onions.
21. The Jews are the same as the Greeks the Romans the Hebrews.
22. King Richard I of England was called Richard the Just Richard the Lion-Hearted Richard the Unlucky.
23. Ethan's pet, whose name was Snooks, was a bear cub a monkey a squirrel.
24. Peter Pan was a boy who never grew up who made a trip around the world who stole a loaf of bread.
25. Ali Baba's enemy, the captain of the robbers, disguised himself as a sailor an oil merchant an old woman.
26. The Four Great Giants helped Hans get the golden pears enchanted pearls magic carpet.
27. Sindbad was a pirate a sailor a prince.
28. Luther Burbank made wonderful improvements in electric lights books plants.
29. Lodo was a gray wolf reindeer bear.

(Go on to next page)

Difference	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Score	28	29	29	30	30	31	31	32	32	33	33	35	37	39	41	43	45	48	50	52	54	56	58	60	62	64	65	65	66

30. A character in "Tom Sawyer" is **Betty Lewis Eugenia Forbes Becky Thatcher.**

31. The magic words that Ali Baba used were **Fee-Fi-Fo-Fum Hokus-Pokus Open Sesame.**

32. Aiken-Drum was a **brownie fisherman soldier.**

33. The fairy shoes pinched Timothy when he **outgrew them walked too fast went where he should not.**

34. Miles Standish was **a poet a scholar an Indian fighter.**

35. King Arthur's chosen followers were called the Knights **of the Round Table of the Golden Fleece of the Silver Shield.**

36. The Thanksgiving loaves of bread were good only **when fresh when shared with others when crisp and brown.**

37. During the Trojan War, the Greeks gave the Trojans **a wooden horse a statue of Zeus a golden apple steeped in poison.**

38. Jim Hawkins is a character in **"Two Little Savages" "Treasure Island" "Rip Van Winkle."**

39. The country of Lilliput was visited by **Gulliver Crusoe Standish.**

40. Pandora caused trouble for herself and others by her **selfishness curiosity beauty.**

41. "The Courtship of Miles Standish" is a story about the early days of **Virginia Texas Massachusetts.**

42. William Shakespeare wrote **short stories novels plays.**

43. In "A Christmas Carol," Tiny Tim said, **"I wish every day were Christmas" "God bless us every one" "Oh, the pudding is on fire."**

44. The Owl and the Pussy Cat got their wedding ring from **a hidden treasure a turkey a pig.**

45. Paddy, the little brown bear, asked the question **"What is Christmas?" "Where do fairies live?" "What makes seashells?"**

46. When he was a boy, Abraham Lincoln lived in a **fine brick house cottage at the seashore log cabin.**

47. Mark Twain was the pen name of **William Sydney Porter Samuel Clemens Washington Irving.**

48. Scrooge was a **soldier miser shoemaker.**

49. Gretel was the sister of **Nello Tiny Tim Hansel.**

50. An important happening of Hiawatha's childhood was **killing a deer exploring a cave building a sled.**

51. Greyfriars Bobby was a **little boy London cabman little dog.**

52. Robert Bruce gained strength to try again by watching **a bee an ant a spider.**

53. "The Call of the Wild" is a story about **Alaska Canada Iceland.**

54. Rip Van Winkle slept **a month twenty years a hundred years.**

55. The Greek name for heaven was **The Happy Hunting Ground Valhalla The Elysian Fields.**

56. The stories of Doctor Dolittle were written by **MacDonald Lofting Ruskin.**

Number right ( ) + 10 - - _____

Number wrong ( ) ÷ 2 - - - _____

Difference - - - _____

Score - - - - - _____

(Note: The *Difference* should be rounded off to the next higher integer if a fraction arises in it. Also, a negative *Difference* should be recorded as zero.)

29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
67	68	69	71	72	73	74	75	76	77	78	79	80	81	81	82	83	84	85	85	86	87	88	89	89	90	91	92	92	93	93	94	95	95	95	95	96	96

Raw.....	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Score.....	29	28	29	29	30	30	31	32	33	33	34	35	35	36	37	38	39	40	40	41	42	43	44	45	46	47	49	50	51	53	54	56	57	58	60

Grades	4	5	6
Number words credit to point of beginning	0	9	18
Number words correct in sentences dictated	___	___	___
Sum	___	___	___
Score	_____		

35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
61	63	64	64	65	65	66	67	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	85	86	87	88	89	90	91	92	93	94	95

DIRECTIONS: Draw a line under the word that makes the sentence true. Do not skip any of the items. Let this sample guide you:

Sample: Fish live in
trees <u>water</u> rocks fields.

