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Reading Difficulties of the Third Grade

Beulah Plake

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FOREWORD

The problem of what to do with the poor reader and the non-reader of the third grade has been the author for many years. Solutions in the form of preventative measures beginning in the first grade do not effect the problem at all. In schools where no such measures have been taken, a mass of third grade poor readers and non-readers is always at hand, and something should be done with them before they leave the primary grades.

By
Beulah Plake

Therefore the third grade is the last outpost of the primary department, and it seems to be an excellent place to begin on correctional measures. There are several reasons for this. To begin with, the poor reader or non-reader of the third grade has attained the actual age of seven or more years, and the mental age of at least six and a half years. With the exception of a few special cases, they are reached, or will soon reach, the stage described as "the stage for reading."

A Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree

Master of Science

because the improper reading habits which he may have acquired are more easily corrected. For the same reason, the attitudes can be corrected more easily and quickly.

The data concerning the poor readers and the non-readers of the third grade, and the improvement shown, has been gathered from the author's third grade room at the John McCormack Junior Chamber Library at 40 North Riley Avenue, Indianapolis, Indiana. The experiment began in the fall of 1936, and was completed in January, 1937. There is no doubt that a well-kept record of the progress of these third grade students in reading of the new material is the only way of knowing what is possible to accomplish for the poor reader and non-reader, who are included in the experiment and because of the new interests which are developed in the study because of the fact that they were disappointed in their school. From the data gathered during the experiment it is evident that the poor reader and non-reader of the third grade can be brought to a point in which they are able to read the new material of his, through the use of one of the methods described

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FOREWORD

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Therefore the third grade, as the last outpost of the primary department, would seem to be an excellent place to specialize on correctional measures. There are several reasons for this. To begin with, the poor reader or non-reader of the third grade, has attained the actual age of eight or more years, and the mental age of at least six and one-half years. With the exception of a few special cases, he has reached, or will soon reach, the stage described as "readiness for reading."

Secondly, the improper reading habits which he may have acquired are not as strong as they will be in the later grades, and can be more easily corrected. For the same reason, the wrong attitudes can be corrected more easily and quickly.

The data concerning the poor readers and the non-readers of the third grade, and the improvement shown, has been gathered from the author's third grade room at the John McCormack School Number Thirty at 40 North Miley Avenue, Indianapolis, Indiana. The experiment began in the fall of 1936, and was concluded in January, 1938. Thus it was possible to measure and record the progress of three third grade classes. The shifting of the population in the district, however, made it impossible to complete the records of all the poor readers and non-readers, who were included in the experiment and several of the most interesting cases had to be omitted from this study because of the fact that they were transferred to another school. From the data gathered from class measurements and observations of individual cases remaining in the district, the author hopes to show that a poor reader or a non-reader of the third grade may raise his reading ability to a point in excess of what might normally be expected of him, through the use of the proper remedial measures.

B. R. P.

Indianapolis, 1938

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READING DIFFICULTIES IN THE THIRD GRADE

CHAPTER I

INTRODUCTION

The problem of reading difficulties of the third grade child is one of great importance to the teacher. It is generally, though erroneously assumed that the child has mastered the mechanics of reading by the time he has completed the third grade. In the grades which follow the third there is little time for remedial reading, however necessary it may be. The child having reading difficulties stumbles on and on and all sorts of other difficulties are likely to occur. It would be an ideal arrangement if these poor and non-readers could be apprehended at the beginning of their school career and measures taken to prevent their appearance in the third grade. This ideal situation does not occur in many schools however, and like the poor, we have the child with reading difficulties always with us. This type of child creates a problem which must be met and which should be dealt with in a manner beneficial to the child, to the school system and to society in general.

As evidence of the fact that these difficulties are

INDIANAPOLIS PUBLIC SCHOOLS
 READING ABILITY OF PUPILS MEASURED BY STANFORD ACHIEVEMENT TEST

1936-1937

Grades 3B-8A

Actual Grade	Number Tested	Grade Equivalent in Reading Ability														
		2A	3B	3A	4B	4A	5B	5A	6B	6A	7B	7A	8B	8A	9B	9A
4B	411	37	41	47	77	53	52	46	17	14	10	5	4	1	1	6
4A	264	18	19	21	38	37	38	39	15	10	10	9	2	4	4	
5B	352	7	17	17	43	59	53	60	24	19	13	16	6	5	3	10
5A	300	5	11	10	27	35	44	46	25	19	21	19	10	8	11	9
6B	402	1	6	9	22	39	47	71	38	36	32	24	22	10	18	27
6A																
7B	574	9	8	16	17	27	43	80	50	45	56	53	35	26	36	73
7A	416	3	5	8	15	18	31	45	28	31	36	36	22	24	28	86
8B	563	3	4	4	17	18	26	64	42	38	45	67	33	33	45	120
8A	397	1	1	2	12	14	14	32	24	22	37	38	24	32	39	105

Notice No. 63-MW
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present a survey of a large number of city schools is herewith presented. This survey deals with grades 4B to 8A and gives the reading ability according to the grade equivalent. Attention is directed only to grade 4B, since in this grade will be found all the third grade children who are supposed to have successfully completed the third grade course of study. Of the four hundred and eleven children tested one hundred and twenty-five or 30 per cent showed a reading ability that did not measure up to the fourth grade standard.

As further evidence of these ever-present reading difficulties the author made a survey of the reading ability of 3A classes of School Number Thirty for two successive years. Both measurements were taken in September. The result appears in graphic form on the next page. Of the 3A's tested in September, 1936, eight of the eighteen children, or 44 per cent of them, did not measure up to the standard of the third grade. Of the 3A's tested in September, 1937, six of the eighteen tested, or $33 \frac{1}{3}$ per cent of them, had reading abilities which fell below the standard. Both classes were tested with the Monroe Standardized Silent Reading Test, Test I Form I. These children represent an average third grade class. They had all been promoted to the 3A grade unconditionally and they were all of sufficient intelligence to render it possible for them to learn to read. It will be seen that, although they were all called third grade pupils,

they had reading abilities which ranged widely, and unless some measures could be taken to elevate the reading ability level of the slower readers, it would be quite impossible to expect them to compete with the better readers of the same class. Little, if any provision has been made in the Indianapolis curriculum for these reading discrepancies, which exist in every class, as shown in the Indianapolis survey on page 2.

Number of pupils according to grade equivalent to reading ability. Data for 18 pupils of 3A grade, School No. 30, September, 1937.

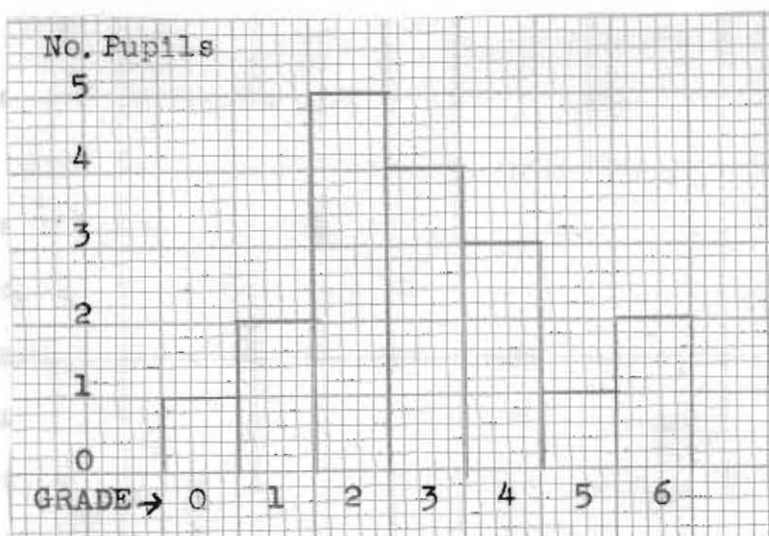


FIGURE 1. Number of pupils according to grade equivalent to reading ability. Data for 18 pupils of 3A grade, School No. 30, September, 1936.

¹Phillips Blanchard, "Reading Difficulties and Their Treatment," *Mental Hygiene*, Vol. 17, 1915, pp. 11-17.

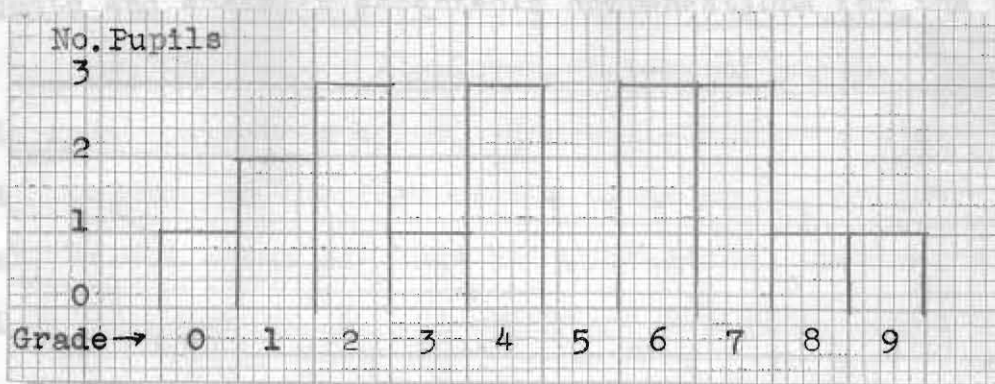


FIGURE 2. Number of pupils according to grade equivalent to reading ability. Data for 18 pupils of 3A grade, School No. 30, September, 1937.

The foregoing evidence of reading ability discrepancies and of reading maladjustments show clearly the need of some remedial work to be done with the children of the third grade. Yet it is a colossal, and in some cases an impossible task for the child to correct all his reading defects during the third year, while carrying on at the same time, all the other third grade activities. Since, however, under our present system it is impossible to relieve the child of any of the other activities, it is advisable to assist him with his particular reading difficulties as much as possible.

If this assistance is not given, and the child is left to gain whatever he can with his inadequate reading tools, a feeling of inferiority is likely to develop as he progresses upward in the grades. Phillis Blanchard¹ says that unless

¹Phillis Blanchard, "Reading Disabilities in Relation to Maladjustment," Mental Hygiene, Vol. 12, (October, 1928), pp. 772-78.

adequate and socially acceptable compensations for the feeling of inferiority are developed, personality and behavior deviations are apt to arise. These deviations are usually mild ones, taking the form of day dreaming, or of oversensitiveness which may lead to inattention, absent-mindedness or lack of interest, all of which are annoying in the classroom.

James McCallister² makes the statement: "They (the students) are handicapped in the upper grades and in high school because they are unable to perform effectively, the reading activities required of them."

If poor reading ability is a cause of maladjustment in the grades above the third, it is also a cause of maladjustment within the third grade. The child who is unable to read the material to which the class is assigned must find something else to do. Sometimes this selection takes the form of listless dawdling, playing with an inoffensive article, or merely gazing into space. More often, however, he may become actively engaged in some form of amusement which will disturb those about him. He may even become malicious in his activities. Every teacher is familiar with this sort of thing.

Sometimes, in his intense desire to keep up with his classmates, the child is led to be dishonest. In order not

²James McCallister, Remedial and Correctional Instruction in Reading. New York: D. Appleton-Century Co., 1936. P. 33.

to seem slower than they, he resorts to cheating, copying and perhaps lying. Thus it is seen that these traits which are so undesirable, are brought into being by the fact that he is a poor reader. Who can say how far-reaching these may be, or to what extent they will shape his character? If he is stimulated to make an effort to read, he is confronted with insurmountable obstacles, such as the inability to get connected thought from the printed page. He becomes confused and disgusted. By the time the child has gone through the first three grades, he is pretty sure to have poor study habits. Success has seldom been his, and if he is not indifferent, he is morose or has developed a bluffing attitude.

It is the concern then, of the third grade teacher, to begin with this child at a point where he can be successful in reading, even though it be with pre-primer material, and to build up from that point, as best she can in the limited time she has with the child, as many of the reading abilities as it is possible for the child to grasp. The time element, the child's attitude toward reading improvements, the cooperation of the parents, the demands of the curriculum and of the other students, all effect the solution of the problem of the poor or non-reader, and must be considered in its solving. For, until the time comes when the child with reading difficulties, is given exemption from the other subjects of the curriculum, and the attention of a teacher unhampered by the

demands of any other children, the non-reader and the poor reader will overcome their handicaps more or less slowly, in proportion to the interest which the teacher takes in their difficulties.

The problem of this study may be stated, then, as follows: How can the classroom teacher of forty-two children, provide suitable remedial work for the non-reader and the slow reader so that these children may make reasonable progress in reading?

In defining the term "non-reader" it should be stated that any child who cannot read first grade material is classed as a non-reader in this dissertation. The "slow reader" and children with "reading difficulties" are those who have been taught to read first and in some cases, second grade material but who are definitely not third grade readers. The child who is not successful in passing several third grade reading tests, should be regarded as a subject for diagnosis for reading difficulties.

CHAPTER II

REVIEW OF PREVIOUS STUDIES OF READING

Before going further into a discussion of the reading difficulties of the third grade, it would seem logical at this point, to consider some of the accepted data on reading at the third grade level. From the physiological point of view, reading is a complicated matter. Paul Klapper¹ says that the matter of eye-movements is very important, and that the study of these eye-movements helps us to realize what a fatiguing process reading really is, especially for the beginner. The eye moves across the page in sweeps or jerks, and pauses at regular, (or if the reader is a poor one) at irregular intervals. The eye-movements are termed "eye-sweeps" and the pauses are termed "fixations." Actual reading takes place only during these pauses. The ordinary adult reads a page in two or three minutes with one hundred and fifty eye-sweeps, and as many fixations.² The child makes many more than this when reading. It is therefore impossible

¹Paul Klapper, Teaching Children to Read. New York: D. Appleton and Co., 1922. P. 9.

²Ibid., p. 9.

for him to read without fatigue. One authority gives 8.9 fixations per line as the median for the third grade in silent reading, and 10.4 fixations per line in oral reading. Some amount of fatigue can be eliminated by keeping the eye at the proper distance from the page, which in the third grade is 9.9 inches.³

Rhythmic movement, with regular and uniform pauses and sweeps, is the desirable end to secure. The amount of words recognized in one eye-sweep is called the "span of recognition." Betts⁴ cites a reference wherein an elementary pupil had a span of recognition from 1.04 to 2.44 words in silent reading. If the reading is easy and natural, the eye-sweeps are fewer. The eye sees and the mind contributes the rest. If the material is not interesting, the child will have difficulty in forcing his eye along the page and will become inattentive.

A great nervous strain is induced by the eye moving along, getting the words in focus. The eye muscles must hold the eye in focus, while the eye pauses, thus causing a period of strained rest which is as fatiguing as the eye-movements themselves. Muscles of the body, especially the head and

³Emmett A. Betts, The Prevention and Correction of Reading Difficulties. Evanston, Illinois: Row, Peterson and Co., 1936. P. 159.

⁴Ibid., p. 133.

neck muscles, are tense while reading, thus aiding in the fatigue.⁵

It is necessary to understand the psychology of reading in order to understand the causes of some retarded readers. In teaching children to read it is necessary to bring about the auditory image of the word and the visual impression of the same word in a relationship with each other. Because of this inseparable association of sight and sound of words, the problem of inner speech arises. It is therefore natural for the child to vocalize the words which he sees on the printed page. This is called "lip-reading" and is a great factor in retarding the rate of reading. Reading without vocalization is an acquired art and is a habit to be cultivated.

The rate at which a child reads is also determined by his mental expectancy. That is to say, the mind grasps the meaning of the sentence before the eye has seen it all. Another way to put it would be to say that the mind guesses the part of the sentence that the eye has not seen. Klapper⁶ says:

Generally speaking, the rate of reading is determined by the rhythmic sweep of the eye over the line; but the rhythmic sweep is, in turn, modified by inner speech and mental grasp.

⁵Op. Cit., Paul Klapper, p. 12.

⁶Loc. Cit., Paul Klapper, p. 12.

He further says that rapid readers are the more intelligent readers. They gain more vivid impressions than do the slow readers. Those who indulge in lip movement, in auditory aids and the like, are not only less extensive, but also less intensive readers.⁷

In order therefore that the child may be taught to be a rapid and an intelligent reader, it is necessary that he should be taught in the beginning, not words or parts of a word, but rather larger units, such as sentences or phrases, so that he may cultivate longer eye-sweeps. To teach the child at first to recognize the words or phonograms, is to place a premium on lip movement, which in turn will promote slow reading and resulting poor comprehension.

Stages in Reading

Samuel Patterson⁸ says that there are three stages in reading. He calls the first stage the preparatory stage. This stage is spent at home and includes the first few weeks at school. It consists of a variety of experiences from which the child will draw his reading material later. Toward the end of this period, carefully selected sight words used in the story-telling experiences, become the material for

⁷ Ibid., p. 19.

⁸ Samuel A. Patterson, Teaching the Child to Read. New York: Doubleday, Doran and Co. Inc., 1930. Pp. 3-93.

the child's basic printed vocabulary. If reading readiness tests show that the child is not ready to read, this stage should be lengthened. Lasting damage to a child's reading attitudes can be done by pushing the child through this stage and into the next before he is ready for it. Following the preparatory stage comes the initial stage. This includes the pre-primer, primer and first reader stage. The generally accepted method of teaching reading at this stage is to begin with the larger unit or sentence. This is taken from the experience of the child. The sentence is then broken into phrases and later into words. The reason for the use of the larger unit has been brought out in the preceding paragraphs.

The words come last and may be broken into phonograms. New and related words should be made by combining other consonant sounds with the known phonograms. At no time, however, should the child be permitted to think in terms of words or parts of words, since the practice tends to produce slow and laborious readers.

The third stage is the rapid reading stage. In this stage is emphasized the fundamental attitudes and skills. Samuel Patterson says ordinarily this stage is finished at the close of the third grade, and the independent reading habit is established. By this time the child has the ability to read more quickly silently, than orally, and

can read orally, easily and expressively. The child's skill in attacking new words will be reasonably sure and correct. Therefore, at the end of the third stage, the child is able to continue his reading even though removed from the school influence. A more detailed account of these skills may be found in Bruechner and Melby.⁹

Causes of Reading Difficulties

There are innumerable causes of difficulties in reading. Some of the less common causes are herewith noted. It is not likely that they will be encountered often, but they deserve mention. One of the less common causes of reading inability is that of reversed mental images. According to Dr. Orton, Professor of Neurology in the College of Physicians and Surgeons at Columbia University,¹⁰ the body is composed of structures that duplicate each other, but which stand in mirrored position with each other. We have two halves of a brain which are placed in this mirrored position to each other. Usually one side of the body has the dominance in performing all skilled actions. In most people this is the right side of the body which is controlled by

⁹Leo J. Bruechner and Ernest O. Melby, Diagnostic and Remedial Teaching. New York: Houghton Mifflin Co., 1931. Pp. 250-55.

¹⁰Marjorie B. Greenbie, "Some Children Can't Read," Parent's Magazine, (October, 1936), p. 30.

the left side of the brain. In left-handed people, who are also left-legged and left-eyed, the control is exercised by the right side of the brain. The dominant side of the brain controls speaking, writing and reading. When either side of the brain dominates, as in the two conditions noted above, no trouble occurs.

If however, there is no complete dominance, such persons may sometimes be controlled alternately by the left side or by the right side of the brain. A child who has this sort of difficulty, would at times see words as they are, and then again see them reversed. The word was would appear as was at one time and saw at another time. As can be readily seen, ordinary methods of teaching would be of no use in teaching this child. He requires special assistance with this difficulty. Fortunately, such cases are not common.

Another unusual cause of non-readers has been termed "word-blindness." This condition is due to an injury to, or otherwise loss of the use of either the right or left gyrus, or to a cellular deficiency in this part of the brain. The child thus afflicted can struggle through a sentence with help, but cannot remember the words when they are presented to him the next time. Occasionally the child can remember the spelling of the word, and the only way that he can read it is to spell it aloud first. Letters and sound associations appear to present no difficulties. When it is found that the

word center in the brain is not functioning, it becomes necessary to make a new one on the opposite side of the brain. In order to do this the child must be taught to write with the opposite hand, from the one which he is using, and should be given much work in phonics.¹¹

Motor-minded children present difficulties also. It has been suggested that such a child trace the words slowly on paper or blackboard, saying the words aloud at the same time, and being careful not to copy the word. He is then presented with the word on a card for recall. He is encouraged to articulate and blend sounds and also to write them out. It has been found that motor-minded children have been taught to read by this method.¹²

Aside from the foregoing "uncommon" causes of poor reading, there are numerous others which effect the greater numbers of non-readers of the third grade. These will be noted here as "common" causes of reading difficulties.

In searching for the cause of a child's failure in reading, the first thing to look for would be physical defects. Since the child gets his concept of the printed page directly

¹¹Annie D. Inskeep, Teaching Dull and Retarded Children. New York: McMillan Co., 1926. P. 38.

¹²Grace Fernald and Helen Keller, "The Effect of Kinaesthetic Factors in the Development of Word Recognition in the Case of Non-Readers," Journal of Educational Research, (December, 1921), pp. 355-77.

through the eye, these organs must not be faulty. If they are, the fault should promptly be corrected.

Another important factor in producing poor readers is the hearing. Efforts should be made to learn whether or not, the child who is having reading difficulties, is also hard of hearing. Terman¹³ says that from 10 to 20 per cent of school children do not hear normally, and that the hearing of from 2 to 5 per cent is seriously impaired. In the city of Indianapolis, any child with questionable hearing, can be tested and have provision made for him by the city school system.

Another cause of poor reading is defective speech. By the time the child has reached the third grade, he may have overcome, to a large degree, any defect that he may have had at the beginning of school. If however, it is clear that he has a speech defect, and it is also clear that this defect is effecting his hearing, a program of speech correction should be undertaken.

Emotional factors must also be considered among the causes of difficulties in reading. Any dislike for reading, which the child may have, must first be overcome. He must want to correct his reading faults. Unless the cooperation of the child is obtained, it is nearly impossible to help

¹³Lewis M. Terman, The Hygiene for the School Child. Boston: Houghton Mifflin Co., 1914. P. 223.

him. Patience and understanding are required of the teacher if the child persists in his distaste for reading. If the old adage of, "Nothing succeeds like success," is remembered, and the teacher continues to look for some small success in the child's work in reading, and having honestly found it, will remark it, a change will begin to take place in the child's attitude. This idea is borne out in a study by Lois Meek,¹⁴ wherein she noted that failure had a bad effect upon the child and subsequent success changed his attitude.

In this study Meek found that other emotional disturbances (besides the disappointment of failure) also had a bad effect upon the learning of children. In one case the child's mother had visited the school one day, and the child was too distracted by this fact to show any gain in learning and retention. Another child was sulky and showed no gain. It developed that his mother had scolded him in the morning before he had come to school. Such facts as this show how emotional disturbances may effect one day of a child's learning, and it is not unreasonable to believe that constant contention in the home would effect a whole term or a year of a child's study.

Fear of the teacher or principal may inhibit the

¹⁴Lois Hayden Meek, A Study of Learning and Retention in Young Children, Columbia University Contributions to Education No. 164. Teacher's College, Columbia University, 1925. P.83.

responses of a child to a marked degree. Fear of the teacher may cause the child to develop a strong dislike for her, and this will be reflected in his attitude toward his school work. Such pupils develop strong anti-social tendencies that result in lying and cheating, etc. Betts¹⁵ thinks that the faulty techniques of the teacher may be the cause of some failures in reading.

Another common cause of failure in reading is too much absence from school during the first year. The child loses more than he can make up and subsequently lapses farther behind each term, unless the teacher diagnoses his case and provides remedial measures. In a case of too much absence wherein the child has lost much that is important in the reading chain, the only thing to do is to have him repeat the grade or give him such help individually as will cause him to regain his place with the other readers of his grade.

Another general and common cause of reading maladjustments is the fact that many children are thought to be ready for reading when they start to school at the age of six. However, this is not the case. Betts¹⁶ says:

Until seven and one-half years, some children exhibit a reversal tendency. To place a child in a reading situation is to permit him to practice confusions. It

¹⁵Op. Cit., Emmett Betts, p. 56.

