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Word mastery in oral reading telling versus sounding words in grade one.

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WORD MASTERY IN ORAL READING

TELLING VERSUS SOUNDING WORDS

IN GRADE ONE

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INTRODUCTION

Oral reading plays a very important part in the total reading program of the primary grades. It is in these grades that the child is learning to read by reading. Reading orally enables him to gain confidence and security in his newly found ability, reading. If, as a result of lack of information or misconception on the part of the teacher, a child acquires a poor attitude toward reading, this is indeed a great problem and a possible source of future reading difficulty.

Hildreth's[1] opinion in this area of oral reading is:

> "Reading aloud forces the child to read every word instead of skipping the hard items. Carelessness is promptly detected. During oral reading the pupil benefits from being told new words he hesitates over as he goes along, both because he learns words in this way and because the prompting helps him grasp the meaning of the sentence."

Durrell[2] has stated his belief in this way:

> "Word analysis during the oral reading lesson often spoils the pleasure of the group in audience reading. A child should be helped immediately on mispronounced or unknown words. Comments of teacher and pupils during audience reading must be directed only toward the content of the story. Difficult words may be noted for future study if they are of sufficient importance to be included in the

1/ Gertrude Hildreth, Teaching Reading, Henry Holt & Co., New York, 1958, p. 293.

2/ Donald D. Durrell, Improving Reading Instruction, World Book Company, New York, 1956, pp. 150-151.

> child's sight vocabulary. Any child will have adequate opportunity to apply his word analysis ability in independent reading and study. At that time he is not emotionally confused by his display of difficulty and is likely to use his word analysis ability to better advantage. Interest cannot be expected in oral reading when the outcome of the story is known in advance or when the activity serves only to 'catch' children on mispronounced or unknown words, to answer trivial questions, or simply to fill the reading period.

Every means available must be utilized to determine the best procedure in all avenues of reading.

The purpose of this study is to determine the relative value of different procedures in oral reading situations. Two procedures will be considered:

1. The child will sound out unfamiliar words as he meets them in reading.
2. The teacher will supply immediately an unknown word to the child, thus the continuity of the story will be sustained for the reader and also his reading companions.

CHAPTER I

SUMMARY OF PREVIOUS RESEARCH

In attempting to determine the relative value of any technique or theory used to stimulate the child's mind in the learning process, it is necessary to delve into many related areas. The process involved in the act of learning to read is perhaps the most complex and difficult task encountered by the elementary school child. Several factors are interwoven in this process, and can affect it dramatically. Among these is the child's emotional development.

According to Dolch,[1] this is an overpowering consideration which will affect the very content of future basal readers. He states, "Books will not be ends in themselves, but more means to change attitudes and improve 'mental states'." In this way, the teacher will become an advisor "in selecting the right book for the right child. Mental health may dominate the reading program for some time to come."[2]

The child's physical abilities and handicaps must also be considered in this learning process. In the words of Barbe,[3] "Poor vision and hearing should be corrected before the beginning of the formal reading situation. Environmental factors must be battled and balanced also." Barbe further notes, "The teacher must show an interest

1/ E. W. Dolch, "What Next in the Teaching of Reading," Education, Volume 78, May, 1958, pp. 526-528.

2/ Ibid., p. 527.

3/ W. B. Barbe, "Why Children Have Trouble in Reading," Education, Volume 78, May, 1958, pp. 521-525.

and love for reading herself. Books should be attractive and the quality of literature should be high."[1] The teacher must realize too, "A child may lack a particular experience common to the average child."[2] Naturally the school must compensate for that also.

The school must also judge the factors involved in the placement of the child in a group to learn this reading process. Therefore, the group must also be determined before the learning process can begin. Friden[3] suggests, "First Grade grouping may be done on the basis of chronological age for maturity level, intelligence tests, or readiness tests. Intelligence tests are a better forecast for ultimate achievements in reading than readiness tests."

Once this grouping has been accomplished, the question arises of how shall reading be taught. In a study matching beginning children in a systematic classroom against the opportunist type of classroom, the following results were recorded:

"1. The objectives outside of the traditional areas were equally well achieved by both groups.

2. The children in the opportunist type of classroom were slightly ahead in motor functions.

1/ Ibid., p. 523.