1. Waves are seen on
roads houses oceans gardens.

2. Stairs belong to
fences rabbits streets houses.

3. A gift is a
hat present number dress.

4. We taste with our
fingers toes tongues ears.

5. The tongue is used when we
walk talk write sleep.

6. Quiet means
still purpose late large.

7. A castle is a kind of
fence house barn organ.

8. Noise comes from
heat drums fun exercise.

9. Twice means
deserve double often seldom.

10. To stare is to
fear look like hunt.

11. The price of a thing is its
weight cost length size.

12. Wine is made of
corn apples oranges grapes.

13. To spy is to
watch catch arrest report.

14. To connect means to
cross join exercise learn.

15. Fuel produces
heat freedom famine lace.

16. To scare is to
scold report echo frighten.

17. Grief makes us
sad great earn dull.

18. A vessel is a kind of
lake view boat smoke.

19. Decay means to
rot refuse rent sweep.

20. A debate is a kind of
argument idol hut leader.

21. To interrupt is to
help trust disturb scoff.

22. Style belongs to
cattle buckets dresses trees.

23. Aged means
alike old amend empty.

24. California is a
seaport city country state.

25. Weary means
bare pain weak tired.

26. A shed is a kind of
plant field house shop.

27. A thing of high quality is
superior proud swift worthless.

28. Literature may be
eaten drunk read harvested.

29. A convention is an
assembly assurance average awakening.

30. Courtesy means expense correspondence
politeness constancy.

(Go on to next page)

Difference	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Score	26	26	27	28	28	29	30	31	32	33	34	35	36	38	39	40	41	42	44	45	46	48	49	50	51	53	54	55	56	57	59

31. Crimson is a
color salad flower crystal.

32. Sympathy means
pity devotion mercy meekness.

33. Immediate means
present past distant future.

34. A furrow is made with a
potato number bayonet plow.

35. A raven is a
ship bird fox poem.

36. Legal refers to
law life holidays experts.

37. Artificial means
unreal attractive adorned liberal.

38. Extremely means
excessively slowly rapidly wisely.

39. Mirth means
gladness prayer sin sickness.

40. Lofty means
light immense heavy high.

41. An utterance is
bought spoken carried fancied.

42. A surgeon is a kind of
mayor hospital orchardist doctor.

43. A goal is an
expedition eternity aim game.

44. A tavern is a kind of
theatre tent prison hotel.

45. To yearn is to
crave seek frighten pretend.

46. Haughty means
healthful harmful proud expectant.

47. Hostile means
respectful plentiful spiteful unfriendly.

48. Venice is a
country picture city hero.

49. Feeble means
odd numerous neglect weak.

50. To avoid means to
tread take worry shun.

51. A substantial thing is
large valuable sufficient strong.

52. Eternal refers to
space time area honesty.

53. Crafty means
respectful artistic artful concise.

54. Vivid means
spacious wealthy unjust brilliant.

55. An interrogation is a
derivation query metropolis diagnosis.

56. The vogue is a
habit drug vacation fashion.

57. To disparage means to
dramatize engross equalize belittle.

58. To rectify means to
regulate build correct commend.

Number right (   ) + 10 - - - ________

Number wrong (   ) ÷ 3 - - - ________

Difference - - - ________

Score - - - - - ________

(Note: The *Difference* should be rounded off to the nearest integer if a fraction arises in it. Also, a negative *Difference* should be recorded as zero.)

31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
60	61	63	64	65	66	67	68	69	69	70	71	72	73	74	74	75	76	76	77	78	78	79	80	80	81	82	83	83	84	85	86	87	88	89	90	91	92

DIRECTIONS: Fill each blank with the word that makes the statement true.

Example: Fred has a pony and a cart. The **pony** pulls the **cart.**

1. Dirt is never to be excused. Although a child may not be able to wear the most expensive _____ to school, he can at least keep himself _____.