¹⁶Ibid., p. 20.

is also generally believed that the mental age of six and one-half years is essential in beginning reading. According to statistics on the problem, approximately one-fourth to one-third of the first grade entrants do not survive the reading ordeal. Of the remainder who do pass, a substantial portion are characterized by poor attitudes, nervous instability, wandering attention, stuttering and a number of other ailments.

Miss Floro Torrence,¹⁷ General Supervisor of the Elementary Schools of Indianapolis, found that the Lee-Clark Reading Readiness Test was a valid means of predicting success in reading achievement for beginners. If reading readiness is thus predictable, many failures and much grief for both the pupils and the teacher could be eliminated by abiding by the results of a reading readiness test. No doubt a large percentage of third grade failures could have been prevented had a reading readiness test been given them and the information thus gained, been acted upon.

Closely allied with the child who is not ready at the actual age of six, is the child who is mentally retarded in a more serious way. It is a well known fact that a child with a serious mental handicap cannot progress as fast as a child with normal mentality. In some localities there is a special room for such handicapped children. If such means have not, or cannot be taken, the teacher must do her best

¹⁷Floro Torrence, Is the Lee-Clark Reading Readiness Test a Valid Means of Predicting Reading Achievement in the First Grade? Unpublished Problem, Department of Education, Butler University, Indianapolis, 1937.

for this child with what remedial measures she can take in the classroom. However, before deciding that the child in question has a low mentality, some mental measurement test should be given. It cannot be emphasized too strongly that this mental test must not be a test in which there is any reading. The author gave a Binet individual test to a twelve year old boy in August, 1937, on which his score was one hundred and ten. This child was a slow reader and when he took the Hermon-Nelson Group Intelligence Test in February, 1938, his score was only eighty-eight. The Hermon-Nelson is entirely a reading test, thus making it utterly impossible for any slow reader to show any amount of intelligence. If this grade is carried on into the high school as an I.Q. a great deal of harm may have been done this child.

Remedial Measures

Before proceeding with any remedial work with a child who reads poorly in the third grade, it is necessary to measure his reading achievement and his mental abilities.

Betts¹⁸ suggests the following:

The analysis of a case of reading disability calls for an inventory of the oral- and silent-reading habits and of certain individual capacities. Data are secured from the following sources:

1. General achievement tests
2. Intelligence tests

¹⁸Op. Cit., Emmett Betts, p. 78.

3. Tests of specific reading skills and information
4. Tests of sensory capacities (visual and auditory)
5. Tests of appraisal of perceptual abilities and habits
6. Tests of identification of association difficulties
7. Tests of motor functions
8. Appraisal of individual interests
10. Case history and general observations

After determining his mental age, his place on the reading scale, his attitude toward reading, and the specific difficulties of the child, the next step would be to work up an enthusiastic interest in reading. It is not likely that the child will have a great amount of interest in the subject, if he has failed in it up to this point. Yoakum¹⁹ says: "Some children will need to have special personal attention to remove fears, prejudices, the sense of failure and other undesirable habits." Betts²⁰ says: "One of the biggest problems for the remedial teacher is that of changing the attitude of the child who is in difficulty." If this attitude is one of intense dislike for reading, the teacher will need to substitute some success for the sense of failure. According to Clarence Stone:²¹

Cases of discouragement and distaste for reading may be remedied by starting with the child at a point where he can achieve enough success to find satisfaction in his reading experiences.

¹⁹Gerald Yoakum, Reading and Study. New York:MacMillan Company, 1928.

²⁰Op. Cit., Betts, p. 109.

²¹Clarence Stone, "Teacher's Guide and Course of Study in Reading," Board of Education, San Jose, California, 1935, p. 50.

vocabulary, speed, comprehension, etc., charts of the number of books he has been able to read, will tend to show in a concrete way, how much better he is growing. Of course it is understood that he will show progress, since all the remedial measures will be within his grasp.

Visual aids such as bright pictures, lantern slides, stereographs, crayon drawings, chalk talks, etc., are all helpful in creating an interest in reading.

After the teacher has been able to bring about an interest in reading, and an enthusiasm for it, she must then devise some method for meeting the individual need of the child. Some children will need assistance in building vocabulary, some will need to increase the eye-span, others will need help to bring about an accurate return eye-sweep, while still others will need training on how to attack a new word. Betts²⁴ says:

The remedial teacher is primarily concerned with
 (a) the correction of physical handicaps by a specialist,
 (b) the establishment of desirable attitudes toward reading, and (c) the development of efficient, rhythmical reading habits.

It is for the developing of these efficient and rhythmical reading habits that the teacher will need to devise charts, blackboard exercises or flash-cards. The reading of these flash-cards without moving the head will increase the

²⁴Op. Cit., Betts, p. 249.

eye-span, as will the quick exposure of a phrase or short sentence. The return eye-sweep, or quick return of the eye from the end of one line to the beginning of the next, may be improved by doubling the spacing between the lines.

As the child builds his sight vocabulary he must be taught to notice similarities and differences between words, so that they may be recognized more easily. If recognition is not immediate, various clues should be given, the most important of which is the guessing of the meaning from picture or context. Generally a complete analysis will not be necessary because the child needs only enough clue to be sure that his visual analysis, checked by a guess from the context, is sound. All three skills should be used together.²⁵

In order to be able to recognize the word, the child should know the initial sound. These should be learned in the following order of difficulty, if it is found that the child does not know them: b,m,t,d,n,p, z,f,l, v,k,sh, g,y,r,th.²⁶ Marion Monroe suggests that words beginning with these consonant sounds be arranged in similar groups and that they be mounted with pictures. She suggests choosing the words wherein the vowel comes after the consonant.²⁷

²⁵W. B. Townsend, "Phonics in Reading," Instructor, (January, 1936), p. 22.

²⁶A. Inskip, Op. Cit., p. 49.

²⁷Marion Monroe, Children Who Cannot Read. Chicago: University of Chicago Press, 1932. P. 117.

Following are some of the suggested groups: B- baby, boy, bear; M- man, moon, mother; T- table, top, tie, etc.

It has been said that "word-calling" will result from teaching a child words, phonics and sounds, yet there is something to be said in favor of this method when used with certain types of retarded readers. Dr. Monroe²⁸ justifies this procedure as follows:

Although some of the methods which we have used stimulate at first a mechanical approach to reading, we have not discarded them on that basis if they brought measurable improvement in reading without sacrificing comprehension. We have proceeded on the assumption that, although it is desirable to be a speedy reader, it is better to be a slow reader than a non-reader; that, although it is desirable to be able to recognize large thought units, it is better to read the sentence word by word, or words sound by sound, than not to read at all; that, although it is desirable to obtain the meaning without the awareness of mechanics, it is better to get the meaning by mechanical steps, than not to get the meaning at all.

In a later book Dr. Monroe²⁹ lists the types of errors made by children and suggests remedial measures for each type. Those errors fall into the following types, according to Dr. Monroe:--

1. Faulty vowels and consonants.
Ex. LIKE for LOOK -- NET for MET
2. Reversals.
Letters: BIG for DIG
Words: WAS for SAW

²⁸ Ibid., Monroe, pp. 113-14.

²⁹ Marion Monroe, and Bertie Backus, Remedial Reading. Boston: Houghton Mifflin Co., 1937. Pp. 50-85.

3. Addition and omission of sounds.
 Addition of sounds: TRAP for TAP
 Omission of sounds: BACK for BLACK
4. Substitution of words.
 DUCK read HEN
 THE read A
5. Repetitions.
 Ex. Text: THE BOY HAD A DOG
 Read: THE BOY THE BOY HAD A DOG HAD A DOG.
6. Additions and omission of words.
 Text: THE LITTLE DOG RAN AWAY.
 Read: THE DOG RAN AWAY.
7. Refusals and words aided.
 Child merely stares at word and makes no attempt at reading.

After the teacher has tried all the above mentioned means of teaching the child to read, and has met with no success, she may try the approach suggested by Fernald and Keller.³⁰ This method has been found to be highly successful with sub-normal children having reading difficulties. In short the method consists of the following measures:--

- a. The seeing, saying and tracing of the script form of the word.
- b. Writing the word, without copy, while saying the syllables.
- c. Seeing the word in print form.
- d. Using the word in sentences.
- e. Writing the sentences from memory.

The comprehension and rate of speed of the retarded reader

³⁰Grace M. Fernald and Helen Keller, Loc. Cit., 355-77.

³¹Nila B. Smith, Loc. Cit., pp. 1-150.

should not be neglected. As soon as he begins to show a mastery of sightwords and the ability to read little stories some check should be made upon his comprehension and speed and efforts made to bring both up to the highest possible point. Laura Smith³¹ suggests some interesting little games and devices which delight the child and give him real joy in reading. Her exercises in selection, organization and retention, as well as those in comprehension and speed, can be used as they are or changed to meet the needs of the class.

In concluding the chapter on "Remedial Instruction in Reading" Monroe and Backus³² make the following statements which are applicable to these paragraphs on remedial reading:--

. . . There is no short and easy formula for correcting reading defects. The solution to each child's problem can only be obtained from a careful study of the child and by thoughtful, specific and experimental corrective instruction. . . . The remedial reading teacher can never settle down into a routine type of work with a few favorite methods which she applies indiscriminately to all cases. . . . Remedial reading is a highly adaptive experience; and one which has an educative value to the teacher as well as the child.

In summarizing this chapter it may be said that the teacher who hopes to diagnose the reading ills of her class must have some knowledge of the other studies which have been made in the field of reading. She must know all the stages

³¹Loc. Cit., Nila B. Smith, pp. 1-150.

³²Op. Cit., Monroe and Backus, p. 93.

in reading, so that she can determine at what stage the child is; she must know of some of the causes of reading difficulties, both common and uncommon, so that she can locate the cause of the difficulty in each poor reader of her class, since, without knowing the cause, it is sometimes impossible to determine the remedy. Lastly she must know the approved remedial measures, so that she can apply those which will bring about the surest and quickest results. It was with these other studies in mind that the author set about to locate the children having reading difficulties in her third grade class and to determine the cause and apply the remedial measures necessary.

CHAPTER III

PLAN OF PROCEDURE

Analytical Measures

The plan of procedure was to test all the 3A children in September with group mental and reading tests. These tests were given early in the term so that a variation of abilities could be ascertained and those children who showed reading weaknesses apprehended. The mental tests given were, First,--the Otis Group Intelligence Test, Primary Examination, Form A. This examination consisted of eight tests as follows: Test 1, Following Directions; Test 2, Association; Test 3, Picture Completion; Test 4, Mase; Test 5, Picture Sequence; Test 6, Similarities; Test 7, Synonym-Antonym; Test 8, Common Sense. No actual reading ability was required. A second test was given to check upon the Otis Examination. This second test was the Haggerty Intelligence Examination, Delta I for grades One to Three. It consisted of the following: Test 1, Oral Directions; Test 2, Copying Designs; Test 3, Picture Completion; Test 4, Picture Comparison; Test 5, Symbol-Digit (Selecting the right number to place under a symbol); Test 6, Word Comparison. This latter exercise involved reading

ability, and was given with the idea of finding out whether or not this amount of reading would influence detrimentally the I.Q.'s of the slow and non-readers.

The first reading test given was the Monroe Standardized Silent Reading Test Revised, Test 1, Form 1 (given in September) and Form 2 (given in January). This test was chosen because it tested the speed and comprehension of third grade readers, and would show at once, all those children who were not in need of remedial work in reading. The test consisted of a number of paragraphs of description and narration, with a question at the end of each paragraph which tested interpretive ability. Here follows a descriptive verse with the interpretive question at the close:--

Robins in the tree-top,
 Blossoms in the grass,
 Green things agrowing,
 Everywhere you pass;
 Sudden little breezes,
 Showers of silver dew,
 Black bow and bent twig,
 Budding out anew.

Draw a line under the month which is described in this stanza.
 APRIL JANUARY AUGUST OCTOBER DECEMBER

Each line was numbered and the number of words in that line was placed in the margin at the left of the paragraph. When a child had read exactly four minutes, he was told to stop and place a check to indicate at what line he had stopped reading. By dividing the number of words read by four, the teacher was able to tell how many words the child had read per minute.

The norm in comprehension for grade 3 was 3.8, and the norm in speed was eighty-two, or eighty-two words per minute.

Form 2 was given in January to determine just how far the class and individuals had progressed according to this scale.

In order to get a better idea of the reading ability of those children who could make no progress with the third grade reading material a second test suitable for readers from grades one to three was given. The test chosen for this was the Haggerty Reading Examination, Sigma I for Grades I to III. This examination consisted of two tests. One consisted of a series of directions together with a picture as:--

PUT A TAIL ON THIS PIG (Picture of Pig)

The second test tested information in the form of questions which would be answered by "yes" or "no," to be underlined, e.g.---

DO DOGS BARK? NO YES

This test gave the norm for each grade and also the age norm. For instance, if a child scored twenty on the test, his reading age was eight years and four months, and his reading grade was two. While this test did not diagnose any of the special reading difficulties, it was valuable in that it placed the child on the reading scale of achievement as to grade.

The Detroit Reading Test I, by Parker and Waterbury, was selected because it measured the type of reading which is usually found in most classrooms. The type used in this test

was narration, description and social science. Each test begins with a paragraph of narration, then one of description, and then one of social science material. This cycle is traversed four times in each form. Each paragraph is followed by two questions, one interpretive and one factual, each of which may be answered by underlining the correct word or phrase, chosen from among four. Of the four answers given, one is the correct one, one shades off from the correct but is distinctly incorrect, one is suggested by the other two, and a fourth is almost absurdly incorrect. It was expected that this type of test would show up the weaknesses of the class and individuals, so that that particular type of reading could be improved upon.

Another test known as the Master Achievement Test for Grade Two was given the slow readers near the close of the term to check on their reading placement. This test gave the reading grade of each child. It consisted of short paragraphs followed by two sentences, each of which allowed a multiple choice of four possible facts, with only one correct. For instance:--

DICK IS A LITTLE WHITE DOG. DICK HELPS TO TAKE CARE OF THE BABY. HE HELPS THE BABY'S MOTHER.

A little white dog takes care of a _____.
BEAR BABY HORSE PIG

The dog is good to the _____.
BABY MAN GIRL HELP

These tests were used in comparing the reading

achievements at the beginning of the remedial work period, with those at the close of the period. To these measurements were to be added the observations of the previous teachers of the children in addition to the observations of the author. The latter followed a suggested outline by Betts.¹ (See Appendix).

Briefly, this outline was as follows:

- I. Educational factors
 - A. Oral reading
 - B. Silent reading
 - C. Word recognition habits
 - D. Study habits
 - E. Spelling habits
 - F. Background
- II. Physical factors
- III. Social attitudes

In making an analysis of the slow or poor reader, the teacher kept the following questions in mind while listening to the oral reading of these children: Did the child ignore periods, question marks, and commas in the sentence? Were the sentences read slowly and painfully, or word for word? Was the sentence mumbled and the voice monotonous or high-pitched? Were many of the words read in reversed order, such as felt for left, or was for saw? Were many of words beginning with b read as if they began with a d, or p and q, or u and n reversed? Were many of the words omitted? Were many inserted? Were some words substituted for other words? How

¹Op. Cit., Betts, pp. 82-85.

often were words repeated and mispronounced? Could the child pronounce a word he did not know by looking for little words in it; by guessing from content; by looking at the first or first and second letter, and then guessing; by sounding out the vowels, consonants or phonograms? Was there a speech defect?

In observing the silent reading of these slow and poor readers she kept the following questions in mind: Did he move his lips in reading? Did he move his eyes forward and then backward again over the same word or phrase? How many times did his eye pause in a line of words? Did his eye move from the end of one line to the beginning of the next line? How many words could he read in a minute? Did he comprehend what he read?

In the case of the child who could read nothing, the teacher tried to locate his interests, and to discover, by conversation, the extent of his spoken vocabulary. She kept in mind these following questions: Did the child seem to have a brain dominance of left or right side, or could he use one side as well as the other? Was he mentally able to learn to read? Did he ever write words in a mirrored position? When introduced to a word, did he read it reversed, or reverse any letters in it? Did he know how to attack a word that he did not know? How well equipped was he to sound out words? Did it seem necessary to use all sensory approaches to the brain in

learning new words? In addition to the above educational factors to be kept in mind, the teacher would expect to know about the physical factors which might contribute to his reading disability.

She would expect to find answers to the following questions: Does the child need to wear glasses? Is he under weight or undernourished? Does he get enough sleep? Is he excessively nervous? Has he been ill recently and what is his general health condition at present? Were the home conditions favorable to calmness or were there conditions in the home that would lead the child to be nervous, irritable, suspicious, etc? Were the parents helpful?

This educational and physical inventory would be followed by one on his attitudes. What was his attitude toward reading? What was his attitude toward the teacher and the school? What was his attitude toward his classmates?

These questions and answers were to be tabulated in order to provide a basis for remedial work. Such an analysis would be expected to locate the cause of reading disability, so that the proper remedial measure could be attempted.

Remedial Measures

The plan of procedure along the line of remedial measures was to build up the sight vocabulary of these slow and non-readers. Since the lack of a sight vocabulary is at the root of most of the reading difficulties, the teacher proceeded upon

the assumption that all the slow and non-readers in the third grade class would be benefited by an increased sight vocabulary, unless it was definitely shown that this was not the case. Since the needs of the slow readers were not exactly the same as the needs of the non-readers, these two groups were separated.

In the case of the non-readers who were not able to do even pre-primer reading, a small class in chart reading was organized. The material used was such that all the class could use the sense of smell, touch, sight or hearing in learning. Usually an object was used that dealt in some way with the social studies or science of the grade. For instance, when the social studies embraced the study of pioneers, such things as a copper powder flask, an old wooden yoke for oxen, a project which called for the making of a log cabin or some covered wagons, etc., were used as the basis for learning new words. In every case the teacher was careful to see that all these children had some sensory experience with the material to be used in reading.

After all the children had become interested in the reading material each contributed a sentence about it. These sentences were all put permanently on a chart and another chart was cut up into phrases to be matched with those on the chart. Later, separate words on the chart were matched and recalled. They were all made conscious of the beginning

letter of the words to be remembered and any of the phonetical elements that helped to sound the word. They were given drill on the sounds of the vowels, both long and short, and on the sounds of all the phonograms, as well as the sounds of the consonants. For instance, if it became evident that the class did not know the phonogram "or" the teacher would select a word which the children already knew, and which contained this phonogram, which is, let us say, "horn." In the study of pioneer life, it would be easy to connect the copper powder "flask" with a powder "horn." The children underline the phonogram "or" and say it aloud. They are encouraged to think of any other word which contains this same sound. Let us say that they suggest the word "for" and "morning." These are written on the board and the sound "or" underlined. Both words are pronounced in concert with the teacher. The children are then told to note that each one contains the same sound of "or" which will make them all sound a little alike. The reason they are different is the fact that they begin and end differently. The "f" and "m" and "h" are sounded separately, so that they may hear the difference. The words are written on a chart with the sound "or" at the top, so that they will get the idea that this phonogram will aid in the sounding of those words. These words are recalled often enough to make them a part of the vocabulary of the child. Such a procedure as the above is necessary because of the

fact that these non-readers must be given some way to recall the words which they are taught. If the work in class did not seem enough for the child, he was given extra help on these words by a better reader of the same grade. This assistance was given before school opened or at some period in the day when the good student could spare the time.

The vocabulary thus gained by the child was used in multiple choice tests, other chart material, simple questions and directions, in writing and spelling lessons, etc. As soon as their vocabulary warranted it, they were given very simple stories to read for pleasure, and the bright colored pre-primers, that they all loved. As soon as these children were started on the reading path, they were no longer called "non-readers" and could be classed with the slow readers of the grade.

Since the slow readers already knew some of the more simple words, it was not necessary to begin at the beginning, altho the same procedure was followed. The remedial measures consisted of first guessing from the context, and if that failed, in looking for some known little word in the larger word. Secondly it consisted in sounding the first letter and guessing the rest of the word, and lastly, in working the word out phonetically when all else failed.

Some attention was given at this point, to the faulty eye-movements which characterized most of these children.

A check-up by observation showed that they paused after almost every word, and many times retraced the eye-movement. Much of this was due to the fact that they did not know the word, or were not sure of it. Therefore the material used in improving the eye-movements consisted of words which they already had learned. Short phrases of three or four words were written on cards and the children told to look at them only once, and to see how much they could read. After some practice they became conscious of making as few eye-movements as possible. The phrases led to short sentences on the blackboard, and a sort of game evolved from this eye-movement work. They vied with each other in making fewer eye-movements.

Another remedial measure that combined pleasure with drill was a box of remedial seat work devices called "Projects in silent Reading Arranged for Individual Study," by James E. McDade. This box contained one hundred different puzzles, drills, games, etc. The children loved to work with the "puzzles" for several reasons: they were all different; an individual report card for each child showed the puzzles which he had worked and whether or not he had been successful with them and there was reading material there suitable for them all. The reading material of the seat work ranged from 1B to 4A reading levels, so that none of the class were left out. In a little booklet on "How to Conduct Individual Seat Work," James McDade has made some statements of the purpose

of this seat work that gives a very clear definition of that purpose. Those statements are as follows:--

A great variety of pieces of seatwork were devised, each consisting of a simple printed test telling the pupil what to do with certain materials provided. These tasks are of an interesting character in themselves, dealing with toy animals and Mother Goose stories, etc. Some require drawing or cutting, some deal with the assembling of pictures into interesting groups, etc., but all are alike in making it necessary for the pupil to read and to show by what he does that he has read comprehendingly. Where possible, reference material has been added in the shape of dictionaries, which make the child independent and enable him to deal with the new words without the teacher's help.

To teachers who have not tried silent reading seat work, it is a revelation to see the fascination for children that there is in such work. They have an outlet for their activities, reading comes as a real message to them, and unconsciously they get out of the habit of reading by words and read by ideas only. . . .

These projects are intended to place in the pupil's hands the means of teaching himself to read, and to give him the interest and stimulus that comes in keeping a record of his progress from day to day. If, in using these, he uses habits of self-direction and is aroused to independent efforts, he will proceed to the later sets with confidence and assurance of success.

Some of the names of the "puzzles" are given below:--

Vocabulary Study Cards	Clay Modeling
Color Names	Making Posters
Vocabulary Pairs	Study Assignments
Picture Phonics	"Period or Question Mark"
Cut-up Rhymes	Which Word Belongs
Cross Words for Beginners	Riddles
Split Sentences	Making Words
Nature Questions	The Right Class
Little Compositions	Out of Place
Phrase Exercises	The Kitchen Cabinet
Occupations	The Toy Shop
Construction in Paper	Noah's Ark
Stories and Questions	Problems in Manners

The Reason Why	Problems in Conduct
Cross-word Puzzles	Safety Problems
Paragraph Titles	Health Problems

This seat work is a great factor in bringing up the standards of reading for the whole class as well as those standards of the slower readers.

Another remedial measure that helped in this work was a "Diagnostic Workbook" published by the American Education Press which furnished drill on the common weaknesses in reading. Book II was given the slower readers and Book III was given the other children. Book II was called "Red Deer, the Indian Boy," and was chosen because of the fact that it was composed of material suitable for first and second grade readers, and also because it dealt with the subject of Indians, since this subject was a unit of study for the social studies of this grade. This little workbook dealt with the following skills:--

1. Ability to comprehend facts
2. Vocabulary development and word mastery
3. Ability to find the main ideas in a selection

Two hundred and eighty-eight different words were used repeatedly in this workbook.