2/ Ibid., p. 524.

3/ Sister M. Friden, "Grouping Pupils for Reading," Catholic School Journal, Volume 57, December, 1957, p. 51.

3. The modern systematic teaching resulted in greater average achievement in arithmetic, spelling, silent and oral reading."[1]

These are but a few of the considerations that must be made when any area of the subject of reading is under scrutiny. Much has been studied, analyzed, and recorded, about the learning process involved, and many factors have been found significant. There are at least three major areas which have a direct influence upon the methods being considered in this thesis. These three broad areas are the psychological and physical factors in the reading process, the subject of oral reading in itself, and the controversial area of phonics. Each of these will be discussed in detail in the following pages of this chapter.

Needless to say, this is not aimed at deciding on the best way of teaching reading to every child, but rather at providing sufficient background on which to weigh the findings of this study.

Research for this study has been done in relation to the following areas:

1. The development of reading abilities as they compare with the physical and mental development;
2. The influence of psychological factors in the reading process;
3. Factors influencing the development of a reading vocabulary;

1/ Arthur I. Gates et al, "Systematic Versus Opportunist Methods of Teaching Reading," Reading in the Three R's, p. 101.

4. An analysis of the various methods of teaching phonics;

5. The influences determining success in oral reading.

For many years, the elementary school reading program has been determined by tradition, educational philosophies, textbooks, in fact, everything but the most important element--the child himself. In recent years, the elementary school curriculum has taken into consideration the developmental patterns and the characteristics of children.

According to Russell,[1] "The developmental traits of children and their reading activities are related in two ways:

1. The characteristics, needs, and activities of children at various age levels influence what and how they should be taught in reading.

2. Reading activities influence the nature of children's development by stimulating new abilities and interests and by affecting children's total adjustment."

As a result of his tabulating of a great number of research studies, Russell[2] feels that the following six principles of development should emphatically influence the planning and execution of a reading program:

1. All children go through similar stages of development as their reading abilities mature.

2. Development of reading abilities is a continuous and gradual process.

1/ David H. Russell, "Reading and Child Development," Forty-eighth Yearbook, 1949, Part II, National Society for the Study of Education, The University of Chicago Press, Chicago, p. 13.

2/ Ibid., p. 34.

3. Although children go through similar patterns of continuous development, there is a wide variation in the time individuals reach certain points in reading achievement.

4. Although reading is a continuous process, at various levels different needs and interests tend to accelerate certain phases of growth in reading abilities and attitudes.

5. In general there is a positive relationship between reading achievements and general physical, mental, and social development among the various reading achievements themselves.

6. The effect of environmental influences related to reading varies with the stage of maturation reached by the child.

Teachers are aware that children who are normal first learn to listen to the sounds surrounding them, then to speak, later to recognize the printed symbols. After recognizing these printed symbols, they learn to interpret them and apply them to their own experiences. Growth in reading, like physical growth, is generally speaking, a smooth process. Reading in the primary grades, like physical growth in early life, is rapid. It slows down as the child approaches adolescence.

When one speaks of "children going through similar patterns of development," it is usually conceded that most children begin to talk at about seventeen or eighteen months, and begin to read at six years of age. However, in classroom situations, reading achievement may differ by two, three, or more years, while the chronological ages may be approximately the same. Although this is true, there is usually a positive correlation among developmental factors for any one child.

Other things which influence reading development may be environment

and individual motivation. Social pressures and hobbies affect reading development. Jersild[1] suggests that new influences on motor, social, emotional, and intellectual behavior are other developmental factors. Sometimes children become disinterested in reading for a time and may suddenly change as their needs change.

It was pointed out by McCarthy[2] that verbal competence is closely allied to general maturity. Since this has been proven to be true, the teacher can expect mature reading from those children who have had wide experience and desirable emotional and social maturity for their level. In choosing materials the child's development and experiences must be given consideration, otherwise there will be no satisfaction in reading. Varied reading should be provided which will aid in the children's all-round development.

Many people consider reading a purely mental activity. Gates[3] claims reading cannot be so regarded. He says: "The dynamic and emotional processes are involved."

When children are truly interested in what they are reading, they not only understand and think about the reading matter, their emotions become involved. Perhaps anxiety, happiness or some other emotion is stirred up.