2. Mr. Wilson was going away for a few days. Alice and Dan went as far as the station with him. As Mr. Wilson got on the _____, Alice and Dan waved and shouted, "_____ daddy."

3. Christmas Eve night, three hooks of different heights were by the fireplace for Joe, Mary, and the baby to hang their stockings on. Joe was the oldest and tallest of the three children. The lowest hook was for _____ and the middle hook was for _____.

4. Many vines on which large pumpkins are growing are to be seen in the field. The pumpkins are gathered, and pies are made from them. _____ grow on _____.

5. A pretty young pullet was carrying a basket to market for her mother. A crippled fox saw her and wished to eat her. Knowing he could not outrun her, the deceitful _____ said, "Let me carry your _____ for you, pretty pullet."

6. Ann was looking everywhere for her kitten. Suddenly she saw it curled up asleep behind a bush. "Naughty _____," said _____, "you shall have no milk for supper."

7. One morning Joe's father said, "I am going to the city to-morrow, but no bad boys shall be allowed to go with me." The remainder of the day _____ tried to be _____.

8. Betty and Harry were playing in the yard when they heard Betty's hen calling her chicks. One of them was lost. Finally the chick returned, and _____ said, "I am so glad my hen has _____ her chick."

9. Market days are Monday, Wednesday, and Friday. Ned walks to school except on market days, when his father takes him in the car on the way to market. There is no school on Saturday; so Ned must walk to school on _____ and _____.

10. The manner in which a mother squirrel carries her young is very interesting. She grasps the young squirrel by a leg. As she lifts him, he coils, making a close-fitting fur collar for her, with which she can travel freely. A _____ squirrel carries her young around her _____.

11. Although toads and frogs are very much alike, they differ in numerous respects. One of these differences is found in the mouth. A toad is toothless, while a frog has teeth in his upper jaw and in the roof of his mouth. When Mary was examining one of these little animals in the nature study class, she exclaimed, "Oh, this fellow must be a _____, for he has no _____."

(Go on to next page)

12. It was Saturday afternoon, and five-year-old Bess was lonesome. "Come over and play with me, Jean," she called to the little girl next door. "I can't come to-day, but I can to-morrow," Jean called back. So Jean went to play

with _____ on _____.

13. Roy had always been interested in zebras, elephants, giraffes, and ponies. His sister Beth had liked to look at pictures of acrobatic performances. When the brother and sister went

to the circus, Roy went into the_____

tent while Beth watched the_____
perform.

14. A frog has a long viscous tongue to which insects will adhere when touched by it. When

a small_____comes near a frog,

the frog's_____may be seen to

dart out suddenly.

15. The fuel which early settlers used for making pig iron was charcoal. To make charcoal, wood was piled closely in a dome-shaped heap, which was covered with sod except for a small

opening. A smothered _____
was kept burning until the wood became

_____.

16. Some children think that they cannot save because they are not earning money. One can save money by saving the things which only money can replace. Children do not have to

_____to be able to_____.

17. Clocks, like people, have a face and hands, and with these they tell time. In the morning when it is time for girls and boys to get up,

the hour _____ in the

_____of the clock points to seven.

18. Jackie went to the rodeo. The next day he borrowed his mother's clothes line for a lariat and played that the posts belonging to the yard fence were steers. Jackie spent the day

roping the _____ with his

_____.

19. Sound travels about six feet in the time required for radio waves to travel 1000 miles. Thus you will hear on your radio a note struck

on a piano 1000 miles away_____
a listener in the studio hears it if he is more

than_____from the performer.

20. King Alfred ruled England a long time ago. He was a man of great kindness and sympathy —a man of true greatness, who did so much for his people that the world speaks of him

to-day as _____ the

_____.

21. To each of our questions the man cupped his hand behind his ear and took a short step forward. After several repetitions of this pro-

cedure we decided the_____

was_____, and we drove off.

22. The bluebird and the robin are harbingers of spring. The former heralds the season's arrival in a flash of blue and a burst of gay song; the latter by a chatty visit to your lawn in search of a fat breakfast. In the spring the

_____may spread happiness,

but the_____surely hunts for
worms.

(Go on to next page)

23. "Beautiful hands are they that do work that is noble, good, and true." No one can ever say truthfully that Mother's hands are _____, for her hands are always _____ good deeds.