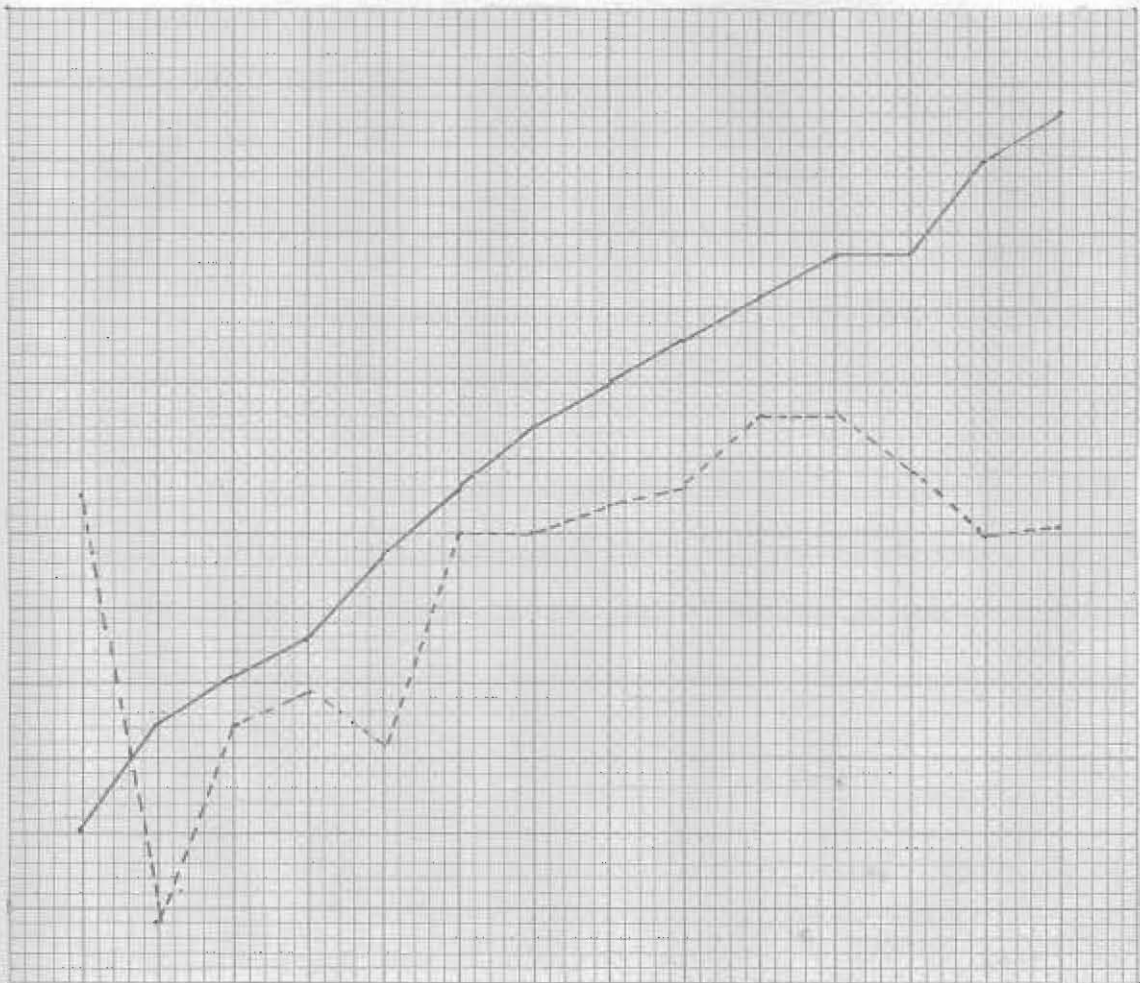
Still another remedial measure was the "Library Hour," which was held twice a week. A fairly good-sized library of materials suitable for pre-primer to fourth grade readers was placed in the back of the room. The children made their own library cards and took out such books as appealed to them,

and which they could read. The very slow readers were never permitted to take books that were definitely beyond them. They were not permitted to take the books out unless they were fairly sure that they wanted that particular book, and could read it. In this way no child was encouraged to take out a book, look at the pictures and put it back again without reading it. At the story hour held in connection with the "Library Hour," the children were permitted to tell the stories which they had read, or at least give the most interesting part of the story. Occasionally the class was divided into several groups which spread about the room, the members of which told their story to the rest of the group. In this way a great many children could tell their stories in the period, and a check-up of the slow readers could be made. Each child was given credit on a chart, for the stories which he had told and which he had read himself, and at the close of the term little awards of blue ribbons were given to the children who had reached a certain standard. The slower readers were put into a "Bluebird" group, so that they could compete with children of like ability, and would therefore not be left out of the awards in the end. This story hour was one which they all looked forward to, and in which they all wanted to participate.

The sixth method used in the remedial work was the "Pupil-teacher" method of help for the slow reader. (This help occurred in the morning before school, or at some time during

the day when the "pupil-teacher" had finished his own assignment and could help the slow reader with no loss to himself.) This help followed the particular need of the child.

In summarizing this chapter it may be said that the first steps taken were those of selecting the child who read poorly and the non-readers by means of standardized tests, and of obtaining their mental measurement in order to determine their capabilities. The second step was that of determining their individual difficulties by means of tests and observation. The third step was that of administering such remedial measures as (1) building up an oral vocabulary, (2) building up a sight vocabulary, (3) correcting bad habits of omitting letters and words, (4) correcting bad habits of substituting and inserting words or letters, and (5) forming new habits of attacking words. Effort was made to increase the eye-span of the slow readers, and to build up correct eye-movements. A conscious effort was made to make the remedial reading pleasant and profitable by means of individual reading games, drills, etc. A diagnostic workbook furnished drill for the common weaknesses and helped build vocabulary. The "Library Hour" furnished an opportunity for the pupil to display his reading ability as measured by his comprehension, since the child was expected to tell some story he had read. The physical and emotional factors that had a bearing on reading ability were studied and an effort made to correct such factors as could be corrected by the teacher and school.



a fairly good reasoning skill. At any rate, I coincided with the judgment of the writer and the previous teacher as to the mental abilities of the
 Otis Mental Test
 Haggerty Mental Test
 Intelligence test was not as valuable since it contained some

FIGURE No. 3. Comparison between scores made on Otis Mental Test (without reading material) and the Haggerty Mental Test (with reading material). as shown by these two group tests

in this, the writer thinks, to the part of the Haggerty score lost by the poor reader on the reading which was in this test. The straight line indicates the scores made on the Otis test.

TABLE I. MISTAKES MADE CHAPTER IV READING TEST II FORM 4, WITH PERCENTAGE OF IMPROVEMENT AFTER 5 MONTHS READING INSTRUCTION.

Paragraphs on #Questions	GATHERING AND INTERPRETING DATA					
	NARRATIVE		DESCRIPTION		SOCIAL SCIENCE	
	I	II	I	II	I	II
<p>This investigation began in the fall of 1936 with the children who were then 3B's. The chief experiment, however, was performed with the 3A class of the fall term of 1937. It is from the data gathered from this class that results will be shown first, to be followed by other data and results from other classes.</p>						

Question No. I was a relative question.
 Question No. II was a factual question.

Class Data

The mental equipment of this September, 1937, class was measured by the Otis and Haggerty Mental Group tests mentioned in the previous chapter. The Otis test proved to be a fairly good measuring stick. At any rate, it coincided with the judgment of the writer and the previous teacher as to the mental abilities of the class. The Haggerty Intelligence Test was not as valuable since it contained some reading matter which the poor readers could not attack. The difference in the I.Q.'s as shown by these two group tests is due, the writer thinks, to the part of the Haggerty score lost by the poor reader on the reading which was in this test. The straight line indicates the scores made on the Otis Test,

TABLE I. MISTAKES MADE ON DETROIT READING TEST II FORM A, WITH PERCENTAGE OF IMPROVEMENT AFTER 3 MONTHS REMEDIAL WORK.

Paragraphs on *Questions . .	NARRATION		DESCRIPTION		SOCIAL SCIENCE	
	I	II	I	II	I	II
Mistakes Oct. 12	12	8	16	17	16	16
Mistakes Jan. 7	7	5	17	10	7	8
Improvement in Jan. by per cents	** 58	62	** 0	52	** 43	50

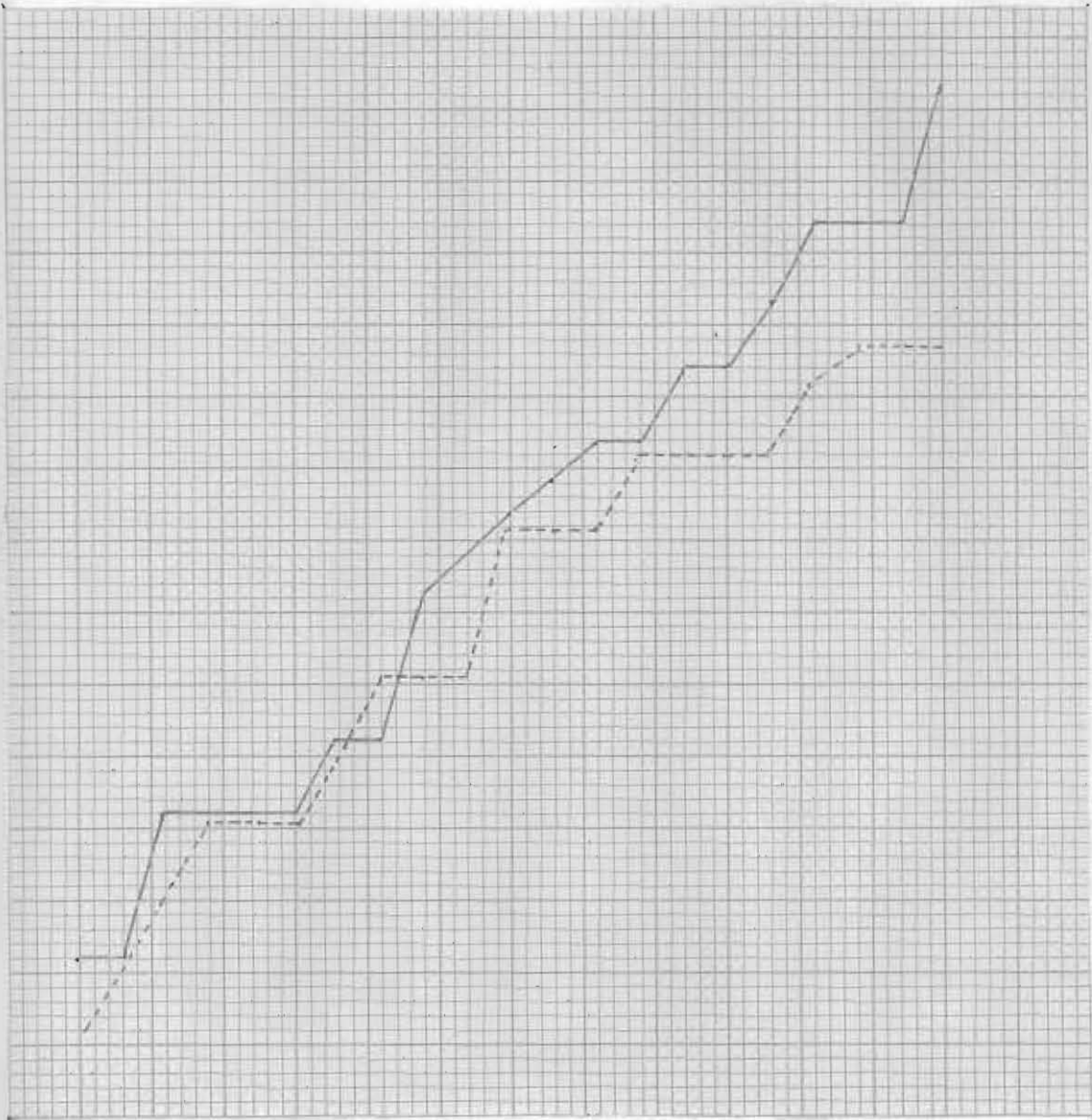
* Question No. I was an interpretive question.
Question No. II was a factual question.

** Per cent of improvement

and the dotted line indicates the score made by the same children on the Haggerty Test. (See Figure No. 3.)

The first reading test given to the September, 1937, class was the Monroe Standardized Silent Reading Test, Revised, Test I, Form I. (See Figure No. 2.) This Monroe Test measured the speed as well as the comprehension in reading, but on this diagram only the comprehension are shown. It will be noted that the abilities range from zero to grade nine, as measured by this test. The same disparity will be noted in Figure No. 1, which gives the measurement of the September class of 1936. Both classes are, however, a fair example of the extremes in reading ability found in third grade classes, as well as those classes above the third. It is quite obvious that all these children of the third grade could not comply with the third grade standards of reading. It is also natural to suppose the inevitable outcome. The children at the top of the reading abilities were bored with the reading of the other children, and the slow and non-readers at the bottom of the reading abilities found the third grade reading impossible. This test was valuable in that it helped the teacher check on those children who were slow in comprehension and speed.

In the early part of October, 1937, the same class was given the Detroit Reading Test II Form A, mentioned in the preceding chapter. This test was given in order to diagnose

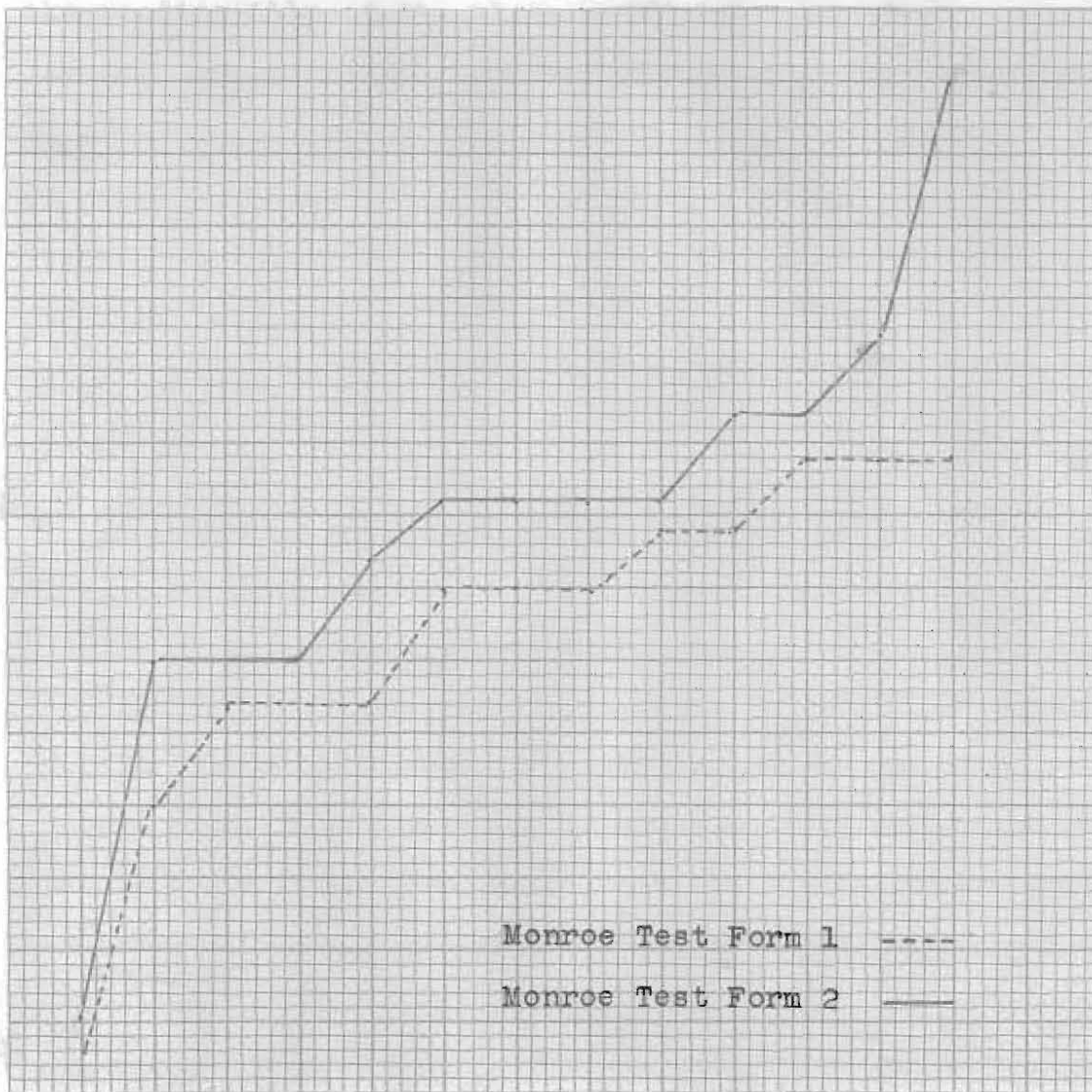


3A's Jan. 1938 ———

3A's Sept. 1937 - - - -

FIGURE NO. 4. Two comprehension curves compared.

FIGURE NO. 5. Two curves showing rate of speed in reading,
as measured by Monroe Test.



first test in September, by constant. Because of this fact
 a separate measurement of their improvement could be given
 3A's Jan. 1938 ——
 3A's Sept. 1937 ----
 but their measurement will be shown individually.

FIGURE NO. 5. Two curves showing rate of speed in reading,
 as measured by Monroe Test.

measured in comprehension during the five months period
 of regular work. The better readers made more improvement
 than the slower readers, but it must be remembered that

the reading ills of the class as a whole and of the poor readers in particular. The results of this test are compared with those of the same class given three months later in January, 1938, after the remedial work had been done. The results of these tests are shown in Table I. Questions No. I are interpretative and No. II are factual. The descriptive paragraphs were the most difficult for the children who were slow readers. When an interpretive question was asked about the descriptive paragraph, the difficulty was increased, with the result that the slow readers made more mistakes. Their reading ability, even after being raised, had not reached the level required for reading descriptive material and giving correct interpretive answers. (See Table I, page 47).

On January 5, 1938, the second Monroe Silent Reading Test I Form II was given this class, to determine how much improvement in comprehension and speed had been made in the five months of remedial work. The three very slowest cases have been omitted since they disqualified themselves on the first test in September, by cheating. Because of this fact no accurate measurement of their improvement could be given here, but their measurement will be shown individually. Figure No. 4 gives a general idea of the amount of class improvement in comprehension during the five months period of remedial work. The better readers made more improvement than the slower readers, but it must be remembered that

these better readers had no poor reading habits to overcome, and that they were not struggling with vocabulary. The strides made by the slower readers will be shown under

"Individual improvement."

Diagram No. 5 shows the improvement in speed. The continuous line shows the speed as measured in January, while the dotted line shows the speed as measured in September.

It will be seen that in both rate of speed and in comprehension, as measured by the Monroe Test, the remedial measures were successful in bringing about a class improvement as follows:--

Speed: Norm--82 words per minute; Sept. Median 99; Jan. Med. 117

Comp: Norm--3.8 paragraphs ; Sept. Median 5; Jan. Med. 6

TABLE II. RETARDATION IN YEARS AND MONTHS OF SLOW AND NON-READERS, AS SHOWN BY HAGGERTY READING EX. SIGMA I.

Name	Otis I. Q.	Chron. Age	Reading Age Yrs. Mo.	Retarded Yrs. Mo.
George H.	108	* 10.6	* 9.4	* 1.2
Lillian G.	112	9.5	8.7	.10
Whitful O.	83	10.10	6.6	4.4
Charles W.	106	9.2	0.0	3.2
Daniel B.	81	11.5	8.1	3.4
Frances V.	88	9.4	0	3.4
Mary C.	96	8.7	0	2.7
Billy I.	104	8.11	0	2.11

* 10.6 means ten years and six months.

tabulated from time to Individual Data

In November, 1936, the 3B class was given the Haggerty Reading Examination, Sigma 1. More than the five children described in Table II fell into the slow and non-reader group, but as all except these five moved out of the district before the Haggerty Reading Examination was given again in May, 1937, no accurate measurement of their progress could be tabulated. The data obtained from the testing of these children in November shows them to be definitely slow readers. The observations of their previous teachers bore out this idea also.

In March, 1937, three other children were given the Haggerty Reading Examination, Sigma 1, to establish the fact that they were non-readers. The last three children were 3B's at the time, and were included in the class experiment the following September, 1937. Since the Haggerty Reading Examination gives the reading age of the child in years and months, the amount of retardation can be figured by subtracting the reading age from the actual age. The column at the right on Table II shows the retardation in years and months. (See Table II, page 52).

Observations of reading maladjustments, such as scanty sight vocabulary, inability to attack new words, poor eye-movements, reversals of letters in words, substitution and omission of letters and words, repetitions, etc., were made on all these poor and non-readers, and the observations

tabulated from time to time. Observations as to emotional reaction to reading, physical condition, and home conditions influencing reading were also made and tabulated. A number of different tests were given these children. The results of these observations and tests will be summarized in the case of each of these children under the heading of "case studies."

Case Study No. 1.--George H. Observation showed that George's chief trouble was that of a limited vocabulary. His eye-movements were poor and his attack of words he did not know was faulty. In searching for the cause of his disability, a mental test was given to learn whether or not he was doing as much as his capacity permitted. The Haggerty mental test showed him to be a little above normal. His I.Q. on the Otis Test was one hundred and ten. This cause, therefore, was eliminated. It was found that he had been ill with a throat ailment while in the second grade, and had lost several weeks of school. Although at the time he was in the third grade, he was seldom absent, he still was not robust looking. He was quite tall for his age and a little shy, probably because of his height. He was cheerful and happy and anxious to please. He did not dislike reading, although he was retarded more than a year in the subject. The father was a W.P.A. worker and the home poor but clean. The mother was anxious to help him and did, whenever possible.

1937. With the above facts in mind the author set about building up George's vocabulary. This was done by giving him material to read that was on the first grade level. He kept a list of new words learned in social studies and used them in writing little stories and in oral reports. He was drilled on making fewer eye-movements, as were all the class. Drill on the way to attack a new word (by guessing, looking at first or first and second letters, sounding by means of vowels, consonants and phonograms) was given him, as well as the class. He completed the diagnostic workbook mentioned in chapter three, and worked most of the "puzzles." His interest in reading grew with his ability, until in the last half of the 4B grade (September to January) he ranked second in the class as to the number of social studies reports which he had done. These reports were the result of silent reading. According to the Haggerty Reading Examination given George during his third grade term (one in November, 1936 and another six months later in May, 1937), he had risen from the reading age of 9.4 to that of 10.2 or of the equivalent of ten months in that time.

Continued remedial work with this boy in the 4B grade gave the following results, which will be given here to show that, in one and one-half years, he was brought from a poor reader to one who could surpass the standards for his grade. George was given the Monroe Silent Reading Test in September,

1937, and again in January, 1938. The standard for speed on this test for the fourth grade was one hundred and twenty-two words per minute. George read in September at the rate of ninety-nine words per minute, and in January at the rate of one hundred and sixteen. This shows him to be a little below the standard for speed, but he more than made up for this in comprehension. The standard for comprehension on this test for 4B's is 7.7. In September George's score was five, and in January it moved up to nine. When he left the author's room in January to take his place in the intermediate department, he was quite as good a reader as any of the best in his grade, with the exception of his speed, which would no doubt improve as he read. The remedial work was a definite aid to George.

Case Study No. 2.--Lillian G. The Haggerty Reading Examination showed Lillian to be ten months, or nearly a year, below the standard for the third grade. (Test in November, 1936.) A mental test showed that she had an I.Q. of one hundred and twelve, which put her above normal for intelligence. Her inability to read was evidently not due to mental incapacity. An analysis of her difficulties (by observation) showed her trouble to be chiefly insufficient vocabulary, and inability to help herself with new words. The cause, however, of Lillian's poor reading ability, was easily located. Her trouble was physical, aggravated by emotional disturbances

at home. there was not much to do to relieve the situation

She was a very nervous, emotional child, wiggling around in her seat, talking in a high-pitched nervous voice, losing her temper easily, crying often, etc. She was very often inattentive, dawdled over her assignments, never finishing them on time and often crying when she was told to get them completed. Evidence of an emotional disturbance at home, however, was not apparent until November of 1937. At this time Lillian told the author that daddy had left home and that mother had gone after him in Louisville; that mother was so worried and this made her (Lillian) feel badly. She took the troubles and cares of her family very seriously. A few days later she was sent to take her little sister home because the child had fallen in a mud puddle and gotten her clothes wet. When Lillian returned she was most excited and sat in her seat with her face twisted with suppressed tears. A chance remark of surprise from another child as to her facial expression opened the floodgates of Lillian's tears and she wailed, "No wonder! Last night my mother tried to commit suicide, my father is gone, and now my sister gets her new dress all muddy, and mother will whip her when she comes home tonight for running." (The mother worked and a housekeeper took care of the two children during the day.) Since it was evidently Lillian's nature to take life seriously, and to worry over things that could not be prevented

by her, there was not much to do to relieve the situation except to provide her with a sympathetic understanding of her problem, make her life at school as happy and calm as possible, and bring all her successes out into view. Although no amount of calmness in school could erase the emotional disturbances at home, she did benefit by the attempt to make her happier and more cheerful. In order to show that these emotional disturbances were caused by the trouble at home, a result of Lillian's achievement in the Monroe Silent Reading Test given in September, 1937, and another form in January, 1938, will be given. Lillian was a 4B at this time. In September, 1937, her test showed a speed of eighty-six words a minute (standard one hundred and twenty-two) while in January the second form showed her to read at the rate of seventy words per minute. Instead of improving, she had gone down. Her comprehension, as measured by the September test was five (paragraphs read correctly in four minutes) while the second form of the same test showed her comprehension in January to be only four.