1/ Arthur T. Jersild and Associates, Child Development and the Curriculum, Bureau of Publications, Teachers College, Columbia, New York, 1946.

2/ Dorothea McCarthy, "Language Development in Children," Manual of Child Psychology, Wiley and Sons, New York, 1946, pp. 476-581.

3/ Arthur I. Gates, "The Role of Personality Maladjustments in Reading Disabilities," Journal of Genetic Psychology, LIX (September 1941), pp. 77-83.

Betts[1] avows attitudes are very important. Sometimes children are retarded in reading because of the attitudes they encounter at home. Another attitude to be considered is that of the individual whose personality has been changed by what he has read. The truth of this statement is borne out by the practice of bibliotherapy which is the treatment of maladjustment by means of reading and contemplating on carefully selected materials.

Educational psychology has long stressed the differences existing among individuals and the range of abilities found in any one group. These differences are caused by readiness factors which may reflect hereditary or environmental factors. Some children are just natively more adept than others. When considering environmental factors, the child who has been stimulated by learning rhymes and listening to stories is better prepared for learning to read. Community conditions also have their effect. Hereditary factors such as vision and hearing, if serious, will affect reading.

Reading, too, may have its affect on vision as in the practice of calling on all in turn to read orally while others follow silently. Gilbert[2] proved in his studies that when silent readers attempted to keep pace with oral readers who were poorer readers than themselves, they almost invariably increased the number of fixations. The data also proved that the regressive movements likewise increased when the silent reader tried to follow the oral reading of a poorer reader.

1/ Emmett A. Betts, "Are Retarded Readers Dumb," Education, 1956, Volume 76, pp. 568-575.

2/ Luther C. Gilbert, "The Effect on Silent Reading of Attempting to Follow Oral Reading," Elementary School Journal, (April, 1940), 40:614-621.

Figures to substantiate these claims are as follows: In grade two the increase amounted to 83 per cent; in grade three the increase amounted to 120 per cent; in grade four the increase amounted to 160 per cent; in grade five the increase amounted to 77 per cent; and in grade six the increase amounted to 85 per cent. It also proves that the visual pause is prolonged. The data are unmistakable in condemning the routine practice of requiring silent readers to follow the oral reading of poor and mediocre readers.

Anderson and Dearborn[1/] concur that the practice of sitting a child down and having him read orally, interrupting to have him look more carefully at errors and then having him go over whole paragraphs to get all the words is poor remedial teaching. They feel that this process merely makes the child hypersensitive of individual words and completely overshadows the real purpose of reading which is to get meaning from the written word. They believe it would be better to supply the words outright. They contend that there is nothing wrong with telling the children what the words are. It is true that in the first place the children have to be told the words in order to recognize them.

Some conclusions have indicated that there are different mental ages for successful beginning reading. The mental age necessary varies with the methods employed by various teachers. Thus instruction

1/ Irving H. Anderson and Walter F. Dearborn, The Psychology of Teaching Reading, Ronald Press Co., New York, 1952, pp. 169-170.

should be given in such a way that each pupil has the opportunity to use his abilities most effectively.[1]

Desirable situations for oral reading are: reading to inform or prove a point; reading a report to oneself for appreciation; and choral reading.[2]

Mattola[3] found significant differences in favor of teaching words in isolation at first grade level, rather than teaching them in phrases. Girls were found to learn better by either method.

The most important subtest of the Stanford Binet I. Q. Scale is vocabulary. It correlates more highly with the total test score than any other subtest.

From this a student's vocabulary is basic to his success in almost all intellectual endeavors.

The author gave the vocabulary section of Minnesota Reading Examinations for College Students, Form A to 100 Los Angeles State College students in 1955.

In summary, students with superior vocabulary cannot be differentiated from those with poor ones on the basis of languages spoken in the home, knowledge of Latin, or feelings of competence in using the dictionary.

1/ Arthur I. Gates, "The Necessary Mental Age for Beginning Reading," Elementary School Journal, Vol. 37, pp. 498-508 (March 1937).

2/ National Society for the Study of Education, Reading in the Elementary School, Forty-eighth Yearbook, 1949, Part II, The University of Chicago Press, Chicago, p. 343.