24. Contrary to common belief, water is highly resistant. It is a well-known fact that an explosion will go in the direction of least resistance. When a torpedo is exploded in water near the hull of a ship, the hull will be crushed for the reason that the ship's hull is _____ resistant than _____.

25. In the quarrel which took place between the mountain and the squirrel, the squirrel admitted he could not carry a forest on his back but defied the mountain to crack a nut. The story teaches that each of _____ has a definite _____ to perform.

26. Light in some degree is absolutely essential to sight. Without the reflection of some light on an object it will remain invisible. _____ can be seen in total _____.

27. Water cannot rise higher than its source. Likewise the government of a democracy will be no higher than the level permitted by the education and understanding of its people. A successful _____, therefore, _____ its people.

28. Pronouns denoting sex are often used to refer to things not actually possessing sex. The rule is to apply the masculine form to things of great power and to apply the feminine form to things of beauty or grace. For example: the ship unfurls _____ sails, and the sun gives off _____ energy.

Number blanks correctly filled - - - - _____

Score - - - - - _____

No. Correct	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Score	28	30	31	32	34	35	36	38	39	40	42	43	45	46	47	49	50	51	53

19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
54	55	57	58	60	61	63	64	65	66	68	69	70	72	73	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	89	90	91	92	93	94	95	96

DIRECTIONS: Draw a line under the word or group of words that makes the statement true. Do not skip any of the items. Let this sample guide you.

Sample: Pat Neff was governor of
Arkansas Oklahoma Texas.

1. The capital of the United States is
New York Washington San Francisco.

2. The President lives in the
White House Embassy Capitol.

3. Rubber is a product of
a tree mineral ore a cactus plant.

4. Our earth is shaped most like a
box ball pear.

5. The number of states now in the United States is forty-four forty-eight fifty-two.

6. The state that has the largest population is
Illinois Pennsylvania New York.

7. An important export of Hawaii is
pineapple wheat animal hides.

8. The largest state in the United States is
New York California Texas.

9. A center of the automobile-manufacturing industry in the United States is
Denver New Orleans Detroit.

10. America was discovered in
1342 1620 1492.

11. Benjamin Franklin set up, in Philadelphia, a
law office blacksmith shop printing office.

12. A pirate is one who robs
ships banks churches.

13. The river that is called the Father of Waters is the Hudson Mississippi Columbia.

14. At various times earthquakes have done considerable damage in
Nebraska Alabama California.

15. On a map, the top usually represents
north south east.

16. The product which is taken from a quarry is
rock oil silver.

17. All seas contain
salt water fresh water warm water.

18. An American frontiersman was Mark Twain
Andrew Jackson Daniel Boone.

19. Spaniards came to the new world in search of
homes religious freedom gold.

20. A city located on the Mississippi river is
Washington, D. C. Denver New Orleans.

21. The principal occupation of the Southern Colonies was
agriculture manufacturing mining.

22. When a President of the United States dies, the office is filled by the Attorney-General
Secretary of State Vice-President.

23. "The Quaker State" is a name for
Pennsylvania Indiana Mississippi.

24. The Pyramids are in
India China Egypt.

(Go on to next page)