The year before, when there was not as much contention at home, Lillian showed an improvement of six months in reading age. The Haggerty Reading age for Lillian was 8.5 in November and 8.11 in May. If, therefore, she was able to show a reasonable amount of improvement during her third grade term, but fell down instead of improving during her

4B term, it is likely that the distractions and emotional disturbances at home were responsible for it.

Case Study No. 3. Whitful O. This child was definitely dull. The Otis Mental Test gave his I.Q. as eighty-three. The Haggerty Reading Examination given him in November, 1936, showed him to have a reading age of 6.6 although he was 10.10 years old chronologically. This would give him a retardation of four years four months. The author learned by observation, that his chief trouble was a lack of oral and sight vocabulary, that his method of attacking new words was extremely poor, that his eye-movements were marked by regressions and the pauses much too numerous. Physically, he was a perfect specimen. His mother was very desirous of helping him, as was his younger sister who was one term ahead of him.

The cause of this child's inability to read was primarily his low mentality, coupled with the fact that he had been started in reading long before he was able to grasp it. In November, 1936, when this experiment was started, he was still a non-reader, although he had been exposed to the reading methods of teaching normal children for four years. Since however, he was not normal as far as mentality was concerned, it is easy to see that he could not learn to read by those methods. Furthermore, he had had so many unhappy experiences with reading, and had formed so many poor habits and attitudes in connection with it, that the problem of bringing about an

improvement in his reading ability was indeed a hard one. The author concluded, after examining the evidence, that the best way to teach Whitful to read was by the "experience" method, wherein he could use all the senses as approaches to the brain. (See "remedial measures" Chapter 3.) As soon as he had mastered some of the vocabulary of the pre-primers and primers, he was allowed to take home some of these little books to read to his mother and sister. He was assigned to a little "pupil-teacher" who helped him on vocabulary and oral reading. His interest in reading began to take shape when he found that he really could read some of these little books, and could work some of the "puzzles." He was given some drill in class on lengthening eye-span, but his lack of vocabulary curtailed the possibility of much improvement along this line.

Whitful's reading age in November, 1936, was 6.6 and when he took the test again in May, 1937, his reading age was 7.0, showing a gain of six months reading age in six months actual time in school. In January, 1938, he was given the Master Achievement Test No. 2, designed for second grade accomplishments, and he scored 2.3, or reading ability that falls into the second grade. It will be noted that while in November, 1936, he scored less than first grade ability that one year and two months later in January, 1938, his reading ability was slightly above second grade. It must be

remembered that, while his reading ability had been brought up to this point he was still retarded two years in reading in January, 1938, when he entered the 4A grade. In conclusion, the author wishes to say that Whitful's case is one of those wherein the child's retarded mentality was not taken into consideration when he was started in reading. The result was that he had acquired a dislike for the subject as well as many poor reading habits, which only a new approach through the senses, coupled with successes along the line of primary reading, could overcome. ~~did not disappear altogether.~~

Case Study No. 4. -- Charles W. The Otis Test showed Charles to have an I.Q. of one hundred and six, so that he fell into the normal group as far as mental ability was concerned. However, in reading, he was retarded three years and two months, according to the Haggerty Reading Examination given in November, 1936. Charles was weak in oral and sight vocabulary, did not know how to attack words which he did not know, had poor eye-movements and an intense dislike for reading. Physically he was normal. He gave every evidence of being "spoiled" at home, however. He and his sister lived with his grandparents and uncles. The mother had been separated from the father and neither came to see the children or contributed to their welfare or support. Two of the uncles were of the extremely dull or moron type. No information could be obtained as to the mentality of the father or the

grandparents. Charles had tantrums in the second grade whenever he was asked to do something which he did not like to do. He did not like to work out any problem that required some sustained effort, although he was capable of doing it. When it became plain to him, that he was not to be excused from doing the task set out for him to do, he would finish it alone and unaided. This was especially true of his arithmetic preparations. His tantrums did not appear in the third grade, although his efforts to slip out of doing tasks that he did not wish to do, did not disappear altogether. These efforts grew perceptibly less, however, as he advanced. His grades in spelling were very low, unless he studied the words by saying them aloud, and writing them out several times. After this study, however, he would be able to make a perfect score. The author concluded that his difficulty in reading might be overcome by the assistance of kinaesthetic aids, wherein he used the hand, ear, eye and voice in learning words. He was put into the class with the non-readers, and given some extra kinaesthetic help. He was assigned to a "pupil-teacher" and given some pre-primer books, whose bright pages interested him immensely. It took longer to gain his cooperation and interest than it did some of the others but eventually efforts in interesting him were successful and this interest was sustained as long as he did not attempt to read third or fourth grade reading material.

This child is an example of one whose previous reading failures had made him take an "aggressive opposition"¹ to reading. He liked to be successful and reading was a subject that thwarted him. As soon as he was able to become successful in this subject, he overcame his dislike for it, but this dislike became evident whenever he found himself in the position of trying to read something which he could not understand. This fact was brought out in the reading abilities which he showed in the second and then in the third grade reading tests. The Haggerty Reading Examination taken in November, 1936, and again in May, 1937, was composed of reading material of grades one to three. Charles was a non-reader in November and tested 6.7 in May, 1937. The gain in reading age in six school months was .7 or seven months on the reading-age scale.

The Monroe Silent Reading Test was given to Charles in September, 1937, and again in January, 1938 (second form), but since this was a test composed of reading material for the third to the fifth grade, it was so far beyond Charles' vocabulary, that he did not try it, and his score was zero for both tests.

He took the Master Achievement Test for Grade Two in January, 1938, cheerfully and scored a reading ability of 2.2 or, second year reading. In concluding the summary of the observation and tests of this child, it may be said that his past failures had so effected his attitude towards

¹Monroe and Backus, Remedial Reading. Boston: Houghton Mifflin Co., 1937. P. 8.

reading, that this attitude, (coupled with the fact that he had been given his way at home to too great a degree), was one of intense dislike for reading and all related subjects; that this attitude gradually disappeared when he found that he could be successful in simple reading. He showed a gain in reading ability, as measured by the Haggerty and Master Achievement Tests, of more than two years in one year and two months of actual school time. The remedial measures (building oral and sight vocabulary by kinaesthetic and other means, etc.) were definitely successful with this child. If these remedial measures could have been begun sooner, or if he had been started later in his reading career (given reading-readiness tests, and the results followed), it is likely that his attitude of dislike for reading might have been averted. As the condition now stands, he has gained two years of reading ability in one school year, but he is still two years below the standard for the 4A grade, and it is likely that this dislike will return when his second grade reading ability is expected to do fourth grade work. One more year of intensive remedial work would probably have brought him up with the standards for his class. His case shows clearly that one year of remedial work cannot be expected to eradicate the reading mistakes of the first two and one-half or three years of school.

Case Study No. 5. --Daniel B. The Table II shows Daniel

to be retarded three years and four months. The Otis Mental Test gave his I.Q. as eighty-one. He appeared to be as intelligent, however, as most of the other children, and this will not be surprising when it is seen that his chronological age is two years above most of the others. His disabilities appeared to be, by observation, a poor sight vocabulary, inadequate method of attacking new words and eye-movements marked by regressions and too many eye pauses. Physically he was small for his age, but had no particular physical disadvantages under which to work except a slight speech defect. He came from a poor home where he lived with his father, a step-mother and five brothers. No great interest was shown by his parents in his successes or failures. His first two years of schooling had been obtained in Kentucky, and had been marked by absences and repetition. He was of a cheerful and happy disposition, and had no particular dislike for reading. Since the Haggerty Reading Examination revealed his reading ability to be about second grade level, it was not necessary for him to join the class in chart reading by the "experience" method. It was thought best to raise his vocabulary level by giving him books to read that were definitely on his level. He was urged to tell his stories during the "Library Hour" period and he was given one of the second year level diagnostic workbooks. He was very much interested in the "puzzles." In September, 1937, he was given the Monroe

Silent Reading Test and again in January. The standard for speed was one hundred and twenty-two words per minute, and his September score was eighty-one. However, he was able to slightly surpass the standard in January, scoring one hundred and twenty-five. The comprehension standard for this test was 7.7, or better than seven paragraphs read in the four minutes of the testing time. His score in September was 7.0 and in January it was 9.0, which brought him past the standard. In summarizing his accomplishments it may be said that he had, through the remedial work of one year and two months, raised his standard of reading more than two years, and in so doing, brought his reading ability up to the standard for his grade. It can be said that the remedial reading had, in his case, made a normal reader out of a poor one.

Case Study No. 6. --Frances V. The Otis Intelligence Test showed Frances to be a dull child as to intelligence. Her previous teacher had thought her too dull and irresponsible to succeed in reading. The Haggerty Reading Examination given her in March, 1937, gave her reading age as below six, or of no measurable reading ability. At that time, she was retarded three years and four months. It was thought best to begin at the beginning with Frances, since her sight vocabulary was so meager. Her physical development was normal, and although she had an eye defect, it was taken care of by glasses.

She had not been ill at any long period during her previous school history. It seemed that the underlying cause for her reading disabilities was the fact that Frances had been started in reading before she was mentally ready for it. Like Charles W. she had experienced so many unpleasant situations in connection with reading, that she had taken a dislike to it and to all that pertained to school, so that it had warped her personality. She had a good home and good care (Frances was an adopted child) and was not "spoiled" at home, but she was unable to get along with the other children. She picked quarrels with them and was vindictive and spiteful. She was also given to falsifying when the occasion gave her the opportunity. It is quite possible that these unhappy traits may have been brought about by the fact that she could not succeed in reading. To quote from Monroe and Backus²--

The child takes an aggressive opposition to the subject or person who has thwarted him. We find many poor readers who "hate" reading, "hate" the teacher and "hate" school. In extreme cases this aggressive opposition may be applied not only to school, but also to social customs, laws and traditions; school becoming identified with society in general. Children brought into Juvenile Court for delinquent behavior are largely drawn from school failures. Reading disabilities contribute attitudes in many cases which result in anti-social and delinquent behavior.

The behavior of Frances, especially at first, was distinctly anti-social. However, after she had been given

² Ibid., p. 8.

"pupil-teacher" help in the "experience" reading class, graduated to the diagnostic workbook and "puzzles," read a number of pre-primers, primers and first readers her dislike for reading evaporated, and her attitude improved. She is, at this writing, reading a continued story to the class every morning and is doing it because she wants to. It is read well.

Here follows the record of Frances as shown by tests:

Haggerty Reading Test March, 1937, Reading age--Below 6.

Haggerty Reading Test Oct., 1937, Reading age 7.1

Gain shown in five school months 1.1

Master Achievement Test (2d grade) Jan. 1938, Reading Grade 2.0

The Monroe Silent Reading Test was given her but it was too hard for her, and she copied the answers from the other children. A detailed report of the results of the Monroe Test with regard to Frances will follow the last case study.

Case Study No. 7. --Mary C. Mary had an I.Q. of ninety-six according to the Otis mental measurement. The Haggerty Reading Examination given her in March, 1937, showed her to be retarded 2.7 years. It was decided to treat her case in the same way that Frances' was to be treated. She was to begin at the beginning and remain in the "experience" method class until she had gained a sight vocabulary and some good habits of attacking new words, etc. Her physical condition was good, but her home life was not. She was the only

member of her family, with the exception of her father, who did not have an eye defect. These defects evidently were inherited from the mother who was nearly blind. The home was poor, the children dirty and the mother ill most of the time.

Mary was a puzzle to her teachers. At times she showed considerable signs of intelligence, but at other times she showed very little indeed. One of her previous teachers classed her as too dull to teach, and another said that she was intelligent enough, but too mean and lazy. Mary's attitude also was anti-social. She would quarrel with the children, do spiteful things to them, etc. The author decided that the cause of Mary's maladjustment in reading was about the same as Frances'; that is, she was started along the path of reading long before she was ready for it, and that this start had brought about the poor attitudes toward reading and classmates. This attitude was strengthened by poor home conditions.

The tests gave Mary's reading achievements as follows:--

Haggerty Reading Age in March, 1937 0

Haggerty Reading Age in October, 1937-- 6 years 3 months

Master Achievements Test in January --Grade 1.8

Gain in 8 school months 8 reading months

This gain is not what could have been hoped for, but when it is considered that she had shown no improvement at all during the first three years at school, this gain is not inconsiderable.

Case Study No. 8.--Billy I. Billy had an I.Q. of one hundred and four and was retarded two years and eleven months according to the Haggerty Reading Examination. His score on this test was zero. That is to say, he showed no reading ability. Billy was thought by his previous teachers to be extremely slow. On the Henmon-Nelson Intelligence Test given to the 4B's in February, 1938, his score was only 88. Since this test was a reading test, this is not to be taken seriously. Physically he was all right with an exception of a slight speech difficulty. Billy's home life was tempestuous. He had eight lively brothers who were disorderly and quarrelsome at home. This disturbance, no doubt, had some effect upon Billy's outlook on life in general. He was a stolid, quiet child with an air of apathy and hopelessness that was probably induced by his school failures in reading and his life at home. The past year has been a sad one for Billy. His mother was ill much of the time, one of his infant twin sisters died in September, and in December his mother died also. The older brothers took over the house-keeping with what meager ability they had along that line, and Billy has been faring as best he could since that time. Billy's father is trying, at this writing, to get the three younger boys into the Masonic Orphans Home.

Billy's case was treated in the same way as was the

TABLE III. SCORE MADE ON MONROE STANDARDIZED SILENT READING TEST SHOWING HOW CHEATING AND CARELESSNESS AFFECTED THE SCORES.
FORM 1 - DISHONEST SCORE FORM 2 - HONEST SCORE

Name ¹	TEST 1 FORM 1		TEST 1 FORM 2	
	Speed	Comprehension	Speed	Comprehension
Frances V.	206	6	72	2
Mary C.	96	3	44	1
Billy I.	99	6	70	3

¹The first two children cheated by copying the answers from their neighbors, but the third child carelessly guessed at the answers without reading the selection.

case of Frances and Mary, so it will not be necessary to go into detail here. They were all three classed as non-readers and put into the "experience" or chart reading class. The following tests give a concrete measurement of Billy's progress:--

Haggerty Reading Test March, 1937, Reading age--	Below 6.
Haggerty Reading Test Oct., 1937, Reading age	7.4
Gain in Reading age during five school months-1 yr. 4 mo.	
Master Achievement Test No. 2 January, 1938--Grade	2.3
Gain in reading March, 1937-Jan. 1938 (8 mo) 0 to grade	2.3

Of the three non-readers in this third grade class tested in March, 1937, Billy has shown the greatest improvement. This, however, is to be expected in view of the fact that he had a greater mental equipment than either Mary C. or Frances V.

At this point it would be well to give the data gathered on cheating vs. poor reading ability. The previously mentioned three children, namely, Frances V., Mary C. and Billy I., gave evidence of trying to achieve success during the Monroe Silent Reading Test by unfair means. The occasion of this evidence was the first Monroe Test in September, 1937. Since none of these children were third grade readers, it was not expected that they should score very high on this test, since it was a test for grades three to five. However, it would have been possible for Frances and Billy to have read part of it intelligently. The author noted, at the beginning of the test, that Frances and Mary immediately

began to look slyly over their papers to those of their neighbors, and to copy what they could see, making no pretense of reading. Billy did not look at his neighbor's paper, but went through the test without attempting to read it, underscoring any word that struck his fancy.

They were not disturbed for the duration of the test, and the result of this September test compared with the result of the January, 1938, Monroe Test, wherein they were not permitted to look at any paper except their own, and wherein Billy was urged to read carefully. (See Table III). Their scores in both speed and comprehension fell considerable. This second Monroe Silent Reading Test agreed with the Master Achievement Test given at the same time.

These cases have been given to show that past failures in reading have a tendency to bring about habits of cheating and carelessness, and develop the wrong attitude toward the accomplishment of a problem. If they could have been successful in very simple reading at an earlier period in their school career, and could have been praised for honest accomplishment, it is not likely that such anti-social habits would have appeared.

In summarizing this chapter on "Gathering and Interpreting Data," it may be said that the data was gathered in two different ways, i.e. by standardized tests and by observation of the individual's daily performance. Analysis of reading

difficulties was made on the basis of the information gathered by these two methods. Physical factors, such as

TABLE IV. GAIN IN READING ABILITY OF CHILDREN MENTIONED IN CASE STUDIES AS MEASURED BY STANDARDIZED TEST.*

to the reading disability. Standard measurements were presented to show that the remedial measures

Name	School Months Taken for Remedial Work	Gain in Reading Ability in Years-Months
		**
George H. in Chapter	12	2.4
Lillian G.	6	.6
Whitful O. shown by the	12	1.9
Charles W.	12	2.2
Daniel B. standardized	12	2.1
Frances V.	10	2.0
Mary C. Achievement Test	10	1.8
Billy I.	10	2.3

*Master Achievement Test.

**2.4 means two years and four months.

difficulties was made on the basis of the information gathered by these two methods. Physical factors, emotional factors and the home were considered in relation to the reading disability. Standard measurements were presented to show that the remedial measures used were effective. These measurements were shown as class and individual.

In conclusion the author wishes to summarize briefly the preceding chapters, to follow this with the resulting conclusions and recommendations, and conclude with a suggestion for further study.

Monroe Standardized Silent Reading Test Revised, and the Master Achievement Test No. 2 is shown in Table IV.

CHAPTER V

CONCLUSION

In conclusion the author wishes to summarize briefly the preceding chapters, to follow this with the resulting conclusions and recommendations, and conclude with a suggestion for further study.

In chapter I the reason for this study has been given, and may be briefly stated as follows: Although it is generally assumed by the makers of the curriculum, that all third grade children have mastered the mechanics of reading and are ready to demonstrate all the reading skills needed in the intermediate grades, this is not the case. As a matter of fact, more than 25 per cent of these third grade children are incapable of doing even third grade reading (see Figures 1 and 2). The writer has classed this lower 25 per cent as "poor readers" (those children who can read first or second grade material) and as "non-readers," (those children who can not read first grade material). As a result of these reading discrepancies within a grade, numerous other conditions arise. Some of these may be catalogued as follows: the development of

an inferiority complex due to the fact that the child has never been successful in reading; development of cheating, lying and bluffing attitudes, to cover up his reading deficiency; development of an attitude of indifference or dislike for the subject of reading; development of intense dislike for the school, the teacher and the other students. It is believed that many of these undesirable attitudes and habits may be eliminated by the third grade teacher if she will begin with the child, at a point where he can be successful in reading, and build up from this point, as many of the reading abilities as it is possible for the child to grasp. The problem involved may be stated as follows: can the classroom teacher of forty-two children provide suitable remedial work for the non-reader and the slow reader, so that they may make reasonable progress in reading?

It is contended that it is necessary for the teacher to be familiar with other studies which have been made in reading, in order that she may know the acceptable reading standards, and the most desirable remedial measures used by other teachers and educators. A discussion of these studies are presented in chapter II. Briefly, these studies may be classed as (1) those which involve the use of the eye in reading (eye-movements); (2) those concerning the problem of inner speech and lip-reading; (3) those involving the three stages of reading, (preparatory, initial and rapid

reading stage); (4) those concerned with the causes of reading difficulties; and (5) those relating to remedial measures.

A knowledge of the studies made in eye-movements will aid the teacher in establishing the correct rhythmic eye-movements, and in realizing the amount of muscular activity and resulting fatigue involved in moving the eye across the page. A knowledge of the inseparable association of sight and sound of words helps the teacher to know that inner speech results in "lip-reading" and is natural. The reading of a selection without vocalization is an acquired art and must be taught. Rapid reading may be brought about by the teaching of large units (such as sentences or phrases) in the beginning, in order to cultivate longer eye-sweeps.

These other studies in reading result in a knowledge of the causes in reading difficulties. One of the less common causes is that of reversed mental images. This condition is found when both sides of the brain exert the same amount of dominance over the body, causing the child to see a word correctly one time, and in a reversed position at another time. (Example--saw-was.) Another unusual cause of reading difficulties is "word-blindness, caused by an injury to one side of the brain, and "motor-mindedness," wherein the child must be taught to read by the kinaesthetic method.

Some of the more common causes of reading difficulties noted in this study are as follows: poor eye-sight, poor

hearing, defective speech; emotional disturbances such as disappointment at failure in reading, or a fear of the teacher or principal; too much absence from school the first year; reading-readiness not considered in starting the child in reading; mental retardation.

The remedial measures include, first, the securing of an enthusiastic interest in reading by means of small successes, games and contests, visual aids, etc., and secondly, the developing of efficient reading habits. This may be done by the child's increasing sight vocabulary, by teaching him to notice the similarities and differences between words, and by recognizing the word by its use in the context, etc. If the child does not respond to any of the above measures, then the vowel and consonant sounds must be taught, together with the phonetic elements of the words.

The plan of procedure used in this study included the use of the Haggerty and Otis Group Intelligence Tests, to determine the child's mental capacity for learning. These mental tests were followed by the Monroe Standardized Silent Reading Test No. 1, Form 1, Detroit Reading Test I and Haggerty Reading Examination Sigma 1, in order to find the reading achievement of the child. To supplement these tests the writer followed Betts's suggestions in observation, noting the educational, physical and social factors that might influence the child's reading ability. These tests and

observations were followed by remedial measures. The poor readers were separated from the non-readers. The non-readers were organized into a chart-reading class, who had a sensory experience for all sentences made and words learned. Phonograms, vowels, consonants were presented and blendings introduced wherever it became evident that the child needed this as a tool in attacking words. The slow readers were given somewhat the same help with the exception of the chart material, which was unnecessary since they already knew the more simple words. Faulty eye-movements were checked upon and class instruction given to lengthen the eye span. Games and puzzles, to improve the comprehension of these readers, were provided in a box of one hundred different selections for drill called "Projects in Silent Reading Arranged for Individual Study," by James E. McDade. A "Diagnostic Workbook," published by the American Education Press, furnished drill on the common weaknesses in reading. A "Library Hour" held twice a week, during which the children told the class about the most interesting story or book that they had read, was another means of stimulating an interest in reading. An individual record was made for both the "Projects in Silent Reading," and "Library Hour," so that the child could see his progress. Another method used successfully in this remedial work was that of the "pupil-teacher." A more advanced student of the third grade helped the slow and non-reader,

before school or during some spare time. After having been given this remedial help according to their individual needs, the children were tested in reading again. Some were tested with the Haggerty Reading Examination, others with the Monroe Standardized Silent Reading Test 1, Form 2 and the Master Achievement Test II, in order to determine the amount of improvement which had been made.

In gathering and interpreting the data the following items which have a decided bearing on the subject of reading difficulties in the third grade were noted. The first item is that of the varying abilities of third grade readers. These abilities range from zero to sixth grade. In a few isolated cases the third grade child may have a reading ability that goes beyond the sixth grade (see Figures 1 and 2). This condition is deplorable, but inevitable under our present system of teaching reading to all children entering the 1B grade.