3/ Margaret Mattola, Effect of Teaching Reading Vocabulary by Words in Isolation and Phrases in First Grades, Unpublished Doctoral Dissertation, Boston University School of Education, 1951.

On the other hand, college students with poor vocabularies tend to be aware of their shortcomings and one can conclude that there should be relatively little need for college teachers to make a concerted effort to bring the matter to their attention. Since this group of students do not like to read for pleasure, there is a need to uncover and remove any factors inimical to recreatory reading. And lastly, it would be advisable to encourage students with poor vocabularies to develop a real dictionary habit.[1/]

A formula and procedure for determining grade level of primary material have been developed which is apparently widely used. The measure is based upon two factors: sentence length, and the number of words (not contained in a list of 769 words considered easy.) The words were originally compiled by selecting the words from two other lists--the International Kindergarten Union List, and the first 1,000 words of the Thorndike Teacher's Word Book.

The Author's Word List is based on a study of the words used in 369 primary reading books, ranging from pre-primers to third readers and A Graded Vocabulary for Primary Reading, which is a study of 21 series of the primary readers published in 1932-1940.

In both studies the words were graded on the basis of frequency of appearance as new words in the different series. For example, to be listed as a primer word, the word must appear as a new word in at least one-third of the primers.

1/ D. G. Schubert, "Factors Related to Vocabulary Size," California Journal of Educational Research (1957) 8:34-35.

The grade level of common introduction of a particular word in reading material is an important index of difficulty.[1]

To stress or not to stress phonetic training still remains a question.

> "In general the evidence appears to be clear that an over-emphasis on phonics produces word calling and lowered comprehension. On the other hand, an under-emphasis may produce word guessing and inaccurate comprehension. More experimental studies are needed on the relative values of different methods of teaching phonics in a balanced and differentiated program of reading instruction."[2]

Stanger[3] says in her book Prediction and Prevention of Reading Difficulties;

> "After sets including all the letters of the alphabet have been introduced, a real book may be presented. Up to this time it is advisable to use the cards or words, sentences, and stories thought out by the teacher, instead of books. This is because of the fact that even in the simple first readers there will be words so non-phonetic as to present obstacles. When we first begin real reading, it is wise to avoid needless sounding out of words that are not phonetic according to the sounds the child has so far learned.
>
> When they are encountered the teacher should simply supply them as soon as the child comes to them."

In this thesis, the writers have grouped some of their tabulated results under the various levels of I. Q.'s.

1/ Clarence R. Stone, "Measuring Difficulty of Primary Reading Material," Elementary School Journal, Vol. LVII (October 1956), pp. 36-41.

2/ Emmett A. Betts, "Phonics: Practical Considerations Based on Research," Elementary English Review, (October 1956), 33:357-365.

3/ Margaret A. Stanger, A Prediction and Prevention of Reading Difficulties, Oxford University Press, New York, 1937, 372.4 st 24.

Bourke[1] reports:

"An analysis of reading achievement by intelligence levels showed significant differences in favor of the highest intelligence level, except in grade 1, where there was a slight difference in favor of the 90-110 I.Q. group.

The order of importance of the factors studied for grade 1 were in this order: phonics, auditory, visual, and letter names.

The order of importance of the factors studied for grade 2 were in this order: auditory, phonics, visual and letter names.

The order of importance of the factors studied for grade 3 were in this order: auditory, visual, and phonics."

In Fahy's[2] Evaluation of Ear Training in Grade I, she says:

"....on all word elements tested the experimental group showed far lower percentage of error than did the control group.

The experimental group was not only better in retention of initial consonants, but the difference for final consonants was statistically significant.

The per cent of error was low for all initial consonants after teaching. The error for initial blends was also low after teaching.

Though both short and long sounds of vowels showed definite improvement after teaching, the percentages of error in this study indicated that in general vowels were more difficult than consonants."

The discussion as to the value of phonics continues with the view of McCullough.[3] She says in Improvement of Reading:

"The persistent use of phonic analysis, in place of more efficient methods, where these can be used, slows the reading process and defeats comprehension either because it entails long pauses between the analysis of words or because the heightened interest in words as words detracts from their meaning."

1/ Anne Bourke et al, The Relationship of Certain Word Analysis Abilities to the Reading Achievement of 1st, 2nd and 3rd Grade Children, Unpublished Master's Thesis, Boston University School of Education, 1953.