25. Ski-jumping is a favorite winter sport in
Florida Switzerland Italy.

26. Cider is made from
oranges apples molasses.

27. The war with Mexico was caused by the annexation of
Northwest Territory Louisiana Texas.

28. Martha Custis became the wife of
Robert E. Lee George Washington
Abraham Lincoln.

29. A large Indian reservation is located in
New Mexico Delaware Texas.

30. A part of Yellowstone National Park is in
Missouri Washington Wyoming.

31. Robert E. Lee was commander-in-chief of the army of the
Union Revolution Confederacy.

32. Jamestown was named in honor of the king of
Spain France England.

33. Tobacco is an important crop in
Kentucky Texas California.

34. A country famous for watch-making and wood-carving is Switzerland Spain Brazil.

35. Thomas A. Edison invented the
gas engine telephone phonograph.

36. Thatch makes us think of
fuel food roofs.

37. A geyser is most like a
fountain cave lake.

38. Independence Hall is in
New York Boston Philadelphia.

39. A good citizen
never finds fault with the government
obeys the laws of his country
belongs to a political party.

40. The section of the United States in which the Rocky Mountains are located is the
eastern western southern.

41. Shanghai is a city in
Russia Arabia China.

42. The Minutemen met the British army at
Quebec Philadelphia Lexington.

43. The Aztec Indians lived in Mexico
in New York around the Great Lakes.

44. A seaport city is Atlanta Boston Denver.

45. The Great Salt Lake is in
Pennsylvania Utah Michigan.

46. Napoleon led the armies of
France England Belgium.

47. The Gettysburg Address was delivered by
Webster Bryan Lincoln.

48. Indigo is a plant used for
dye food medicine.

49. The petit jury is usually made up of
five eight twelve members.

50. The regular term of the President of the United States is two years four years six years.

(Go on to next page)

Difference	0	1	2	3	4
Score	25	25	26	27	28

43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
68	69	70	70	71	72	72	73	74	75	75	76	77	78	78	79	80	81	82	82	83	84	85	85	86	87	88	89	89	90	91	92	92	93	94	95	95	96

51. Balboa discovered the **Atlantic Ocean** **Pacific Ocean** **Arctic Ocean.**

52. Patrick Henry and Daniel Webster served their country as great
generals **speakers** **inventors.**

53. A state that has little rainfall is
Florida **Nevada** **Louisiana.**

54. In a jungle region, plant life is
scarce **moderately plentiful** **abundant.**

55. President Lincoln issued the proclamation of emancipation of negro slaves on
July 4, 1860 **January 1, 1863**
April 9, 1865.

56. Commerce means about the same as
travel **trade** **tariff.**

57. Latin was the language of the
Greeks **Hebrews** **Romans.**

58. The Puritans established a colony at
Plymouth **St. Augustine** **Jamestown.**

59. On the whole, the people of the United States are using its natural resources
not freely enough **wisely and carefully**
wastefully.

60. The Rock of Gibraltar is at the entrance to the
Red Sea **Caspian Sea** **Mediterranean Sea.**

61. Fossils are found in **the earth**
the human body **running water.**

62. A country famous for the beauty of its ancient architecture is **Greece** **France** **Russia.**

63. The Yukon River is in
the United States **Alaska** **Mexico.**

64. The age of the President of the United States must be at least
twenty-one **thirty** **thirty-five.**

65. The number of members composing the United States Senate is **forty-eight** **ninety-six**
one hundred and eight.

66. Poland China is the name of a breed of
hogs **sheep** **cattle.**

67. The authority under which radio stations are established is **local** **state** **federal.**

68. The Monroe Doctrine dealt with
the slave question **high tariff**
foreign relations.

69. The circumference of the earth is about
8,000 miles **25,000 miles** **100,000 miles.**

70. Stone Mountain is a monument to the leaders who fought in the
Revolutionary War **Civil War**
World War II.

Number right ( ) + 10 - - _____

Number wrong ( ) + 2 - - - _____

Difference - - - _____

Score - - - - - _____

(Note: The *Difference* should be rounded off to the next higher integer if a fraction arises in it. Also, a negative *Difference* should be recorded as zero.)

5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
29	29	30	31	31	32	33	35	37	39	41	43	45	47	49	50	51	52	53	54	54	55	56	57	57	58	59	60	60	61	62	63	63	64	65	66	66	67

DIRECTIONS: Draw a line under the word or group of words that makes the statement true. Do not skip any of the items. Let this sample guide you.