The second item to be brought out is that a group test of intelligence which includes any reading, is not a fair mental test for the poor reader. An individual mental measurement is best, but in the event that it is impossible to give this sort of test, the next best thing to do is to secure a test which does not measure intelligence by reading.

The third item is that emotional upsets which have been induced by reading disability, may be eliminated by reducing

the reading disability, (See Case Studies No. 4 and No. 6) and that reading disability that has been brought about by emotional upsets will not improve until that emotional upset is removed. (See Case Study No. 2.).

The fourth item to be emphasized is that of interest. Interest may be brought about by simple successes in the reading field, where nothing but failures had been experienced hitherto, and that interest sustained by reading games, "puzzles," numerous books on the reading level of the slow reader, "story-hour" accomplishments, etc.

The fifth item is that intense remedial work will bring up the reading level of the entire class (see Table I and Figures 4 and 5) and will especially bring about an appreciable improvement of the poorest readers of that class. (See Table IV, page 74).

The sixth item brought out in this study is an answer to the problem of how much can the ordinary classroom teacher raise the reading levels of the slow and non-readers. Table IV proves that the ordinary classroom teacher can raise the reading levels of the slow and non-readers appreciably.

The recommendations are as follows: First, arrange special remedial classes for these slow and non-readers, that will be held at least five hours a week, or more if possible, wherein this child with reading difficulties may be individually diagnosed, and assisted by a remedial reading teacher.

The child should not be held for all the minimum essentials of the curriculum, but should be free to give most of his time to the overcoming of his reading difficulties, until such time as he should be able to resume his place in his class unhampered by the fact that his reading ability was several grades below his actual grade.

Second, supply him with plenty of bright new books on his reading level. Old worn books, however valuable, do not have the same appeal to the child as a new book.

Third, provide, (through the P.T.A. if the parents are not able or enough interested to buy them) a variety of work-books along the diagnostic level, so that as soon as it is proven that a child has mastered a certain difficulty he can be supplied with other corrective work.

The suggestions for further study are as follows:--A slow or non-reader may profit by the remedial program of the ordinary classroom teacher of forty-two children, but it is recommended that he be given more individual attention and freedom from other classroom subjects until he has corrected his reading difficulties. In view of these facts, the following study is suggested:--Select a class of forty-two children, give them as much remedial assistance as possible, after having measured their reading abilities.¹ Measure these

¹See Appendix for valuable individual tests of reading ability and capacity, which were not on the market at the time this study was made.

abilities after having spent a term on these remedial helps; follow this with a term of individual remedial reading during which time the children are excused from their regular class-work, or most of it, and measure their reading abilities at the end of this second term in order to learn whether or not the individual remedial assistance of the second term would yield greater dividends in reading, than did the remedial work of the first term.

The writer wishes to close this dissertation with this comment: While all educators agree that it is the right of every child to gain an education, and to be happy and successful in its accomplishment, a great many children are denied these privileges through no fault of their own. They have been shoved into the path of reading by some of these same educators, and have fallen by the wayside, becoming more discouraged, dishonest, unhappy, repressed, and even anti-social as they are harassed through the grades. If it is possible for the teacher of the third grade to stem this tide of maladjusted children, she will have done them, and society, a great good. It is hoped that the preceding chapters have shown how this may be done.

Smith, Nils B. One Hundred Years of Teaching Silent Reading.
New York: World Book Co., 1923, pp. 25-41.

Stone, Clarence R. All Reading. New York:
Houghton Mifflin Co., 1922, pp. 1-31.

Terman, Lewis M. The Hierarchy for the School Child. Boston:
Houghton Mifflin Co., 1914, p. 223.

BIBLIOGRAPHY

BOOKS

Betts, Emmett A. The Prevention and Correction of Reading Difficulties. Evanston, Ill.: Row, Peterson and Co., 1936, pp. 1-247.

Bruechner, Leo J. and Melby, Ernest O. Diagnostic and Remedial Reading. Boston: Houghton Mifflin Co., 1931, pp. 245-330.

California State Curriculum Commission. Teacher's Guide to Child Development in the Intermediate Grades. Sacramento, Calif.: California Dept. of Education, 1936, pp. 245-279.

Gates, A. I. Interest and Ability in Reading. New York: Macmillan Co., 1930, pp. 35-6.

Inskeep, Annie D. Teaching Dull and Retarded Children. New York: Macmillan Co., 1926, pp. 1-77.

Klapper, Paul. Teaching Children to Read. New York: D. Appleton and Co., 1926, pp. 1-28.

McCallister, James. Remedial and Correctional Instruction in Reading. New York: D. Appleton-Century Co., 1936, pp. 33-138.

Meek, Lois Hayden. A Study of the Learning and Retention of Young Children. Columbia University Contributions to Education No. 164, Teacher's College, Columbia University, 1925, p. 85.

Monroe, Marion. Children Who Cannot Read. Chicago: University of Chicago Press, 1932, pp. 113-17.

Monroe, Marion and Backus, Bertie. Remedial Reading. Boston: Houghton Mifflin Co., 1937, pp. 1-112.

Patterson, S. W. Teaching the Child to Read. New York: Doubleday, Doran and Co., Inc., 1930, pp. 3-83.

Smith, Nila B. One Hundred Ways of Teaching Silent Reading,
New York: World Book Co., 1925, pp. 25-41.

Stone, Clarence R. Silent and Oral Reading. New York:
Houghton Mifflin Co., 1922, pp. 1-31.

Terman, Lewis M. The Hygiene for the School Child. Boston:
Houghton Mifflin Co., 1914, p. 223.

Yoakom, Gerald A. Reading and Study. New York: Macmillan
Co., 1928, p. 331.

MAGAZINES

Betts, Emmett A. "A Psychological Approach to the Analysis
of Reading Disabilities," Educational Research
Bulletin, XIII (September, 1934), p. 138.

Blanchard, Phillis. "Reading Disabilities in Relation to
Maladjustment," Mental Hygiene, Vol. 12,
October, 1928, pp. 772-788.

Cordts, Anna D. "Facts For Teachers of Phonics," Elementary
English Review, April, 1932, pp. 116-17.

Fernald, Grace and Keller H. "The Effect of Kinaesthetic
Factors in the Development of Word Recognition in
the Case of Non-readers," Journal of Educational
Research, December, 1921, pp. 355-77.

Gray, Wm. S. "Reading Problems That Challenge Attention,"
Elementary English Review, III (April, 1926),
pp. 105-107.

Greenbie, Marjorie B. "Some Children Can't Read," Parents'
Magazine, October, 1936, p. 30.

Monroe, Marion. "Remedial Treatment in Reading," Elementary
English Review, X (April, 1933), pp. 95-97.

Parker, Claudia M. and Waterbury E. A. "Reading Disability,"
Educational Method, XII, pp. 411-19.

Stone, Clarence R., "Teacher's Guide and Course of Study in
Reading," Board of Education, San Jose, California,
1935, p. 50.

Townsend, W. B. "Phonics in the Reading Program," Instructor,
January, 1936, pp. 22, 65.

APPENDIX

The following points of observation are suggested by
Francis A. Betts.¹

I. Educational Factors

A. Oral reading

1. Ignores punctuation
2. Word-by-word reading
 - a. Incorrect phrasing
 - b. Inadequate phrasing
 - c. Lack of emphasis on meaning
 - d. Points to each word
3. Inadequate voice control
 - a. Strained high-pitched voice
 - b. Monotony
 - c. Too little or too much voice
 - d. Poor enunciation
4. Tendency to confuse forms
 - a. Word reversals
 - b. Letter reversals
 - c. Begins at right end of line
5. Omits words
6. Inserts words
7. Substitutes words
8. Mispronounces
9. Repeats words
10. Low rate of reading
11. Inadequate word-recognition
12. Speech defect

B. Silent reading

1. Lip movement
2. Low rate of reading
3. Comprehension difficulty
4. Inadequate background of knowledge

C. Word recognition habits

1. Inadequate sight list of words
2. Fails to use context clues
3. Fails to use picture clues
4. Fails to note root, suffixes, etc.

¹ Cf. A. Betts, pp. 82-3.

APPENDIX

The following points of observation are suggested by

Emmett A. Betts.¹

I. Educational factors

A. Oral reading

1. Ignores punctuation
2. Word-by-word reading
 - a. Incorrect phrasing
 - b. Inadequate phrasing
 - c. Lack of emphasis on meaning
 - d. Points to each word
3. Inadequate voice control
 - a. Strained high-pitched voice
 - b. Monotonous tone
 - c. Too little or too much volume
 - d. Poor enunciation
4. Tendency to confuse forms
 - a. Word reversals
 - b. Letter reversals
 - c. Begins at right end of line or word
5. Omits words
6. Inserts words
7. Substitutes words
8. Mispronounces
9. Repeats words
10. Low rate of reading
11. Inadequate word-recognition habits
12. Speech defect

B. Silent reading

1. Lip movement
2. Low rate of reading
3. Comprehension difficulty
4. Inadequate background of experience

C. Word recognition habits

1. Inadequate sight list of words
2. Fails to use context clues
3. Fails to use picture clues
4. Fails to note root, suffixes and prefixes

¹Loc. Cit., Betts, pp. 82-3.

5. Fails to use configuration clues
 - a. Similarities
 - b. Differences
6. Inadequate control over initial sounds and endings
7. Inability to syllabicate and to note familiar words in long words
8. Fails to make use of simple phonic principles
9. Lack of ability in use of diacritical marks
10. Guesses at word
11. Sounds word elements inaccurately
- D. Study habits
 1. Begins work without interest or vigor
 2. Lacks persistence
 3. Wandering attention
 4. Fails to locate information quickly
 5. Inability to summarize or outline material read
 6. Fails to associate material read with previous experiences
- E. Spelling habits
 1. Confuses letters and parts of words
 - a. Reverses letters
 - b. Reverses syllables
 - c. Reverses word forms
 2. Evidence of mirror writing
 3. Overemphasis on phonetics
 4. Spells letter by letter
 5. Omits or adds letters
 6. Oral spelling superior to written spelling or vice versa
 7. Inability to pronounce words to be spelled
 8. Fails to remember correct spelling
 9. Lack of knowledge of meaning
 10. Poor motor control in writing
- F. Background
 1. Inadequate speaking vocabulary
 2. Lack of facility in use of English language
 3. Small foundation of information about science, social science, literature, music and art

II. Physical factors

- A. Under nourishment
- B. Mouth breathing
- C. Lack of rest
- D. Overwork
- E. Eyes ache or burn
- F. Hold book too near, too far, or at an angle

- G. Evidence of blurred or uncomfortable vision
- H. Frowns
- I. Instability
- J. Headaches
- K. Dizziness
- L. Nausea
- M. Residuals from children's diseases
- N. Easily fatigued
- O. Turning in or out of one eye when fatigued
- P. Failure to see blackboard writing
- Q. Inflammatory condition about the eyes
- R. Double vision
- S. Poor posture
- T. Poor hearing

III. Social attitudes

- A. Indifferences versus enthusiasm
- B. Sullen, negativistic versus co-operative, responsive
- C. Prefers to work alone
- D. Day dreams
- E. Resists reading instruction
- F. Dislike for teacher and for school
- G. Reading tenseness and fear of ridicule
- H. Emotional or nervous instability
- I. Lack of home encouragement
- J. Lack of confidence
- K. Lack of persistence
- L. Oversensitiveness
- M. Must be urged to attempt new words
- N. Lack of interest in books
- O. Carelessness

MONROE'S STANDARDIZED SILENT READING TEST REVISED

Name..... Boy or Girl.....
Age last birthday..... Next birthday will be..... 19.....
Grade..... Date..... City..... State.....
School..... Teacher.....

Below there are three exercises. Under each exercise there is a row of words printed in bold face type. Each exercise asks a question. You are to read each exercise and then answer the question by drawing a line under the right word printed in the black type.

Read the following exercises:

(a) Carl, George, Jane, and Clara live in the same block. They all have little dogs to play with except Clara, who has a pretty white cat. Draw a line under the word which tells what Clara had.

dog **doll** **buggy** **cat** **money**

The answer to this exercise is "cat," so draw a line under cat.

(b) Angel food cake should be baked in a slow oven. Mary has just put her cake in the oven to bake and has turned the gas on in full blast. Her cake, of course, was not a success. How do you think Mary felt?

happy **sad** **proud** **stubborn** **glad**

The answer to this exercise is "sad." Draw a line under sad.

(c) John wished to make a box, but his father would not let him until Saturday, when there would be no school. Draw a line under the word which tells what John wanted to make.

aeroplane **wagon** **kite** **sled** **box**

On the three following pages there are a number of exercises like these to be read and answered. When the signal is given, turn over this page and begin. Work rapidly but remember that your answers must be right in order to count. Remember that you are to draw a line under only one word in each exercise. Also remember that this test is on three pages. When you finish one page turn to the next.

658 15. It wasn't quite bedtime. After an early tea the fire was lighted
670 and the children had an hour for a game or a story, or whatever pleasant
685 things might happen.

688 Draw a line under the word which tells what kind of time they had
702 after tea.

704 exciting enjoyable tedious unhappy sad

709 16. The smith, a mighty man is he,
716 With large and sinewy hands;
721 And the muscles of his brawny arms
728 Are strong as iron bands.

733 Draw a line under the word which best describes the smith.

744 treacherous pale short stout fat

749 17. Little Scar Face was an Indian girl. Every morning Little
759 Scar Face worked very hard. She set the wigwam in order, scoured the
772 kettle, and brought in a great pile of wood for the fire.

784 Draw a line under the word that describes Little Scar Face.

795 idle careless industrious lazy negligent

800 18. Bright yellow, red, and orange
805 The leaves come down in hosts;
811 The trees are Indian princes,
816 But soon they'll turn to ghosts;
822 The scanty pears and apples
827 Hang russet on the bough.

832 Draw a line under the season of the year described in this stanza.

845 summer spring autumn winter

849 19. From Harweda's birth everything that love or money could do
859 for him had been done. His parents never thought of making him think
872 of anybody but himself. He had never given up a comfort that some-
885 body else might have a pleasure.

890 Draw a line under the word which best describes Harweda.

900 selfish pleasant companionable happy polite

905 20. An old man was sitting in his lodge, beside a frozen stream.
917 It was the close of winter, and his fire was almost out. He appeared
931 very old and very desolate.

936 Draw a line under the word that tells what kind of man he was.

950 English Japanese Egyptian Indian German

955 21. 'Twas the night before Christmas,
960 And all through the house,
965 Not a creature was stirring,
970 Not even a mouse.

974 Draw a line under the word which best tells how this stanza
986 describes Christmas Eve.

989 cold light snowy quiet merry

994

DETROIT READING TEST

TEST I: FORM A

For Second Grade

By EVELINE A. WATERBURY

Assistant Supervisor of Reading

Detroit, Michigan

Do not open this booklet until you are told to do so. Look at the sample stories. You will have time later to write your name, etc.

Name Grade

(First name, initial, and last name)

Age last birthday years months

Score

Teacher Date 19....

School City

Sample Story A. Mother says Billy must stay in the house. He is watching the big drops on the window. He can see a little dog on the sidewalk. The poor little thing is all wet.

1. Outside it is

blowing shining raining snowing

2. The dog is on the

sidewalk bed floor grass

Sample Story B. A bed of flowers was at the side of the house. Some boys were playing ball. The ball fell into the flower bed and they could not find it.

3. The ball was

lost new old big

4. The boys were playing

house school ball train

Sample Story C. Boy Blue was a good boy. Father gave him some money for cleaning the yard. He got a horn, a ball, and a soldier, with the money.

5. Boy Blue got

bread toys candy shoes

6. Father gave Boy Blue

a dog a letter money a bird

I. It was a cold winter day. The children played in the snow. They rolled the snow and put some eyes, a nose, and a mouth in it. They set it up back of the barn.

17. The children made a
 house **box** **snow man** **wagon**

18. They were playing in the
 barn **snow** **woods** **field**

J. Every day little Jack puts a cent in his bank. He will not take any out until he has enough to buy a new wagon. He can buy a nice red wagon for ten cents.

19. Jack saves
 toys **books** **pictures** **money**

20. Jack will get a
 wagon **horse** **kitten** **top**

K. Mary is making a flag. She will color it red, white, and blue. Mary's brother is a soldier. He will put her flag in the window.

21. The flag will have
 two colors **four colors** **three colors** **one color**

22. It will be put in the
 barn **window** **box** **corner**

L. We have a new dog. His name is Spot. When we go away, he stays at home. He barks when any one comes near the house.

23. Our dog is a
 big dog **toy dog** **baby dog** **watch dog**

24. The name of the dog is
 Billy **Gruff** **Spot** **Jack**

I. My mother made some bread. She used flour, salt, milk, and lard. She forgot to put the yeast in. It did not rise and was so heavy we could not eat it.

17. To make it rise bread needs
sugar yeast flour eggs

18. The bread was
sour light heavy hot

J. The children played they were Eskimos. Mary was the mother Eskimo. John was the father Eskimo. Tim was the little Eskimo boy. They built a house of snow and ice.

19. It was
winter summer fall spring

20. The mother Eskimo was
John Tim Mary Ann

K. Little green shoots came up through the ground. The grass looked fresh. The roots began to grow, and the tiny leaves peeped out. The early flowers were in bloom.

21. It was
fall summer spring winter

22. The shoots were
white brown red green

L. One cold winter day there was a heavy snowstorm. At the same time the north wind blew. It heaped the snow over the road in front of Polly's house.

23. This happened in the month of
June January July September

24. The wind that blew was the
south east north west

Haggerty Reading Examination

SIGMA 1

FOR GRADES 1-3

Arranged and standardized by M. E. HAGGERTY, University of Minnesota, and MARGARET E. NOONAN, Public Schools of St. Louis

My name is I am a
First name Last name Write boy or girl
This is the day of 19..... I am years old.
My next birthday will be 19..... I am in half of Grade.....
The name of my school is The name of my city (county) is.....
The name of my state is.....

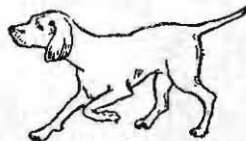
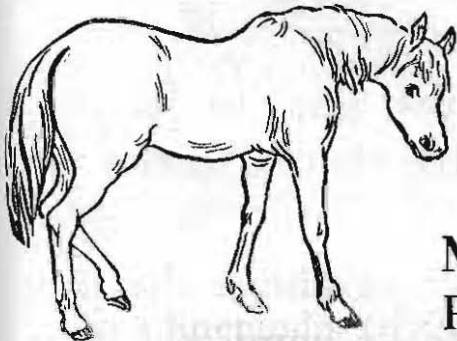
Put a stem on the apple.



Put a cross on the ball.



Put a ring around the bee.



Make two lines under the horse.
Put a cross over the dog.

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Test 1

1. Put a tail on this pig.



2. Make an eye on the bird.



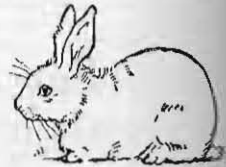
3. Put a ring around the squirrel.



4. Put a cross on the wing of the goose.



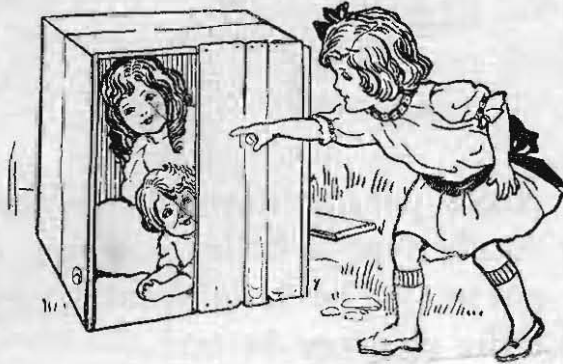
5. Find the rabbit's tail and make it longer.



6. Make two lines under the big bubble that is in the air.

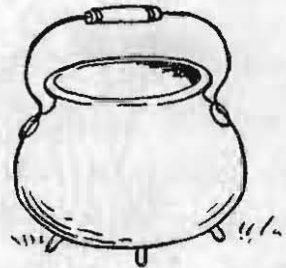
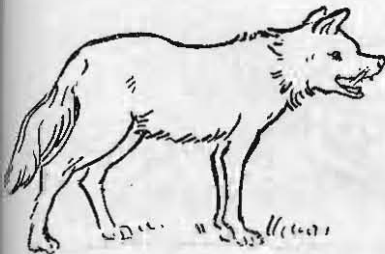
7. Put a cross above the pipe in the girl's hand.

8. Put a cross over each bird that is on the ground.



9. Put a cross on each child that is hiding.

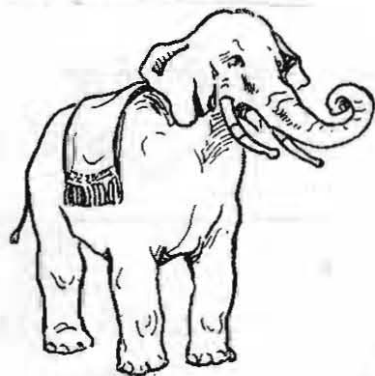
10. Put two lines under the girl who has found the children.



Once a hungry wolf was about to eat a poor little pig.
The little pig jumped into a big kettle and saved herself just in time.

11. Put a line under the animal which was about to eat the pig.

12. Put a cross under the place where the pig hid.



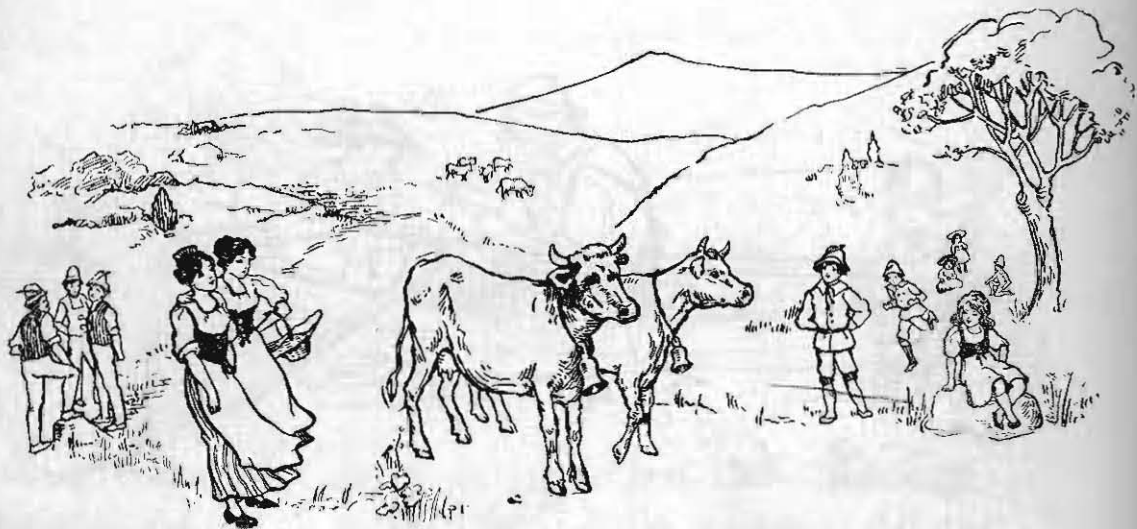
Here comes the circus parade down the street. A clown is driving a donkey hitched to a little wagon. All the children want to see the circus. The boys want to see the elephant, while the girls like the monkey better.

13. Put two lines over what the boys want to see.
14. Put a cross under what the girls like.
-



A mouse once gnawed some ropes with which a lion had been bound by some hunters. The lion was thankful to be free.

15. Draw a line under the ones who bound the lion.
16. Draw a cross over the one which set the lion free.



In a country far across the sea is a land of mountains and valleys and many wonderful lakes and rivers. When the spring-time covers the mountain sides with fresh green grass, thousands of cattle are driven up into them to graze during the summer. Here they are watched and tended by the men from the villages, while the women are busily preparing butter and cheese for the market. The men hang bells about the necks of the cows so that they can locate those which wander from the herd. In the fall, when the cattle are driven down again into the valleys, there is great rejoicing and a holiday among the children.

19. Draw a line under those who spend the summer preparing food for the market.
20. Draw a ring around those who make merry in the fall.
21. Draw a cross under what helps the men locate the wandering cows.