2/ Anne Fahy, Evaluation of Ear Training in Grade 1, Unpublished Master's Thesis, Boston University School of Education, 1949.

3/ Constance McCullough, Problems in Improvement in Reading, Mc-Graw-Hill Book Co., Inc., New York-London (1946) (First edition), p. 105.

An excellent point in the presentation of phonics lessons is made by Fancey[1] who says, "Phonics lessons and drills should not be isolated lessons but should be carried over into the reading lessons. Partial and incorrect use of sounding by slow learners or children with reading disabilities can be due either to premature or incorrect reading, or both."

Research would seem to indicate what Witty and Sizemore[2] say:

> "Phonics systems may develop a tendency in children to recognize words piecemeal.
>
> The method should not be used apart from meaningful approach in very slow reading. The child is sometimes hampered by attempts to sound out each part of a word and fails to react to natural, larger perception units in oral and in silent reading."

1/ Mildred R. Fancey, Anne M. Hogan, and Margaret M. C. Lane, Evaluation of a Planned Program of Word Analysis in Grade 2, Unpublished Master's Thesis, Boston University School of Education, 1958.

2/ P. A. Witty and R. A. Sizemore, "Phonics in the Reading Program - A Review and an Evaluation," Elementary English, Vol. 32, October, 1955, p. 369.

CHAPTER II

PLAN OF THE STUDY

In order to conduct the study it was necessary to construct materials, secure a population, teach new vocabulary, and measure retention of vocabulary.

There were five teachers in the group. Each one selected at least twenty words she thought would be appropriate for the study. There were more than one hundred suggested words gathered from a variety of sources such as the speaking vocabulary[1/] of children on a first grade level, basic reading books of some of the higher grades, and children's interests in this particular age group.

Table I is the list of proposed words submitted by the group of first grade teachers.

TABLE I

ORIGINAL LIST OF 136 WORDS

acrobat	arrow	blizzard	candy
air	aunt	bracelet	carriage
airplane	bacon	brave	carry
alphabet	balloon	butterfly	chocolate
always	baseball	cake	circus
answered	beautiful	calendar	cloudy

1/ Helen A. Murphy, "The Spontaneous Speaking Vocabulary of Children in Primary Grades," Boston University, Journal of Education, 1957, 140:2.

TABLE I (concluded)

clown	growl	pocketbook	strawberries
cocoon	helicopter	princess	stretch
couch	hibernate	pudding	subway
crocodile	high	puzzle	suitcase
crunch	hold	ranch	summer
dance	hurricane	read	swallow
delicious	ice-cream	reindeer	taxicab
difficult	indian	ridiculous	teach
dinosaur	invite	rocket	teepee
door	juice	rodeo	telephone
dream	lasso	satellite	television
earth	learn	school	thermometer
easy	listen	scramble	toast
electricity	lollipops	scream	tracks
elephant	measles	shadows	traffic
empty	medicine	ship	trapeze
excited	migrate	shovel	travel
fairies	mischief	sky	trip
feathers	mitten	sled	under
fever	naughty	slippery	visit
fingers	noise	soap	wash
fish	parade	sparkle	watch
flowers	parakeet	stairs	weather
fruit	passenger	stars	whisper
gallop	perfume	station	wigwam
gorilla	pie	still	window
gravel	pilot	storm	winter
grocer	planet	stormy	write

When the group discussed the suitability of the suggested words, many of the words had to be eliminated, as different basal reading systems were in use and some of the suggested words were in these systems. Some of these words were: window, wash, aunt, socks, and read.

Other suggested words would have been easily recognized from a familiar root word found in the basic reading vocabulary such as: baseball, hold, and heard. Some words could not be considered suitable because they had been brought up incidentally in some classrooms as the word calendar which was introduced through work on weather and seasons.

After many rejections and suggestions, a list of forty words was compiled. Some were selected because of their color, such as bracelet and lollipop, and others because of particular interest to children, as rodeo, dream, and shadow. Both phonetic and non phonetic words were listed, as storm, whisper, fingers, juice, beautiful, and mischief. Nouns, verbs, and adjectives were included.

An attempt was made to have different letter combinations within words and words similar in form, as telephone and television. The words varied in length and difficulty.