Sample: A drink that builds body tissue is **coffee beer <u>milk.</u>**

1. The best drink for a child's breakfast is **milk tea coffee.**
2. A person cannot live without his **tonsils appendix lungs.**
3. One should not bite off of another person's apple because **it is selfish to do so it is impolite it is unhealthful.**
4. A good way to get exercise is to **play marbles go roller-skating drive an automobile.**
5. Doctors usually try out medical experiments first on **themselves children animals.**
6. Sticking a rusty nail in the foot often leads to **rabies lockjaw rheumatism.**
7. The best way to keep from getting sick is to **follow health rules every day take medicine when you need it stay out of crowds.**
8. The best way to rid our homes of mosquitoes is to **put screens on the windows kill every mosquito we see destroy places where mosquitoes can breed.**
9. Adenoids make a person unable to **breathe properly digest his food walk.**
10. Macaroni is a food that contains much **fat sugar starch.**
11. It is important that clothing should be **expensive new easily cleaned.**
12. A person should sleep with his windows open **in the spring and summer whenever the weather is warm all the year round.**
13. The best way to prevent the death of children in burning school buildings is **to teach pupils how to turn in a fire alarm to have frequent fire drills to have no upstairs classrooms.**
14. A man who has done great service in the field of health and medicine is **Pasteur Edison Marconi.**
15. Fresh air contains a plentiful supply of **oxygen carbon dioxide germs.**
16. The most important feature of a bedroom is its **ventilation quietness size.**
17. The best shoes for walking are **tennis shoes without heels shoes with low heels and broad toes shoes with high heels.**
18. Another name for germs is **corpuscles bacteria antiseptics.**
19. The human body creates energy chiefly by means of **rest food exercise.**
20. A medicine that kills germs is **iodine aspirin syrup of pepsin.**
21. An alcohol rub is a good way to relieve **sore throat sore muscles boils.**
22. A person's bones are strongest when he is **five twenty-five seventy-five years old.**
23. One type of blood vessel is called **an artery a ligament a tendon.**
24. A person who has fever should **take moderate exercise drink no water stay quietly in bed.**
25. A sick person should take medicine which is **advertised in the best magazines prescribed by the doctor recommended by his friends.**
26. A serum has been found that will prevent **tonsilitis typhoid fever chicken pox.**
27. A good subject to discuss while the family is eating a meal is **amusing tricks of pet animals illness and accidents the family bills and debts.**

(Go on to next page)

Difference	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	29
Scores	26	26	27	27	28	28	28	29	29	30	30	31	33	35	37	39	41	43	45	47	49	50	51	52	53	54	56	57	58

28. Typhoid fever is most often caused by
hot weather impure water or milk supply eating too much rich food.

29. A substance that helps to build a strong body is
castor oil cod liver oil mineral oil.

30. Yellow fever is carried from one person to another by
flies mosquitoes drinking water.

31. The best time to take a hot bath is
just before going to bed
just after getting up
just before going outdoors.

32. Nose-bleeding may usually be stopped by
holding the head down
putting salt on the tongue
using cold applications.

33. A healthy body **never has germs in it**
is strong enough to destroy most germs
cannot be harmed by germs.

34. Nicotine is found in **tea grapes tobacco.**

35. Bad breath is usually caused by
sleeping with the mouth open
lack of exercise
the condition of the teeth or stomach.

36. An organ that helps to rid the body of poisons and waste matter is the
stomach kidneys heart.

37. Marrow is found in the
muscles nerves bones.

38. A very unhealthful habit is
chewing gum spitting on the floor
eating sweet foods.

39. The normal temperature of the human body is
70.4 degrees 98.6 degrees 120.8 degrees.

40. Pyorrhea is a disease of the
lungs gums heart.

41. The most comfortable and healthful clothing is made of cloth that is
tightly woven waterproof loosely woven.

42. It is a good thing for a wound to bleed rather freely because
nearly everyone has too much blood
the blood washes out harmful germs
the body will make new blood.

43. A knowledge of first aid
makes it unnecessary to call a doctor
makes us know what to do until the doctor comes
should be taught only to boy scouts.

44. Milk cows are tested to see if they have
tuberculosis typhoid fever hydrophobia.

45. Hay fever affects the membranes of the
lungs nose brain.

46. A disease that is likely to injure the eyes is
mumps measles malaria.

47. In the lungs the blood takes up
oxygen carbon dioxide white corpuscles.

48. The most healthful type of bathing is
the tub bath the sponge bath
the shower bath.

49. Sanitation is the art of **curing disease**
preventing disease by cleanliness
training doctors and nurses.

50. Exercise that is too violent is likely to injure the **bones muscles heart.**

51. The most nearly ideal food is
fruit vegetables milk.

52. A drug that is used as an anesthetic is
ether camphor peroxide of hydrogen.

53. The cranial nerves are in the
head arm back.

54. The blood leaves the heart through the
veins arteries capillaries.

55. A disease caused by improper diet is
scurvy rabies influenza.

56. The retina is a part of the
ear throat eye.

Number right ( ) + 10 - - _____

Number wrong ( ) ÷ 2 - - - _____

Difference - - - _____

Score - - - - - _____

(Note: The *Difference* should be rounded off to the next higher integer if a fraction arises in it. Also, a negative *Difference* should be recorded as zero.)