Read this paragraph and then do what it says to do. Read it again if you need to.

Mr. Toil had a severe and ugly countenance, especially for such little boys or big men as were inclined to be idle. His voice, too, was harsh; and all his ways and customs seemed very disagreeable to our friend Daffydowndilly. The whole day long, this terrible old schoolmaster sat at his desk, overlooking the scholars, or stalked about the schoolroom with a certain awful birch rod in his hand. Unless a lad chose to attend quietly and constantly to his book, he had no chance of enjoying a quiet moment.

2. Draw a line under the one of these four words that tells Mr. Toil's occupation.
lawyer
farmer
teacher
merchant
3. Draw a line under the one of these four words that shows how Mr. Toil looked.
handsome
indifferent
agreeable
displeasing

Read this paragraph and then do what it says to do. Read it again if you need to.

But we are anxious to see the inside of this wonderful craft; so, after a few minutes in the turret, we go down the narrow hatchway into the boat itself. Here we are immediately struck by the amount of machinery everywhere and the neatness and compactness of everything. Behind the living room is the engine room. Here are two heavy oil engines for driving the boat on the surface, and a powerful motor for use when the boat is submerged. In another compartment there are storage batteries for supplying the electric current for the motors, lights, and cooking apparatus.

4. Draw a line under the one of these three words that shows what is described in this paragraph.
sailboat
aëroplane
submarine
5. Draw a line under the one of these three words that best shows the amount of machinery to be seen.
little
much
none

Test 2

Do dogs bark?.....NO YES
Is ice hot?.....NO YES
Have cats wings?.....NO YES
Can you see?.....NO YES

1. Can you eat?.....NO YES 1
2. Can a hat walk?.....NO YES 2
3. Can a clock talk?.....NO YES 3
4. Do girls like candy?.....NO YES 4
5. Does a stone like to play?.....NO YES 5
6. Can a duck wade?.....NO YES 6
7. Is four more than two?.....NO YES 7
8. Have all girls the same name?.....NO YES 8
9. Are men larger than boys?.....NO YES 9
10. Is a dozen more than eleven?.....NO YES 10
11. Does flour come from milk?.....NO YES 11
12. Is every man a soldier?.....NO YES 12
13. Are dresses sometimes made of gingham?.....NO YES 13
14. Does April come before March?.....NO YES 14
15. Are sweaters ever worn by men?.....NO YES 15
16. Are hoods usually worn by elephants?.....NO YES 16
17. Do pigeons have two legs?.....NO YES 17
18. Does the sun rise in the evening?.....NO YES 18
19. Are difficult problems easily solved?.....NO YES 19
20. Do convicts sometimes escape from prison?.....NO YES 20

MASTER ACHIEVEMENT TEST

in READING

Grade Two—Form A

Published by American Education Press, Inc., 400 South Front Street, Columbus, Ohio

Name _____ Date _____

School _____ City _____

Reading Raw Score _____ Reading Grade Score _____

Reading Test

Time: 30 minutes.

Sample

A cat saw a dog. The cat ran up a tree.

The cat ran up a

chair tree hill train

The cat was

happy warm playing afraid

1. A rabbit and a deer were friends.

They played together every day.

The deer and the rabbit were

big friends poor warm

Together, they had much

fun gold food grass

2. Dick has a new dog. Dick feeds his dog every day. He gives him fresh water.

Dick gives his dog water and

flowers grass sugar food

Dick gives his dog

candy good care bad care away

3. Many birds are back from the South. They are making nests. They sing, "Spring is here."

In the spring, birds build

nests farms fires trees

Some birds go south in

spring rain summer winter

4. Some people like winter. They have fun in the snow. They have races over the ice and snow.

People like winter fun and
fields races rain sleet

It snows when it is
hot raining cold warm

5. In the South, children play in the warm sun all winter. The sun makes them brown.

It is warm in the winter in the
South river North sky

The sun makes the children
white good strong little

6. Some Eskimos have two or three houses. They have stone houses which are for winter. They have houses made of skins for summer.

The winter houses are made of
skins stone wood grass

The skin houses are used in
spring winter summer fall

7. Jack is a little dog. One day Jack saw some little white rabbits. "Who are you?" said Jack. "Your ears are long. Your tails are short. You are not little dogs."

The white rabbits had short
tails ears feet eyes

Jack wanted to know who the rabbits
saw were play had

8. Seals are animals that live in the Far North. They like the cold wind. They play in the cold water. They roll on the ice.

Seals live where it is
warm dry cold hot

Seals like to
run dance jump play

9. Happy children are well and strong. They play in the sunshine and in the fresh air. They run and jump. They like to play games.

Fresh air helps to make you
strong sad warm poor

Healthy children are
rich mean cross happy

10. Birds eat worms and bugs. If there were no birds, we could not live upon this earth. The insects would eat all our food.

Birds eat
insects clothes trees flowers

Birds help us in many
things days ways games

11. The boys learned to know many birds at camp. They found out what birds eat and where they build their nests.

The boys learned about birds at
camp home school church

They learned how birds
sleep fly live play

12. When you cross the street or road, look first to the right. Then look to the left. Be sure you have time to get all the way across the street before a car comes.

When crossing the street, always look
one way three ways both ways
four ways

Boys and girls must be
hurt careful sure cross

13. You can feed the birds in winter. You can put up houses for the birds. You can tie bells on your cats.

Hungry cats kill
dogs houses people birds

Birds need your
cats help dogs balls

14. Dick is nine years old. Some day he wants to be a policeman. Dick likes to ride and swim. He wants to be well and strong so he can be a policeman.

Dick wants to be well and
quick slow strong good

Dick is a
boy king policeman man

15. Raccoons live in the woods. They look for food at night. They eat corn and nuts. They eat mice, frogs, toads, and bugs.

Raccoons look for food in the
nest day night ice

Raccoons eat bugs. Raccoons help the
robin farmer children chickens

16. Men are making parks for the birds. As they fly south in the winter, they can rest in these parks. They can find food in the parks. They will be safe, for no one may kill them.

No one may kill the birds in the
woods parks fields trees

Men are trying to save the
parks food water birds

17. The farmer likes snow. It covers his fields. It keeps the ground warm. When spring comes, the snow goes. The water from the snow goes into the ground.

In winter, snow keeps the ground
cold warm hot dry

The water from the snow helps the farmer's
air seeds horse rain

18. A camp fire was left burning. The dry leaves caught fire. The fire grew and grew. After many days, the fire was put out. Many tall trees were burned.

We should always put out camp
smoke fires pails clothes

Someone was
careful careless afire caught

19. One day a little girl was playing. A baby deer came out of the woods. He came up to the little girl. The little girl and baby deer ran and had great fun. Soon their play was over. The little deer ran back to the woods.

The baby deer played with the little
rabbit girl boy dog

The deer knew the little girl was
great light bad kind

20. Ben is a horse. He pulls a milk wagon. He goes out at three o'clock in the morning. The children are asleep. The children wake up in the morning. There is the fresh milk for their breakfast. Ben has gone home to rest.

Ben brings fresh milk for
breakfast dinner supper lunch

At three o'clock in the morning, it is
light dark sunny cold

OTIS GROUP INTELLIGENCE SCALE

Devised by ARTHUR S. OTIS

PRIMARY EXAMINATION: FORM A

My name is

My birthday is

On my last birthday I was years old.

I am in the grade.

The name of my school is

The name of this city is

The date today is

(Do not write below this line.)

Remarks or Further Data

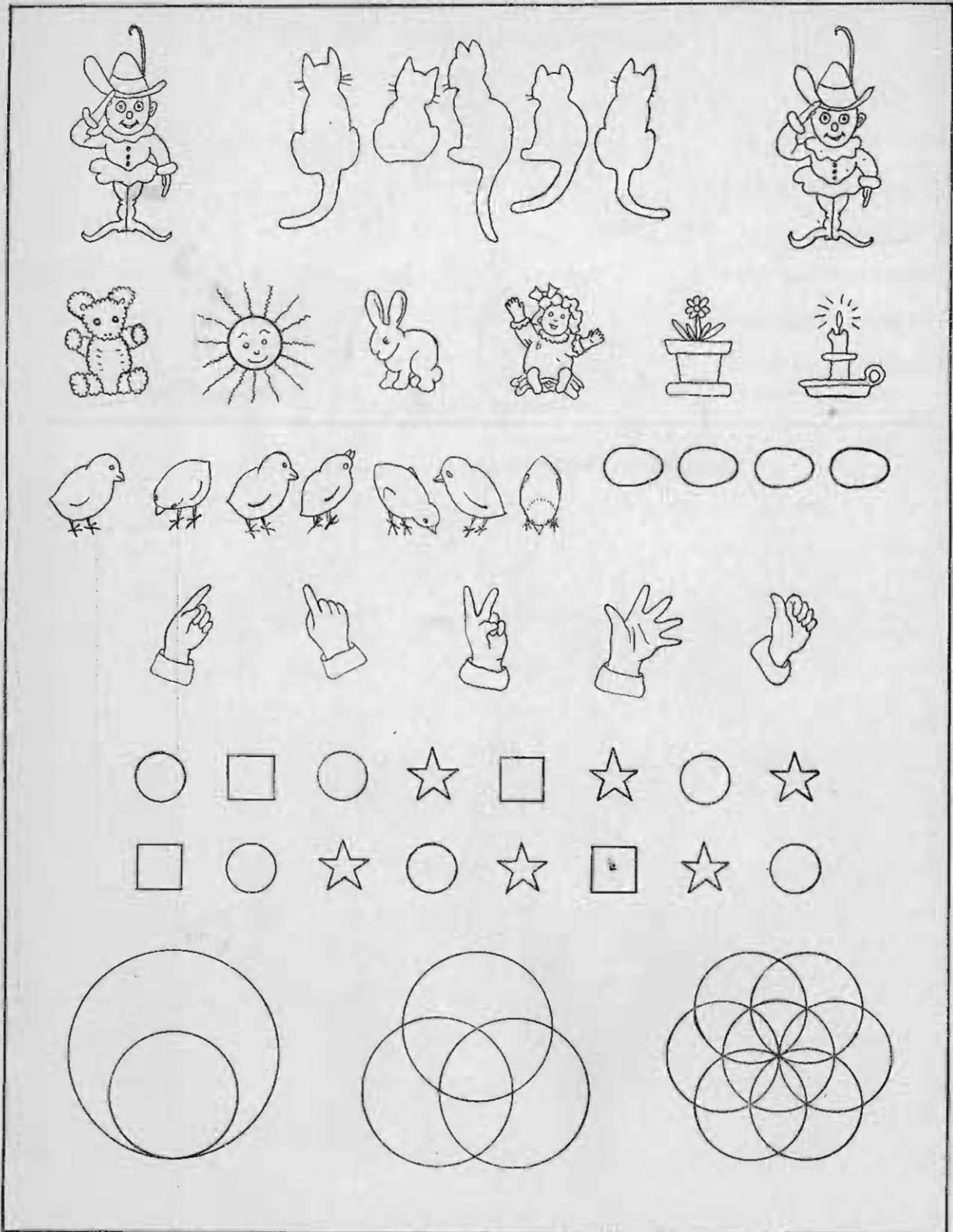
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TEST	SCORE
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Total Score	
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IQ	
PR	

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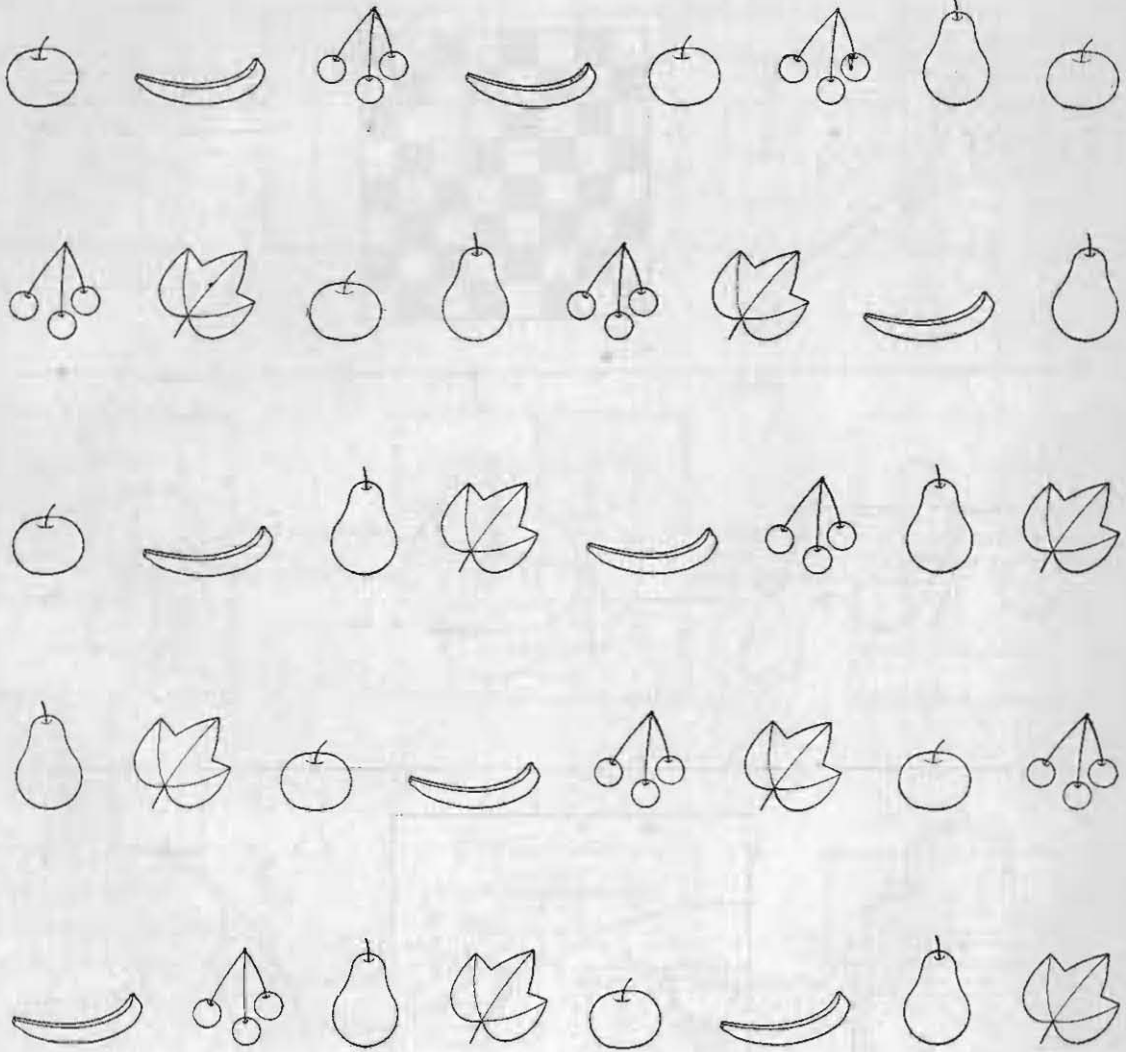
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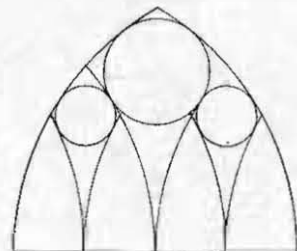
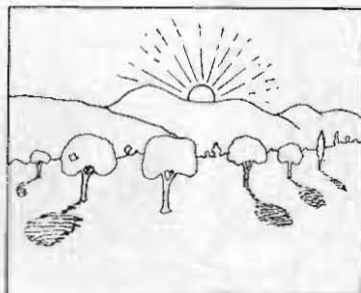
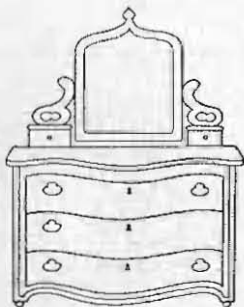
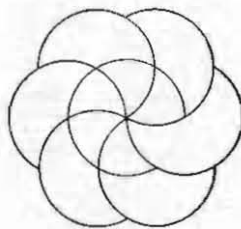
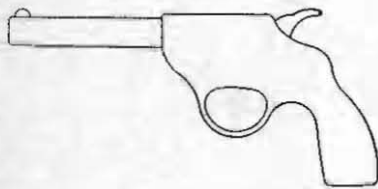
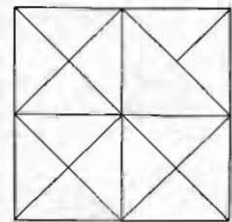
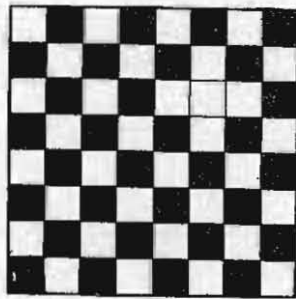
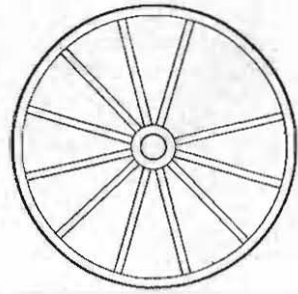
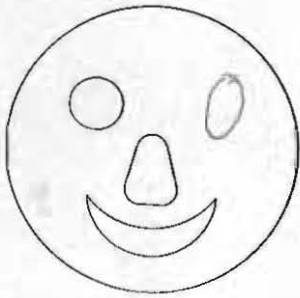
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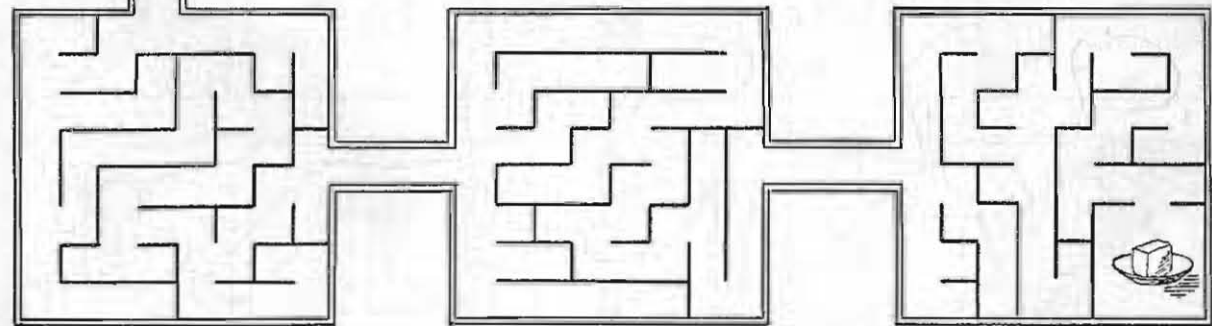
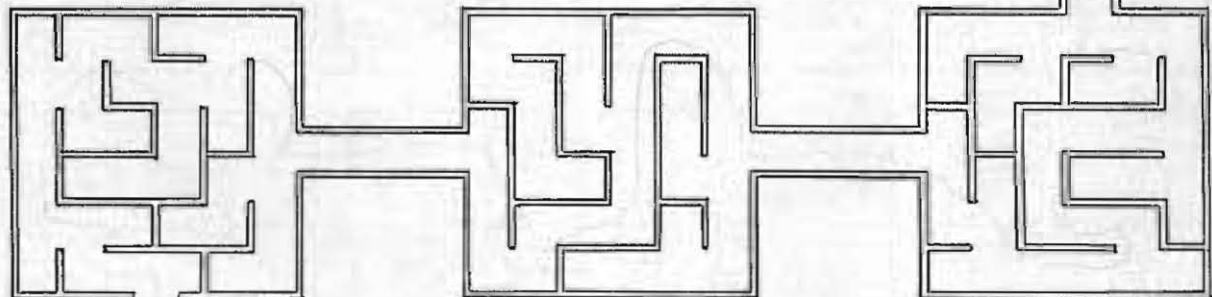
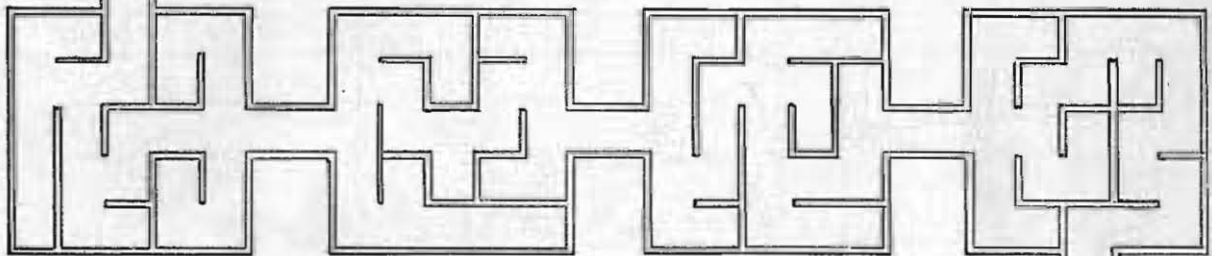
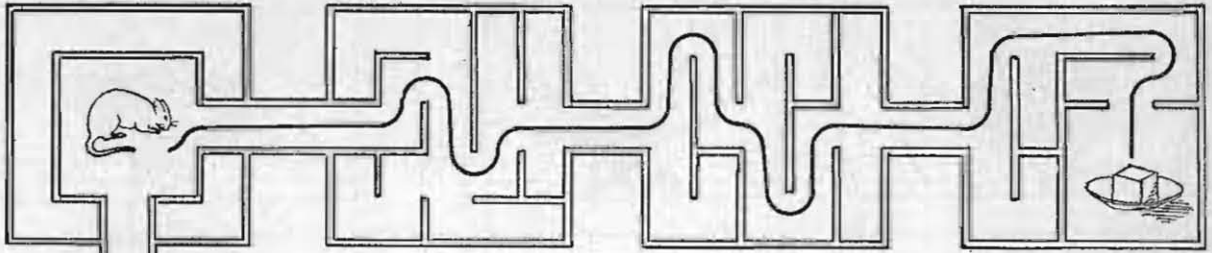
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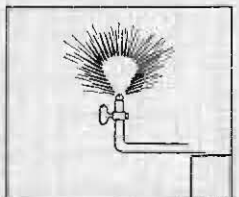
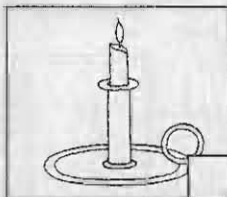
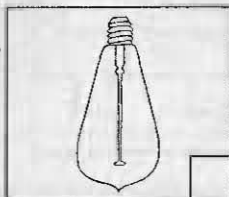
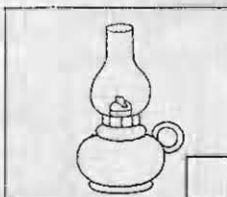
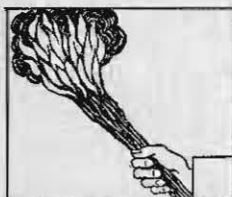
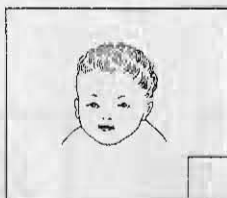
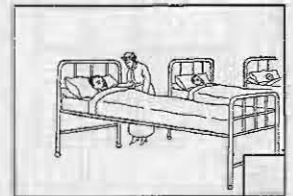
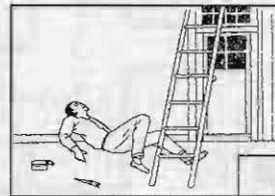
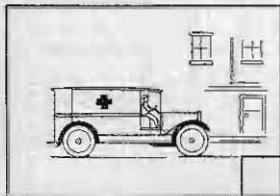
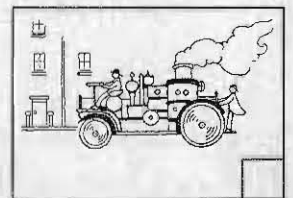
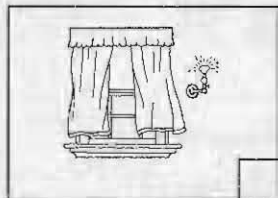
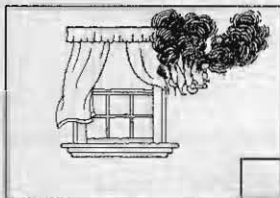
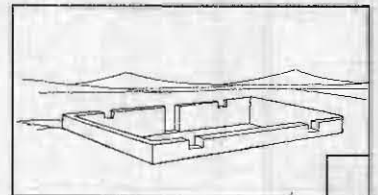
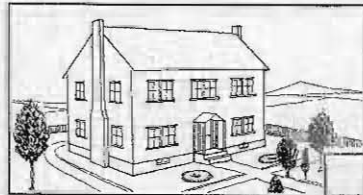
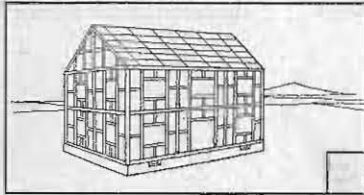
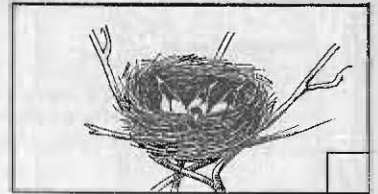
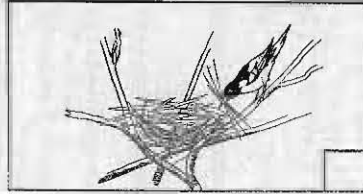
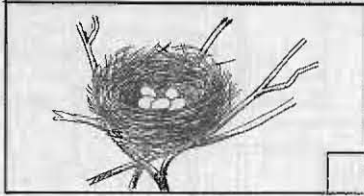
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






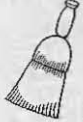









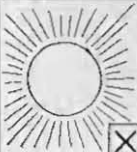












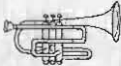





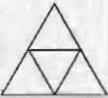

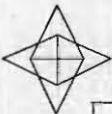














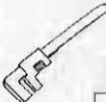








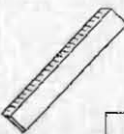

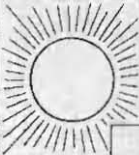
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Score.....