After continued close scrutiny, forty words were accepted by the members of the group working on this study. Table II is the list of words chosen for the study.

TABLE II

LIST OF FORTY WORDS SELECTED

acrobat	dream	lollipop	sparkle
bacon	earth	measles	storm
beautiful	excited	mischief	thermometer
blizzard	feathers	naughty	telephone
bracelet	fever	noise	television
butterfly	fingers	princess	traffic
cocoon	gravel	puzzle	trapeze
crunch	helicopter	rodeo	weather
delicious	juice	satellite	whisper
difficult	lasso	shadows	wigwam

After the final selection of the words, it was necessary to pair them as two words were to be taught each day. Some of the words showed

a natural association and were paired easily, as beautiful and princess, measles and fever. In other pairs, the association was more remote or lacking entirely. Examples of these were dream and helicopter, puzzle and difficult. The following Table III shows how the words were grouped.

TABLE III

LIST OF WORD PAIRS

thermometer	weather
sparkle	bracelet
blizzard	storm
rodeo	lasso
dream	helicopter
excited	television
butterfly	cocoon
delicious	lollipop
naughty	mischief
juice	bacon
crunch	gravel
earth	satellite
shadow	fingers
beautiful	princess
whisper	telephone
measles	fever
acrobat	trapeze
puzzle	difficult
noise	traffic
wigwam	feathers

The pairs were divided equally among the teachers working on the study. Each teacher was responsible for writing four stories using a total of eight words.

The general structure of the stories was discussed in detail. As the experiment was going to be started within the various classrooms about the first of January, it was decided to keep the material as close to the structure of the primer as possible. In order to do this, the Scott Foresman primer, "Fun with Dick and Jane" was examined thoroughly. There was an average of fifty words to a page and about two hundred words to a complete story. Each page measured about five inches by seven inches, with a margin of about an inch on either side and at the bottom.

There was a picture at the top of each page of the story. It was decided that there would be no pictures included in the stories. It was suggested that this general structure be adhered to as closely as possible when the stories were written.

The vocabulary used was to be kept in general at primer level except the two new words that were to be introduced in each story. If it was necessary to insert an extra word it could be told to the child immediately when reading the story. The sentences were simple and a primer typewriter was used.

The two new words present in each story were repeated as many times as possible without making the story ridiculous. The minimum number of repetitions for a word was set at five.

The stories had titles similar to those in the primer.

The first drafts were read by the members of the group. Suggestions were made concerning sentence length, difficult words that could be simplified, and the length of the stories as a whole. Many involved

phrases were eliminated so the wording would more closely simulate that of the basic primer.

The words in each story were counted and a notation was made at the top of the first page of the story to show this count. Some of the stories were longer than others, but it was felt this was acceptable as long stories could be alternated with short stories. The number of repetitions of each new word was counted and noted at the top of the title page. This was necessary to insure equal practice to the new words presented. Some of the suggested titles were changed to provide added motivation.

Oak tag was cut to the size of the story pages and then folded. Paper fasteners were inserted through the cover and stories to make a permanent book which could be easily handled by the children. Masking tape was used to cover the paper fasteners. These books resembled closely the size and form of the basal reading books the children had used in their daily reading program.

The stories were then arranged in the sequence in which they were to be presented, an effort being made to secure contrast by varying the length and content of the story presented each day. The list follows in Table IV.

TABLE IV

LIST OF STORIES

Number of Story	Title	Words to be Taught	
1.	The Red Line	thermometer	weather
2.	Sparkle and the Bracelet	sparkle	bracelet
3.	Winter at the Farm	blizzard	storm
4.	A Day at the Rodeo	rodeo	lasso
5.	A Dream Ride	dream	helicopter
6.	Two Excited Boys	excited	television
7.	A Surprise	butterfly	cocoon
8.	A Trip to the Store	delicious	lollipops
9.	The Naughty Kitten	naughty	mischief
10.	A Birthday Breakfast	juice	bacon
11.	Big Crunch and Little Crunch	crunch	gravel
12.	Blinky and the Satellite	earth	satellite
13.	Fun With Shadows	shadow	fingers
14.	The Princess Ran Away	beautiful	princess
15.	A Surprise Party	whisper	telephone
16.	No School	measles	fever
17.	A New Toy	acrobat	trapeze
18.	The Night Before Christmas	puzzle	difficult
19.	Fun at the Parade	noise	traffic
20.	What Do I See?	wigwam	feathers

A rotation plan was used in order that all words would be presented both ways to take care of differences in difficulty and interest. One school began with the sounding method; the following day the opposite method was used. Table V shows the rotation plan of the stories.