29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
59	60	61	62	63	64	65	66	67	68	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95

DIRECTIONS: Find all the answers as quickly as possible. Write answers on the answer lines. You may figure on the margins of this test.

1. A P.T.A. program was given by 8 girls from the fourth grade, 5 from the fifth grade, and 8 from the sixth grade. How many girls were in the program?

Answer_____

2. One hen has 4 chicks and another has 9. How many chicks do both hens have?

Answer_____

3. There are 16 children in grade 4B and 11 of them are girls. How many boys are there?

Answer_____

4. Carrol lost 3 of his 6 marbles. How many are left?

Answer_____

5. Mr. Jones gave his 4 sons 28 marbles to be divided equally among them. How many did each son get?

Answer_____

6. Joe's uncle gave him 8 marbles to add to the 15 which Joe already had. How many did he have then?

Answer_____

7. Julia had 15 pennies. She spent 7 for paper. How many pennies had she left?

Answer_____

8. Mr. Brown had $545 in the bank and drew out $230. How much did he have left in the bank?

Answer_____

9. Mrs. Riley has 140 white hens and 120 brown hens. How many hens has Mrs. Riley in all?

Answer_____

10. Mrs. Smith paid 35 cents for 7 yards of ribbon. How much did the ribbon cost per yard?

Answer_____

11. Last year Mr. White planted 685 acres in cotton. This year he planted 235 acres less. How many acres did he plant this year?

Answer_____

12. What is the cost of 4 meals in a cafeteria at 32 cents each?

Answer_____

13. Mary's teacher divided 18 chocolate drops equally among Mary and two other girls. Mary gave all but 3 of hers to her little brother. How many did she give her brother?

Answer_____

14. Lois bought 4 yards of cloth at 20 cents per yard. How much change did she receive from a dollar bill?

Answer_____

15. Mrs. Brown bought 24 cents worth of 3-cent stamps. She used two of them to post letters. How many did she take home?

Answer_____

16. Mr. Howell had $75 in the bank when he gave a man a check for $85. He then deposited $65 more. What was his balance after the check was cashed?

Answer_____

17. At the rate of 3 for a quarter dollar, how many handkerchiefs can Ruth buy for 75 cents?

Answer_____

(Go on to next page)

18. Three families went on a fishing trip and shared the expenses equally. The expenses amounted to 16½ dollars. How much was that for each family?

Answer_____

19. Nine hours after it ran down, Joe discovered that his watch had stopped. If the watch stopped at ten o'clock, what time was it when Joe discovered it?

Answer_____

20. Helen made 20¼ pounds of Christmas candy which she put in 9 boxes. How many pounds were in each box?

Answer_____

21. A soft drink recipe calls for a pound of orange juice for each 21 pounds of mixture. How many pounds of orange juice will be required for 798 pounds of the mixture?

Answer_____

22. Walter bought a bicycle for $32. He paid $17 cash. How much per week must he save to pay the remainder in 10 weeks?

Answer_____

23. One day Mr. Smith traveled east 45 miles. The next day he continued east 65 miles more. The third day he traveled west 30 miles. How far was he from his starting point?

Answer_____

24. Ralph bought 15 carrots for his rabbits. Each of the 3 small rabbits got 2 carrots, and each of the large rabbits got 3 carrots. How many rabbits has Ralph?

Answer_____

25. When candy sticks are selling at 12 for a dime, how many can be bought for $6?

Answer_____

26. A field of corn has one yellow ear in each 31 ears. How many bushels of yellow corn will be found if the field produces a total of 2356 bushels?

Answer_____

27. The 6 yards of material for Helen's bedroom window curtains cost $2.40. At that rate it cost $3.20 to buy material for the windows in Mrs. Smith's room. How many yards were bought for Mrs. Smith's room?

Answer_____

28. Ned helped his father with the watermelons. When the melons were sold for $80, Ned's father gave Ned $20. What per cent did Ned receive?

Answer_____

29. Mr. Smith's family of three members consumes ⅕ of a pound of butter per day. At that rate how much butter per day will Mr. Brown's family of four members consume?