Score.....

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B	S	O	L	1	2	3
C	S	O	M	1	2	3
D	S	O	N	1	2	3
E	S	O	O	1	2	3
F	S	O	P	1	2	3
G	S	O	Q	1	2	3
H	S	O	R	1	2	3
I	S	O	S	1	2	3
J	S	O	T	1	2	3

Score.....

Score.....

Haggerty Intelligence Examination

DELTA 1

FOR GRADES 1-3

Arranged and standardized by M. E. HAGGERTY, University of Minnesota

My name is I am a

First name Last name Write boy or girl

This is the day of 19..... I am years old.

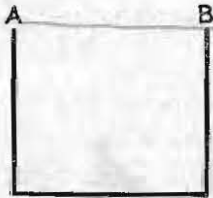
My next birthday will be 19..... I am in half of Grade.....

The name of my school is The name of my city (county) is.....

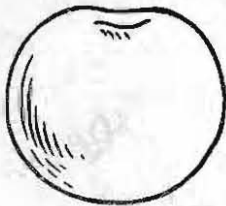
The name of my state is.....

EXERCISE 1

1



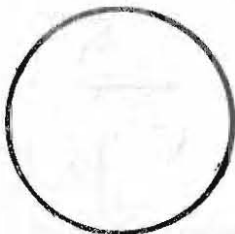
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IS
RAT: INTER. A-2

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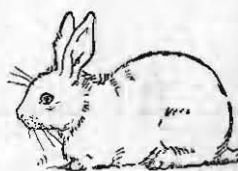
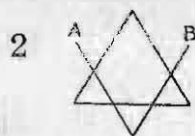
EXERCISE 12

If the two words mean the same, put an **S** between them.
 If they mean as different as can be, put a **D** between them.

1	big _____ large	1
2	good _____ bad	2
3	go _____ leave	3
4	quiet _____ still	4
5	wet _____ dry	5
6	high _____ low	6
7	sad _____ sorry	7
8	wide _____ broad	8
9	run _____ stand	9
10	near _____ close	10
11	sweet _____ sour	11
12	happy _____ cheerful	12
13	up _____ down	13
14	give _____ take	14
15	fear _____ fright	15
16	rude _____ polite	16
17	timid _____ shy	17
18	beg _____ plead	18
19	friend _____ enemy	19
20	order _____ command	20
21	begin _____ commence	21
22	advance _____ retreat	22
23	gradual _____ sudden	23
24	climb _____ ascend	24
25	accept _____ reject	25

Score

EXERCISE 2



Score.....

EXERCISE 11

1 small—little

2 no—yes

3 fall—drop

4 leap—jump

5 black—white

6 go—come

7 hit—strike

8 flower—blossom

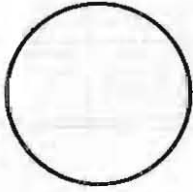
9 sick—well

10 hot—warm

EXERCISE 3

1 A ——— B C D

2



A

3



4



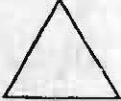
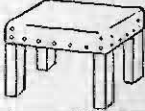
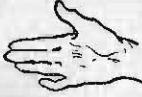



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







EXERCISE 10













Put the right figure under every picture.

					
1	2	3	4	5	6













1













2

3

4

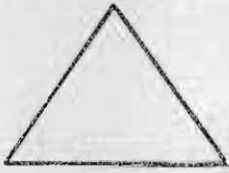
											

Score

EXERCISE 4

Copy these pictures.

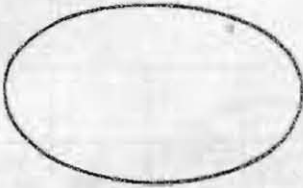
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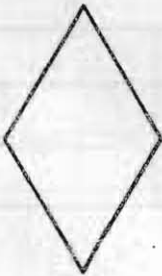
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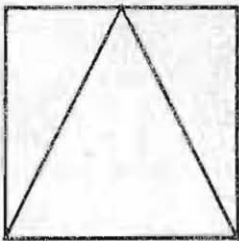
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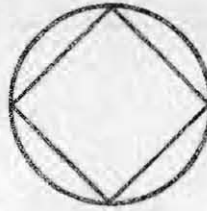
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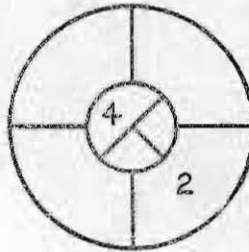
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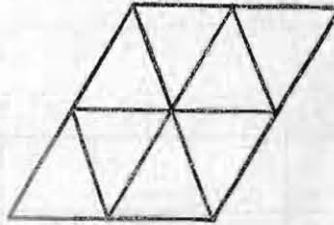
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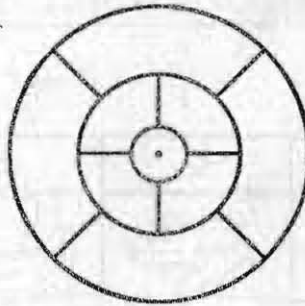
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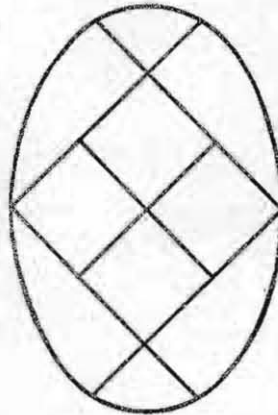
8



9



10



Score.....

EXERCISE 5

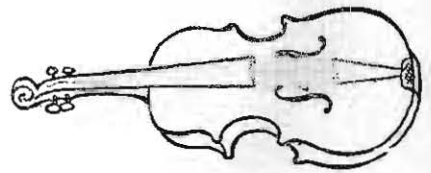
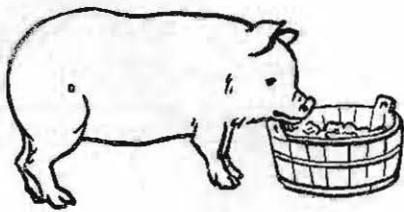
1



2
















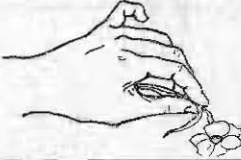




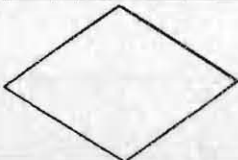
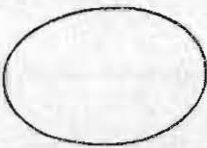
3



EXERCISE 8

If the two pictures are the same, put an **S** between them.

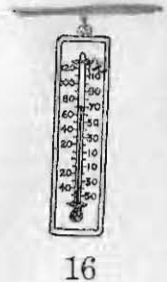
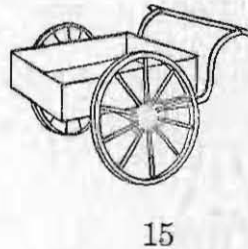
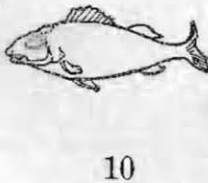
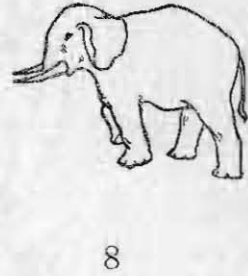
If they are different, put a **D** between them.

1		—		1
2		—		2
3		—		3
4		—		4
5		—		5
6		—		6
7		—		7
8		—		8
9		—		9
10		—		10

Score.....

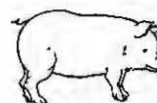
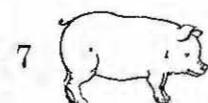
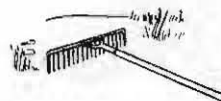
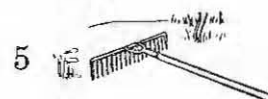
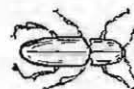
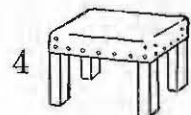
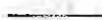
EXERCISE 6

Mark in each picture what is left out.



Score

EXERCISE 7



DURRELL-SULLIVAN
READING CAPACITY AND ACHIEVEMENT TESTS

READING ACHIEVEMENT TEST

By DONALD D. DURRELL
Professor of Education and Director of the Educational Clinic
Boston University

and HELEN BLAIR SULLIVAN
Associate Director of the Educational Clinic
Boston University

Inter.
Achievem't

A

INTERMEDIATE TEST: FORM A

For Grades 3 to 6

Name..... Grade..... Teacher..... Boy or girl.....

Age..... When is your next birthday?..... How old will you be then?.....


Name of school..... City..... Date.....

TEST	SCORE	GRADE EQUIVA- LENT	AGE EQUIVA- LENT
1. Word Meaning			
2. Paragraph Meaning			
Total			
OPTIONAL TESTS			
3. Spelling			
4. Written Recall Rating			

Patent No. 1,586,628

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TEST 1. WORD MEANING

Samples.

An <i>apple</i> is a kind of —	1 paint	2 metal	3 animal	4 fruit	5 chair	1	2	3	4	5
<i>Large</i> means —	1 angry	2 big	3 hurt	4 little	5 like	1	2	3	4	5
To <i>shut</i> means to —	1 help	2 give	3 take	4 run	5 close	1	2	3	4	5
1. A <i>dog</i> is an —	1 answer	2 elephant	3 animal	4 excuse	5 orange	1	2	3	4	5
2. A <i>robin</i> is a —	1 crow	2 bird	3 bug	4 flower	5 leaf	1	2	3	4	5
3. To <i>bring</i> is to —	1 find	2 carry	3 think	4 lose	5 fall	1	2	3	4	5
4. <i>Small</i> means —	1 hurry	2 large	3 little	4 like	5 help	1	2	3	4	5
5. To <i>fall</i> is to —	1 pay	2 lift	3 touch	4 drop	5 face	1	2	3	4	5
6. To <i>bake</i> is to —	1 break	2 lose	3 cook	4 speak	5 copy	1	2	3	4	5
7. A <i>dollar</i> is —	1 copper	2 money	3 business	4 healthy	5 clothing	1	2	3	4	5
8. A <i>voice</i> is used to —	1 clamp	2 speak	3 point	4 write	5 mark	1	2	3	4	5
9. A <i>potato</i> is a —	1 song	2 planet	3 vegetable	4 table	5 postman	1	2	3	4	5
10. <i>Beef</i> is a kind of —	1 horse	2 boat	3 maze	4 ranch	5 meat	1	2	3	4	5
2 →										
11. To <i>chop</i> means —	1 roll	2 note	3 come	4 chide	5 cut	1	2	3	4	5
12. If a thing is <i>above</i> , it is —	1 glad	2 pleasant	3 short	4 higher	5 between	1	2	3	4	5
13. A thing that is <i>bent</i> is —	1 warm	2 sharp	3 crooked	4 straight	5 tight	1	2	3	4	5
14. <i>Travel</i> means —	1 trouble	2 journey	3 serious	4 prepare	5 junction	1	2	3	4	5
15. <i>Oil</i> is used for —	1 fuel	2 water	3 fun	4 writing	5 presents	1	2	3	4	5
16. <i>Quarrel</i> means —	1 stop	2 travel	3 fight	4 forget	5 throw	1	2	3	4	5
17. A <i>hall</i> is a —	1 horn	2 road	3 tooth	4 room	5 field	1	2	3	4	5
18. An <i>island</i> is surrounded by —	1 sugar	2 gardens	3 earth	4 salad	5 water	1	2	3	4	5
19. <i>Remain</i> means —	1 ride	2 measure	3 happen	4 stay	5 accompany	1	2	3	4	5
20. <i>Salt</i> is used on —	1 holidays	2 water	3 food	4 birds	5 flowers	1	2	3	4	5
21. <i>Marriage</i> means —	1 image	2 civil	3 bitter	4 obtain	5 wedding	1	2	3	4	5
22. A <i>carpenter</i> makes things of —	1 iron	2 stone	3 cement	4 wood	5 grass	1	2	3	4	5
23. A <i>maid</i> is a —	1 smile	2 father	3 girl	4 heart	5 fruit	1	2	3	4	5
24. A <i>palace</i> is a —	1 crown	2 storm	3 land	4 building	5 policeman	1	2	3	4	5
25. A <i>helmet</i> is worn on the —	1 knees	2 breast	3 feet	4 elbows	5 head	1	2	3	4	5

- | | 1 | 2 | 3 | 4 | 5 |
|--|--------------|-------------|-------------|-------------|-------------|
| 6. When you <i>miss school</i> , you are — | 1 tardy | 2 absent | 3 present | 4 taught | 5 fair |
| 7. A person is <i>alone</i> who is without — | 1 money | 2 food | 3 company | 4 shelter | 5 danger |
| 8. A <i>stomach</i> is part of the — | 1 sea | 2 sky | 3 body | 4 country | 5 world |
| 9. A man's <i>daughter</i> is his — | 1 parent | 2 child | 3 sister | 4 son | 5 niece |
| 10. <i>Ill</i> means — | 1 sick | 2 hungry | 3 well | 4 safe | 5 sorry |
| 11. <i>Excellent</i> means very — | 1 weak | 2 good | 3 happy | 4 poor | 5 tired |
| 12. A <i>hive</i> is for — | 1 oil | 2 school | 3 robbers | 4 peaches | 5 bees |
| 13. To <i>tumble</i> is to — | 1 type | 2 ask | 3 knock | 4 fall | 5 tickle |
| 14. A <i>grandparent</i> is an — | 1 antagonist | 2 elephant | 3 ancestor | 4 impostor | 5 umpire |
| 15. A <i>smell</i> is an — | 1 amount | 2 answer | 3 office | 4 odor | 5 idea |
| 16. An <i>elm</i> is a — | 1 mold | 2 helm | 3 bug | 4 tree | 5 tool |
| 17. A <i>mule</i> is a — | 1 splinter | 2 pearl | 3 beast | 4 ditch | 5 handle |
| 18. <i>Costly</i> things are — | 1 expensive | 2 pliant | 3 scorched | 4 liberal | 5 domestic |
| 3 → | | | | | |
| 19. An <i>author</i> is a — | 1 patron | 2 policeman | 3 statesman | 4 treasurer | 5 writer |
| 20. A <i>mayor</i> is an — | 1 expert | 2 animal | 3 invalid | 4 umbrella | 5 official |
| 21. A <i>zone</i> is a — | 1 number | 2 stepson | 3 region | 4 sliver | 5 habit |
| 22. To <i>injure</i> is to — | 1 slump | 2 insure | 3 wound | 4 sell | 5 splash |
| 23. To <i>rouse</i> means to — | 1 waken | 2 rule | 3 roast | 4 throw | 5 love |
| 24. <i>Mild</i> means — | 1 gentle | 2 price | 3 wild | 4 new | 5 behind |
| 25. <i>Wicked</i> means — | 1 generous | 2 grateful | 3 unselfish | 4 evil | 5 brilliant |
| 26. To <i>make preparations</i> is to get — | 1 over | 2 measles | 3 ready | 4 upon | 5 cloudy |
| 27. A <i>selection</i> is a — | 1 bullet | 2 capital | 3 desire | 4 choice | 5 folder |
| 28. To <i>tour</i> is to — | 1 prepare | 2 toast | 3 lean | 4 travel | 5 trust |
| 29. <i>Twinkle</i> means — | 1 wrinkle | 2 ringing | 3 pitiful | 4 glisten | 5 feeble |
| 30. <i>Coarse</i> cloth is — | 1 smooth | 2 fine | 3 rough | 4 cold | 5 short |
| 31. A <i>bough</i> is a — | 1 limb | 2 leaf | 3 pail | 4 crest | 5 trunk |
| 32. To <i>welcome</i> means to — | 1 endure | 2 persist | 3 receive | 4 believe | 5 practice |

53. A <i>blunt</i> thing is —	1 dull	2 sharp	3 disagreeable	4 black	5 thin	1	2	3	4	5
54. <i>Circular</i> means —	1 careless	2 familiar	3 round	4 square	5 jealous	1	2	3	4	5
55. <i>Skillful</i> means —	1 laborious	2 excited	3 radical	4 expert	5 kindly	1	2	3	4	5
56. <i>Interior</i> means —	1 inferior	2 above	3 empty	4 dreary	5 inside..	1	2	3	4	5
57. <i>Stupid</i> means —	1 studious	2 false	3 stylish	4 cowardly	5 dull..	1	2	3	4	5
58. To <i>surrender</i> is to —	1 surround	2 soften	3 colonize	4 yield	5 dance..	1	2	3	4	5
59. <i>Destruction</i> causes —	1 discipline	2 ruin	3 government	4 scandal	5 satisfaction	1	2	3	4	5
60. To <i>convince</i> means to —	1 declare	2 design	3 combine	4 nourish	5 persuade	1	2	3	4	5
61. A <i>sign</i> is an —	1 offering	2 agreement	3 acquaintance	4 indication	5 address	1	2	3	4	5
62. A <i>portion</i> is a —	1 gate	2 home	3 wall	4 riddle	5 share.....	1	2	3	4	5
63. To <i>overcome</i> is to —	1 discover	2 happen	3 anticipate	4 defeat	5 worry	1	2	3	4	5
64. An <i>insult</i> is an —	1 instinct	2 insertion	3 announcement	4 embrace	5 offense	1	2	3	4	5
65. To <i>confirm</i> is to make —	1 angry	2 equal	3 trouble	4 certain	5 time	1	2	3	4	5
66. <i>Valiant</i> means —	1 valid	2 lenient	3 brave	4 royal	5 loyal.....	1	2	3	4	5
						4 →				
67. To <i>kindle</i> means to —	1 pick	2 range	3 light	4 soil	5 assist....	1	2	3	4	5
68. <i>Abrupt</i> means —	1 exclude	2 neutral	3 recent	4 sudden	5 rugged	1	2	3	4	5
69. <i>Fatigue</i> means —	1 fatal	2 faithful	3 conflict	4 dodge	5 weariness	1	2	3	4	5
70. A <i>durable</i> thing is —	1 fantastic	2 courteous	3 modified	4 lasting	5 moist	1	2	3	4	5
71. <i>Fourscore</i> is the same as —	1 fourteen	2 fortnight	3 eighty	4 twenty	5 four	1	2	3	4	5
72. To <i>ratify</i> is to —	1 confuse	2 approve	3 assist	4 report	5 poison	1	2	3	4	5
73. To <i>rebel</i> is to —	1 realize	2 pledge	3 justify	4 resist	5 flourish..	1	2	3	4	5
74. <i>Sullen</i> means —	1 sultry	2 satisfied	3 credulous	4 harmful	5 surly	1	2	3	4	5
75. <i>Probability</i> means —	1 disheveled	2 originality	3 likelihood	4 sincerity	5 enthusiasm	1	2	3	4	5

Score.....

TEST 2. PARAGRAPH MEANING

Sample.

One warm, sunny day Helen and her brother went on a trip to the beach. Their mother and aunt went with them. They took their bathing suits so that they could all go into the water. When noontime came, they had lunch on the sand. After lunch the children gathered sea shells. They saw a starfish and some funny little crabs.

1. What did Helen and her brother do?

- | | | | | | | | |
|--------------------------|------------------------|-------------------|---|---|---|---|---|
| 1 went to see their aunt | 2 went to the seashore | 3 went on a train | 1 | 2 | 3 | 4 | 5 |
| 4 went for crabs | 5 went fishing | ..... | \|\| | \|\| | \|\| | \|\| | \|\| |

2. The weather was —

- | | | | | | | | | | |
|---------|---------|--------|----------|---------|---|---|---|---|---|
| 1 quiet | 2 funny | 3 fair | 4 gloomy | 5 rainy | 1 | 2 | 3 | 4 | 5 |
| | | | | | | | | | |

3. The best name for this story is —

- | | | | | | | | |
|----------------------|-----------------------|-------------------------|---|---|---|---|---|
| 1 Helen and Her Aunt | 2 Gathering Shells | 3 Eating Lunch Outdoors | 1 | 2 | 3 | 4 | 5 |
| 4 One Warm Day | 5 A Trip to the Beach | ..... | \|\| | \|\| | \|\| | \|\| | \|\| |

I

5 →

Mary and John go to camp as soon as school closes in the summer. They go on the train and stay until it is time for school to open again in the fall. They have a happy time at camp because there are many other boys and girls there too. They ride, swim, and play games together every day.

1. When do Mary and John go to camp?

- | | | | | | | | | |
|-----------------|-----------------------|---------------|----------------------|---|---|---|---|---|
| 1 before school | 2 when school is over | 3 in the fall | 4 when school starts | 1 | 2 | 3 | 4 | 5 |
| 5 every day | ..... | ..... | ..... | \|\| | \|\| | \|\| | \|\| | \|\| |

2. Which word tells what kind of a time the children have at camp?

- | | | | | | | | | | |
|------------|-------|----------|---------|---------|---|---|---|---|---|
| 1 lonesome | 2 sad | 3 joyous | 4 funny | 5 weary | 1 | 2 | 3 | 4 | 5 |
| | | | | | | | | | |

3. How do the children travel to camp?

- | | | | | | | | | | |
|--------------|------------|--------------------|------------|------------------|---|---|---|---|---|
| 1 on a train | 2 on a bus | 3 in an automobile | 4 on a car | 5 in an airplane | 1 | 2 | 3 | 4 | 5 |
| | | | | | | | | | |

4. The best name for this story would be —

- | | | | | | | | |
|--------------------|--------------------|-----------------------|---|---|---|---|---|
| 1 Close of School | 2 Playing Games | 3 A Trip on the Train | 1 | 2 | 3 | 4 | 5 |
| 4 A Summer at Camp | 5 The Boys at Camp | ..... | \|\| | \|\| | \|\| | \|\| | \|\| |

5. Mary and John enjoy camp life because they —

- | | | | | | | |
|--|------------------------------|---|---|---|---|---|
| 1 are glad to be away for the summer | 2 like the ride on the train | 1 | 2 | 3 | 4 | 5 |
| 3 are glad to be out of school | 4 like to study nature | \|\| | \|\| | \|\| | \|\| | \|\| |
| 5 have fun playing games with the other children | ..... | \|\| | \|\| | \|\| | \|\| | \|\| |

II

Jack had a new fish line. His father took him fishing in a little brook at the back of his grandfather's house. Jack was the first to feel a bite. There was a strong pull at his line. He tried hard to pull the fish out of the water, but it pulled so hard his father had to help him. He was happy when he saw his fish lying on the grass near the stream.