TABLE V

METHOD OF TEACHING VOCABULARY
Rotation Plan

Day	Words Taught		Method	
			Group A	Group B
first	weather	thermometer	telling	sounding
second	sparkle	bracelet	sounding	telling
third	blizzard	storm	telling	sounding
fourth	rodeo	lasso	sounding	telling
fifth	dream	helicopter	telling	sounding
sixth	excited	television	sounding	telling
seventh	butterfly	cocoon	telling	sounding
eighth	delicious	lollipop	sounding	telling
ninth	naughty	mischief	telling	sounding
tenth	juice	bacon	sounding	telling
eleventh	crunch	gravel	telling	sounding
twelfth	earth	satellite	sounding	telling
thirteenth	shadow	fingers	telling	sounding
fourteenth	beautiful	princess	sounding	telling
fifteenth	whisper	telephone	telling	sounding

(concluded on next page)

TABLE V (concluded)

Day	Words Taught		Method	
			Group A	Group B
sixteenth	measles	fever	sounding	telling
seventeenth	acrobat	trapeze	telling	sounding
eighteenth	puzzle	difficult	sounding	telling
nineteenth	noise	traffic	telling	sounding
twentieth	wigwam	feathers	sounding	telling

All reading was done in regular reading groups, the first thing in the morning before the basal reading lesson.

The selected words were presented each day to each reading group this way:

1. Teacher printed word on board
2. Teacher pronounced word distinctly
3. Children pronounced word distinctly
4. Teacher showed flash card of word
5. Teacher and children discussed meaning of word
6. Children matched word on flash card with word on blackboard and said word
7. Several children had practice reading from board phrases using the word
8. Teacher used word in sentences
9. Children used word in sentences.

The plan used in the first story follows.

Lesson I

The Red Line

(thermometer, weather)

The teacher asks, "Do you have a thermometer at home? Can you see a thermometer in our room? For what is a thermometer used?" Allow a short time for discussion. "This word says thermometer. Let me hear you say it. Is thermometer a little word or a big word? Watch while I write thermometer on the board. What two letters do you see at the beginning of the word? This word thermometer begins like some other words we know - the, they, this. What letter do you see at the end of thermometer? Yes, it is "r". Can you hear the "r"? Let's all say the word again."

"Our other word today is weather." Hold up appropriate card. "Is the weather hot or cold in the winter? ....in the summer? Look at this word as I write it on the board. Let's all say the word. What letter does it begin with? Can you think of some other words that begin like weather? Look at the end of weather. What letter is that? Can you hear it?

"Who would like to read the two words on the board? Who would like to read the words on the cards?" Allow time for several children to read the words from board and cards.

(concluded on next page)

Lesson I (concluded)

Write the following phrases on the board. Have several children read them.

a big thermometer	two thermometers
in hot weather	in cold weather
my thermometer	in the thermometer
cold weather	

Flash cards were prepared for all twenty words. They were made of oak tag 3 by 9 inches in manuscript writing with a border of one half inch.

On the first day, following the rotating plan as the story was read, one group of children sounded all unknown words, not just the experimental words. The following day the children were told immediately all words causing difficulty and hesitation.

A time limit of ten seconds was established when a child was permitted to sound or attempt to sound an unknown word. At the end of this time the word was supplied by the teacher. Non phonetic words were told always.

Ten minutes were allowed for each reading group. If some groups had difficulty in completing the story within the established time, the teacher read aloud the remainder of the story. If the complete story was read in less than the ten minute period, the extra time was spent in rereading.

Each day there was a very brief review of the two words taught on the preceding day. One or two other troublesome words were reviewed

in the same brief way. The only practice given to the experimental words was in the presentation, in reading the story, and in the brief review the following day. All of the reading was oral and at sight.

Because of illness, the program was delayed for one week and then resumed in order to complete the study within the designated time. For any child who was absent more than two days, a quick flashing of the cards served as the only practice and acquaintance with the words.