Answer_____

30. To set plants 10 inches apart will require how many for a row that is twenty feet long from the first to the last plant?

Answer_____

End of Test. Use the remaining time to examine your work.

Number right . . . . . _____

Score . . . . . _____

No. right	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Score	28	30	33	36	40	43	46	49	52	54	56	57	59	60	61	63	65	68	70	72	75	77	79	81	83	85	87	89	91	93	95

DIRECTIONS: Find the answers as quickly as possible but try to be accurate. Before beginning work on an example be sure you understand what you are to do.

(1) Add

6
2

(2) Add

0
8

(3) Add

4
0
7
8

(4) Subtract

16
5

(5)

$6 \times 6 =$

(6) Subtract

11
5

(7) Subtract

8
0

(8) Subtract

18
7

(9) Add

32
28
56
18

(10)

$5\overline{)10}$

(11) Subtract

430
118

(12) Add

7966
675
8157

(13) Add

43
16⅝

(14) Subtract

71423
25665

(15) Subtract

6081
3674

(16)

$0 \times 7 =$

(17)

$14 \div 2 =$

(18)

$8\overline{)63}$

(19)

⅛ of 138 =

(20) Multiply

5291
38

(21)

$9\overline{)62}$

(22)

$3\overline{)14.1}$

(Go on to next page)

(23) Subtract

$64\frac{1}{4}$
$37\frac{1}{8}$

(24) $\frac{3}{4} \times \frac{2}{9} =$

(25) Add

$\frac{3}{8}$
$\frac{1}{8}$

(26) Add

$12\frac{1}{2}$
$19\frac{3}{4}$

(27) Add

$\frac{5}{8}$
$\frac{4}{9}$

(28) Subtract

$\frac{2}{3}$
$\frac{5}{8}$

(29) Add

$27\frac{7}{10}$
$25\frac{1}{2}$

(30) $\frac{6}{7} \times \frac{1}{2} =$

(31) $28\overline{)56952}$

(32) $93.4 - 86.53 =$

(33) $12\overline{)9}$

(34) Multiply

67.84
3.06

(35) $\frac{6}{35} \times \frac{5}{14} =$

(36) $\frac{7}{16} \div \frac{3}{8} =$

(37) $\frac{4}{5} + \frac{11}{15} + \frac{1}{3} =$

(38) Add

$43\frac{7}{12}$
$26\frac{2}{9}$

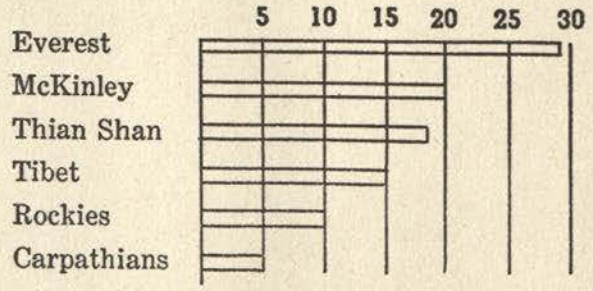
(39) Subtract

$534\frac{4}{9}$
$58\frac{5}{6}$

(40) $.9\overline{)2763}$

(41) 24 is what per cent of 60?

Answer_____



(42) According to the graph above, the height of the Carpathians is what per cent of the height of McKinley?

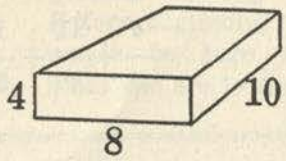
Answer_____

(43) According to the graph above, the height of Tibet is what per cent of the height of the Rockies?

Answer_____

(Go on to next page)

(44) Find the volume of this rectangular prism:



Answer_____

(45)

Multiply

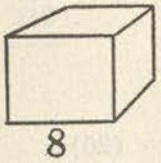
2 gal. 3 qts. 1 pt.

$\times 3$

_____

(46)

Find the area of the total surface of this cube:



Answer_____

End of Test. Use the remaining time to examine your work.

Number right - - - - - - - _____

Score - - - - - _____

No. right	0	1	2	3	4	5	6	7	8
Score	28	29	30	32	34	37	41	45	48

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
50	52	53	54	55	56	57	59	60	61	62	63	64	65	65	66	67	68	69	71	72	73	74	75	76	77	79	80	81	82	83	85	86	87	88	89	90	91