6. Jack went —
- | | | | | | | | |
|------------------------------|------------------------|---------------------------|---|---|---|---|---|
| 1 to his grandfather's house | 2 into the water | 3 fishing with his father | 1 | 2 | 3 | 4 | 5 |
| 4 to buy a fish line | 5 to the ocean to fish | | : | : | : | : | : |
7. The fish —
- | | | | | | | | | | |
|----------|-------------|-------|---------|--------|---|---|---|---|---|
| 1 helped | 2 struggled | 3 ate | 4 tried | 5 fell | 1 | 2 | 3 | 4 | 5 |
| | | | | | : | : | : | : | : |
8. Jack tried to —
- | | | | | | | | |
|-------------------------|------------------------|---------------------|---|---|---|---|---|
| 1 fish near the stream | 2 pull his father back | 3 land his own fish | 1 | 2 | 3 | 4 | 5 |
| 4 put fish in the brook | 5 lie on the grass | | : | : | : | : | : |
9. The best name for this story is —
- | | | | | | | | |
|---------------------------|----------------------|-----------------------|---|---|---|---|---|
| 1 A Trip to Grandfather's | 2 Catching Some Fish | 3 Jack's Fishing Trip | 1 | 2 | 3 | 4 | 5 |
| 4 Buying a New Fish Line | 5 How Father Fished | | : | : | : | : | : |
10. Jack enjoyed his trip because —
- | | | | | | | | |
|-----------------------|------------------------------------|-------------------------|---|---|---|---|---|
| 1 the fish got away | 2 the brook was near grandfather's | 3 he caught a fine fish | 1 | 2 | 3 | 4 | 5 |
| 4 he went to a stream | 5 his father helped him | | : | : | : | : | : |



III

In the cold northlands many animals go to sleep for the whole winter. They have to store up enough fat on their bodies in the summertime to last them all winter while they are sleeping. These animals grow huge in the summer. Bears, which are among the animals which sleep all winter, get so large in the summer that they can hardly move about. All these animals which sleep during the winter crawl into caves or hollow trees when winter nears and stay until spring comes once more. When they come out, they are very thin and are starving.

11. How do the animals which sleep through the winter get their winter food?
- | | | | | | | | |
|--|-------------------------------|--|--|--|--|--|--|
| 1 by carrying their food in with them | 2 by getting fat in summer | | | | | | |
| 3 by coming out for food as they need it | 4 by eating the bark of trees | | | | | | |
| 5 by living on small animals | | | | | | | |
| | | | | | | | |
12. The climate where these animals live is very —
- | | | | | | | | | | |
|---------|--------|----------|--------|-------|---|---|---|---|---|
| 1 windy | 2 warm | 3 breezy | 4 cold | 5 hot | 1 | 2 | 3 | 4 | 5 |
| | | | | | : | : | : | : | : |
13. How do the animals look when they come out of the cave?
- | | | | | | | | | |
|---------------------|-------------------|------------------|--------------------|---|---|---|---|---|
| 1 huge and fat | 2 lean and hungry | 3 thin and tired | 4 large and strong | 1 | 2 | 3 | 4 | 5 |
| 5 huge and starving | | | | : | : | : | : | : |
14. The best title for this story would be —
- | | | | | | | | |
|--|---------------------------------|--|--|--|--|--|--|
| 1 Bears Which Go into Caves | 2 Thin and Hungry Animals | | | | | | |
| 3 Animals Which Sleep through the Winter | 4 Large Animals Sleep in Winter | | | | | | |
| 5 While They Are Sleeping | | | | | | | |
| | | | | | | | |
15. The animals which sleep through the winter make winter dens —
- | | | | | | | | |
|-----------------------------|---------------------------|---------------------|---|---|---|---|---|
| 1 in the summertime | 2 in the open woods | 3 when spring comes | 1 | 2 | 3 | 4 | 5 |
| 4 in caverns or hollow logs | 5 while they are sleeping | | : | : | : | : | : |

VI

Bill vaulted the fence into the corral and faced the bucking pony. At his approach the little animal struck out with his forefeet, but Bill was quick and avoided him. The boy caught the pony close to the head and with a rapid movement sprang into the stirrups. Then began the real task. With head down, back up, and whinnying loudly, the animal reared into the air, bouncing back to earth with terrific force. He tried every trick possible to throw his rider, plunging and rearing in all directions, but Bill held on. Finally, after many minutes, the exhausted pony, wet with perspiration, stood still. His nostrils trembled, but one felt that though his body had been subdued, his spirit was still unbroken.

- | | | | | | | |
|-----|---|---|---|---|---|---|
| 26. | When Bill approached, the pony was — | 1 | 2 | 3 | 4 | 5 |
| | 1 tired and broken 2 quieted in spirit | 1 | 2 | 3 | 4 | 5 |
| | 3 impatient to be ridden 4 disturbed and angry 5 thrown to the ground | 1 | 2 | 3 | 4 | 5 |
| 27. | The pony was finally — | 1 | 2 | 3 | 4 | 5 |
| | 1 overbalanced 2 exultant 3 overpowered 4 distracted 5 restored | 1 | 2 | 3 | 4 | 5 |
| 28. | The little pony tried to — | 1 | 2 | 3 | 4 | 5 |
| | 1 outlive his rider 2 aid the boy | 1 | 2 | 3 | 4 | 5 |
| | 3 unseat his rider 4 exhaust the animal 5 butt Bill | 1 | 2 | 3 | 4 | 5 |
| 29. | The best title for this story is — | | | | | |
| | 1 Riding the Range 2 An Exhausted Pony 3 Breaking a Pony | 1 | 2 | 3 | 4 | 5 |
| | 4 A Perspiring Pony 5 Bill Approached a Pony | 1 | 2 | 3 | 4 | 5 |
| 30. | The article illustrates — | | | | | |
| | 1 how to enter a corral 2 a whinnying pony 3 trickery in riding | 1 | 2 | 3 | 4 | 5 |
| | 4 leading a pony 5 skill in horsemanship | 1 | 2 | 3 | 4 | 5 |

VII



Studying bird life with a camera is certainly an entrancing sport. One can engage in it without destroying life, yet get great satisfaction from the thrilling activities it offers. The sport is appropriate for any time or place. From it one can derive all sorts of adventures, for to be a good photographer of birds in their native haunts it is necessary to climb trees and cliffs as well as travel on land and water. How interesting it is to find their nests, learn where they stay at various times during the day, how the young are fed and cared for, and procure photographs of the birds in various attitudes. Hiking with the camera through the woods is always an enjoyment. There is a feeling of excitement and expectancy present, for one never knows at what moment he may come upon some unusual bird activity.

- | | | | | | | |
|-----|---|---|---|---|---|---|
| 31. | Making studies of bird life is interesting because — | 1 | 2 | 3 | 4 | 5 |
| | 1 they haunt native places 2 of the various activities one can observe | 1 | 2 | 3 | 4 | 5 |
| | 3 it is always done on water 4 the young are fed and cared for | 1 | 2 | 3 | 4 | 5 |
| | 5 the sport is appropriate | 1 | 2 | 3 | 4 | 5 |
| 32. | Using a camera in place of a rifle encourages wild life by promoting — | 1 | 2 | 3 | 4 | 5 |
| | 1 destruction 2 conservation 3 dissatisfaction 4 conversation 5 haunts | 1 | 2 | 3 | 4 | 5 |
| 33. | Bird study is a satisfying sport because — | | | | | |
| | 1 the young are fed 2 the birds like it 3 one can get eggs out of nests | 1 | 2 | 3 | 4 | 5 |
| | 4 it can be enjoyed during all seasons 5 one can use a rifle | 1 | 2 | 3 | 4 | 5 |
| 34. | The best title for this story is — | | | | | |
| | 1 Interesting Birds 2 The Excitement of Adventure 3 Taming Wild Birds | 1 | 2 | 3 | 4 | 5 |
| | 4 Photography of Wild Birds 5 Destroying Bird Life | 1 | 2 | 3 | 4 | 5 |
| 35. | Taking pictures of bird life is fascinating because — | | | | | |
| | 1 it is helped by a camera 2 it takes much time 3 it gives more bird pictures | 1 | 2 | 3 | 4 | 5 |
| | 4 it brings adventure without destruction of life 5 it scatters the birds about | 1 | 2 | 3 | 4 | 5 |

VIII

In the part of our country which gets very little rain in the summer the ground must be wet by irrigation to make the plants grow. Otherwise all the crops would be spoiled by dry weather. This form of agriculture is carried on in states where snow is found high up in the mountains the entire year. A large reservoir is made by damming up the mountain streams. The snow, melting in summer, rushes into a stream. This, in turn, is joined to a large ditch. At the head of the ditch is an intake gate. This can be opened and closed at will. In this way water is drawn off and the various fields are irrigated. The water can be turned on whenever the fields need it. The parts of our country where irrigation is possible seldom have crop failures, because water can be secured when it is needed.

36. This form of agriculture is carried on where —
- | | | | | | | |
|-----------------------------|-------------------------------------|---------------------------|-------|-------|-------|-------|
| 1 crops are grown in summer | 2 mountain streams make it possible | 1 | 2 | 3 | 4 | 5 |
| 3 cities are near | 4 there are large reservoirs | 5 there are crop failures | ..... | ..... | ..... | ..... |
37. Because irrigation is possible crop failures are —
- | | | | | | | | | | |
|-------------|-----------|------------|-------------|--------------|-------|-------|-------|-------|-------|
| 1 increased | 2 reduced | 3 possible | 4 permitted | 5 eliminated | | | | | |
|-------------|-----------|------------|-------------|--------------|-------|-------|-------|-------|-------|
38. They stop the water from flooding the fields by —
- | | | | | | | | |
|-------------------------|-------------------------|-------------------------|-------|-------|-------|-------|-------|
| 1 damming the ditch | 2 use of gates | 3 opening the reservoir | 1 | 2 | 3 | 4 | 5 |
| 4 irrigating the fields | 5 drawing off the water | ..... | ..... | ..... | ..... | ..... | ..... |
39. The best title for this story would be —
- | | | | | | | |
|------------------------|----------------------------------|--------------------------------|-------|-------|-------|-------|
| 1 Damming Up Streams | 2 Supplying Water for Irrigation | 1 | 2 | 3 | 4 | 5 |
| 3 Crops in Dry Weather | 4 Building Huge Dams | 5 Supplying Water for Colorado | ..... | ..... | ..... | ..... |
40. Land that is irrigated yields better harvests because —
- | | | | | | | |
|----------------------------------|----------------------------------|-------|-------|-------|-------|-------|
| 1 in summer it gets little rain | 2 it is high up in the mountains | 1 | 2 | 3 | 4 | 5 |
| 3 water may be applied as needed | 4 the water can be turned off | ..... | ..... | ..... | ..... | ..... |
| 5 agriculture is carried on | ..... | ..... | ..... | ..... | ..... | ..... |

IX

9 →

Sugar beets must be raised where cheap labor can be secured because the plants require a great deal of cultivation, most of which must be done by hand. First the plants are thinned and then blocked to get the correct number in the rows. The roots from which the sugar is extracted are not like the red beets which are eaten as vegetables, but are more like the common turnips. These roots are washed, sliced, and soaked in water. The water is later drawn off and boiled into beet syrup. Then the syrup is changed to a brown sugar called raw sugar. The last step is to send the raw sugar through the refinery, where it is cleaned and whitened. Then the white sugar is ready to be boxed and sold for use in our homes.

41. Sugar beets must be raised where labor is not expensive because they require —
- | | | | | | | | | |
|----------------|----------------|------------------------|--------------------|-------|-------|-------|-------|-------|
| 1 much care | 2 much washing | 3 many plants in a row | 4 soaking in water | 1 | 2 | 3 | 4 | 5 |
| 5 much boiling | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
42. What kind of labor is most used in the raising of sugar beets?
- | | | | | | | | | |
|-----------|----------|-------------|--------|-----------|-------|-------|-------|-------|
| 1 machine | 2 manual | 3 difficult | 4 easy | 5 unusual | | | | |
|-----------|----------|-------------|--------|-----------|-------|-------|-------|-------|
43. The raw sugar is —
- | | | | | | | |
|-------------------|------------------------|--------------------------|-------|-------|-------|-------|
| 1 made into syrup | 2 refined and whitened | 1 | 2 | 3 | 4 | 5 |
| 3 boxed and sold | 4 left as it is | 5 changed to brown sugar | ..... | ..... | ..... | ..... |
44. The best title for this story is —
- | | | | | | |
|-------------------------------|------------------------------|-------|-------|-------|-------|
| 1 Blocking and Thinning Beets | 1 | 2 | 3 | 4 | 5 |
| 2 Colorado Sugar Beets | 3 How Beet Sugar Is Obtained | ..... | ..... | ..... | ..... |
| 4 Cleaning Raw Sugar | 5 How Beet Sugar Is Whitened | ..... | ..... | ..... | ..... |
45. Raising sugar beets requires —
- | | | | | | | |
|-----------------------|--------------------------|-------------|-------|-------|-------|-------|
| 1 inexpensive labor | 2 syrup changed to sugar | 1 | 2 | 3 | 4 | 5 |
| 3 sugar to be cleaned | 4 many common turnips | 5 raw sugar | ..... | ..... | ..... | ..... |

X

Airplanes are growing more important every year. Today they have traveled to almost every part of the world and into many places that would otherwise have remained unexplored. Daring pilots have been responsible for many outstanding feats. They have gone to the aid of dying men when there was no other opportunity of reaching them. At one time serum was carried to Alaska by plane and saved the lives of many children who were seriously ill of diphtheria. Every day of the year, and in all kinds of weather, Uncle Sam's pilots carry the mail through the air. Practically every day one reads of some new achievements of airplanes.

46. Airplanes have rendered valuable service to humanity by —
- | | | | | | | | | | |
|---------------------------------|--------------------------------|-----------------------------|---|---|---|---|---|--|--|
| 1 carrying many diseases | 2 having no other opportunity | 3 aiding the sick and dying | | | | | | | |
| 4 helping boys to become pilots | 5 taking passengers in the air | | 1 | 2 | 3 | 4 | 5 | | |
47. The life of an airplane pilot is —
- | | | | | | | | | | |
|------------|--------|-------------|---------|--------|---|---|---|---|---|
| 1 lonesome | 2 easy | 3 hazardous | 4 happy | 5 high | 1 | 2 | 3 | 4 | 5 |
|------------|--------|-------------|---------|--------|---|---|---|---|---|
48. Airplanes are used for a variety of services such as —
- | | | | | | | | | | |
|---|---|--|---|---|---|---|---|--|--|
| 1 exploring, carrying mail, and aiding the sick | 2 carrying mail in all sorts of weather | | | | | | | | |
| 3 bringing serum to diphtheria patients | 4 serving humanity | | 1 | 2 | 3 | 4 | 5 | | |
| 5 traveling in all kinds of weather | | | | | | | | | |
49. The best title for this story is —
- | | | | | | | | | | |
|----------------------|----------------------------|--------------------|--|--|---|---|---|---|---|
| 1 Mail Pilots | 2 Exploring with Airplanes | | | | 1 | 2 | 3 | 4 | 5 |
| 3 Value of Airplanes | 4 Life of an Air Pilot | 5 A Trip to Alaska | | | | | | | |
50. The accomplishments of airplanes are —
- | | | | | | | | | | |
|---------------|-----------------|-----------|---------------|-----------|---|---|---|---|---|
| 1 unimportant | 2 understanding | 3 trivial | 4 significant | 5 serious | 1 | 2 | 3 | 4 | 5 |
|---------------|-----------------|-----------|---------------|-----------|---|---|---|---|---|

XI

10 →

The mode of living on the plantations of the South was vastly different from that of the early New England people. The spacious Southern mansions, surrounded by the many slave cabins, gardens, and poultry yards, were often in themselves small villages. While many of these planters were living in wasteful extravagance, the Puritans of New England were living in modest two-room homes. They were thrifty people who were not in favor of the riotous living and entertaining of the planters. The New England people were more interested in the establishment of good common schools for all people, while the rich planters did not favor this idea. They had tutors at home for their children, or sent them to Europe to be educated.

51. The New Englanders were interested in —
- | | | | | | | | | | |
|--------------------------------|-----------------------------------|---------------------------------------|---|---|---|---|---|--|--|
| 1 having tutors for their sons | 2 organizing good public schools | 3 educating their children in England | | | | | | | |
| 4 living in two rooms | 5 riotous living and entertaining | | 1 | 2 | 3 | 4 | 5 | | |
52. Which word best describes a Southern planter?
- | | | | | | | | | | |
|----------|-----------|---------|--------|----------|---|---|---|---|---|
| 1 lavish | 2 gallant | 3 brave | 4 weak | 5 frugal | 1 | 2 | 3 | 4 | 5 |
|----------|-----------|---------|--------|----------|---|---|---|---|---|
53. Which word best describes a New England home?
- | | | | | | | | | | |
|---------------|-----------------|-----------------|-------------|------------|---|---|---|---|---|
| 1 magnificent | 2 insignificant | 3 unpretentious | 4 extensive | 5 valuable | 1 | 2 | 3 | 4 | 5 |
|---------------|-----------------|-----------------|-------------|------------|---|---|---|---|---|
54. The best title for this story is —
- | | | | | | | | | | |
|---|--|--|---|---|---|---|---|--|--|
| 1 A Story of Education | 2 A Comparison of the Life of the Planters | | | | | | | | |
| 3 Northern and Southern Modes of Living | 4 The Thrifty New England People | | 1 | 2 | 3 | 4 | 5 | | |
| 5 Good Schools for All | | | | | | | | | |
55. The Southern gentlemen desired —
- | | | | | | | | | | |
|--|---|--|---|---|---|---|---|--|--|
| 1 common education for all | 2 the organizing of good public schools | | | | | | | | |
| 3 good education for members of his own family | 4 tutors for children in New England | 5 good free schools for planters' sons | 1 | 2 | 3 | 4 | 5 | | |

TEST 4. WRITTEN RECALL

I

Blackie was a little kitten. One day a big dog chased him. He became frightened and ran up a tree. After he got high up in the branches, he was afraid to come down. The little girl who owned him came and stood beneath the tree. She called to Blackie and showed him his dish of milk, hoping he would want his supper enough to try to come down. But he would not come. Finally her father called the fire chief. He sent a fireman with a ladder. The man went up the tree and carried little Blackie down. The little girl was happy to have her kitten again.

II

John could hardly wait, so anxious was he to try the new canoe he had received for his birthday. As soon as he finished his breakfast he raced with his brother and sister to the lake. Here they examined his splendid new gift. John's father showed him how to use the paddle and told him that he might take his brother and sister for a short ride in the canoe, but warned him that he must not go too far from shore before he was thoroughly familiar with handling the new craft. All went smoothly, and gradually John forgot his caution and drifted farther from shore. Suddenly there came a great gust of wind. In a moment the lake was filled with heavy waves. John struggled to keep the little canoe upright. Luckily they were not far from a small island. He steered for this and reached the shore just as a particularly large wave turned the canoe bottom side up. The three children scrambled from the water out onto the island just as another huge wave came in. The canoe floated away, and John feared he had lost his precious gift. But a party in a little steamer presently came to the aid of the stranded children and rescued the canoe, which had blown a distance away.

DURRELL-SULLIVAN
READING CAPACITY AND ACHIEVEMENT TESTS

READING CAPACITY TEST

By DONALD D. DURRELL
Professor of Education and Director of the Educational Clinic
Boston University

and HELEN BLAIR SULLIVAN
Associate Director of the Educational Clinic
Boston University

Inter.
Capacity

A

INTERMEDIATE TEST: FORM A For Grades 3 to 6

Name..... Grade..... Teacher..... Boy or girl.....

Age..... When is your next birthday?..... How old will you be then?.....


Name of school..... City..... Date.....

TEST	SCORE	GRADE EQUIVA- LENT	AGE EQUIVA- LENT
1. Word Meaning			
2. Paragraph Meaning			
Total			

Patent No. 1,586,628

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TEST 1. WORD MEANING

I



A ()

B ()

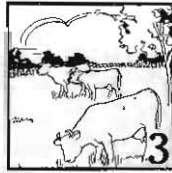
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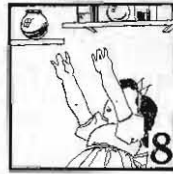
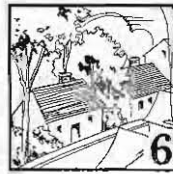
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A ()

B ()

C ()



D ()

E ()

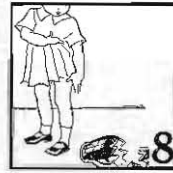
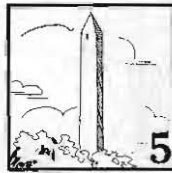
III



A ()

B ()

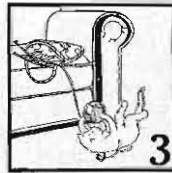
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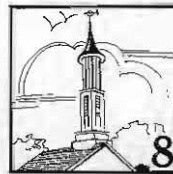
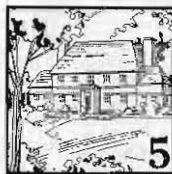
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A ()

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C ()



D ()

E ()

V



A ()

B ()

C ()



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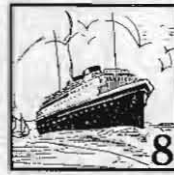
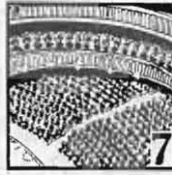
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A ()

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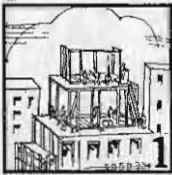
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D ()

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VII



A ()

B ()

C ()



D ()

E ()

VIII



A ()

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C ()



D ()

E ()

IX



A()

B()

C()



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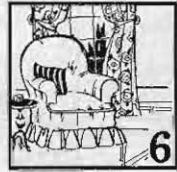
X



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XI



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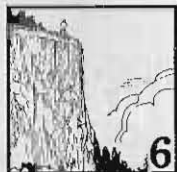
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A()

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XIII



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XIV



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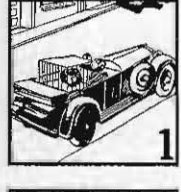
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E ()

VI



A ()



B ()



C ()



D ()



E ()

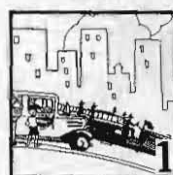
VII



A ()



B ()



C ()



D ()



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VIII



A ()



B ()



C ()



D ()



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X



1



2



3

A ()



1

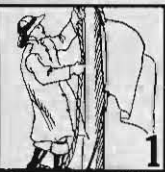


2



3

B ()



1



2



3

C ()



1



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3

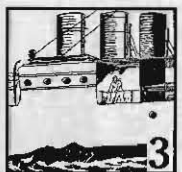
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1



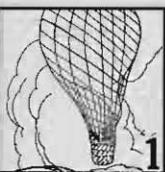
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3

E ()

X



1



2



3

A ()



1

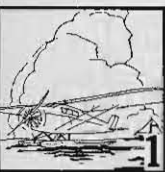


2



3

B ()



1



2



3

C ()



1



2



3

D ()



1



2



3

E ()

XI



1



2



3

A ()



1



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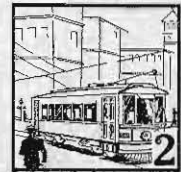


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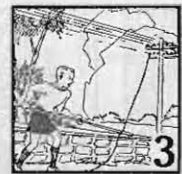
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2



3

E ()

XII



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2



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A ()



1

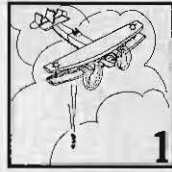


2



3

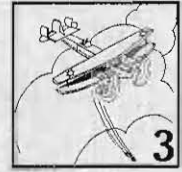
B ()



1



2



3

C ()



1



2



3

D ()



1



2



3

E ()