Absence on Friday, the day of the weekly inventory, necessitated individual testing of the week's words when the child returned to school. No additional provision was made for review of vocabulary after a lengthy absence.

Population.

One hundred and twelve first grade children in four classrooms with different socio-economic backgrounds were included.

Table VI shows the distribution of chronological ages of the total population.

TABLE VI

DISTRIBUTION OF CHRONOLOGICAL AGES
Three month intervals

C A (months)	f
104-106	1
101-103	0
98-101	0
95- 97	0
92- 94	0
89- 91	0
86- 88	2
83- 85	2
80- 82	3
77- 79	17
74- 76	29
71- 73	28
68- 70	26
65- 67	3
62- 64	1
Total	112
Mean	73.77 months
S D	1.73 "

The chronological ages ranged from 63 months to 105 months with a mean of 73.77 months and a standard deviation of 1.73 months.

Group intelligence tests were given early in October. Kuhlman-Anderson Test[1] was used in two classrooms and Pinter Cunningham[2] in the other.

[1] Personnel Press Inc., Princeton, New Jersey.

[2] World Book Company, New York.

Table VII shows the distribution of intelligence quotients for the total population.

TABLE VII

DISTRIBUTION OF INTELLIGENCE QUOTIENTS

	f
134-139	1
130-134	0
125-129	4
120-124	14
115-119	15
110-114	21
105-109	19
100-104	14
95- 99	12
90- 94	5
85- 89	5
80- 84	1
75- 79	0
70- 74	1
Mean	108.34
S D	11.20

Intelligence quotients ranged from 71 to 137 with a mean of 108.34 and a standard deviation of 11.2.

Table VIII shows the distribution of Mental Ages of the total population.

TABLE VIII

DISTRIBUTION OF MENTAL AGES
Three month intervals

	f
107-109	1
104-106	0
101-103	0
98-100	1
95- 97	0
92- 94	6
89- 91	8
86- 88	17
83- 85	15
80- 82	16
77- 79	10
74- 76	16
71- 73	4
68- 70	7
65- 67	6
62- 64	2
59- 61	3
Mean	80.12 months
S D	8.73 "

The mental ages ranged from 59 months to 108 months with a mean of 80.12 months and a standard deviation of 8.73 months.

Testing.

Two types of testing were used--weekly individual inventories and a delayed group test administered one week after the program was completed. Flash cards were used for the individual weekly testing, allowing ten seconds for each word. If the word was not recalled at

the end of this time, it was told to the child. Correct responses were recorded with a checkmark on the weekly chart, and incorrect responses or unknown words were left blank. The checklist indicated whether the word had been presented on a day of sounding or a day of telling. A separate checklist was kept for each of the four weeks of the study.

The horizontal headings on the checklist were the ten words taught in one week and the method used on the day the word was presented--telling or sounding. The vertical column on the left contained the names of the children. The checklist was ruled to make a box for each word, for each child. A sample checklist may be found on the following page.

The delayed test was given one week after the study had been completed; it was a group test administered to each of the four classes participating in the study.

Two types of items were included:

1. word-picture identification
2. identification by category

Sounding and telling words were interspersed in both parts of the test.

The word picture identification part of this test consisted of words and pictures in a multiple choice form. All the words that could be easily pictured were included in this section. It was similar to many work book exercises. The page was divided in three vertical columns and was divided by one horizontal line. There was then an

late

Name	Tell ①		Sound ②		Tell ③		Sound ④		Tell ⑤	
	thermometer	weather	sparkle	bracelet	storm	blizzard	rodeo	lasso	dream	helicopter
Ellen Becker	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Kathy Callahan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Janice Ellerthorpe	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ginger Tenney	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Emily Leamon	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sharon Posner	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Katherine Sampson	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Harriet Shuman	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wendy Smith	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Barbara Herbst	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Benita Kaplan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ann Hinman	✓	✓	–	–		–	✓	✓	–	–
Ellen Hoffman		✓	✓	–	✓	✓	✓	✓	–	–
Karen Hurwitz	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Jana Magnet	✓	✓	✓	✓	✓	✓	✓	✓	✓	–
Frances Silbert	–	–	✓	–	✓		✓			
Debra Smigel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Martha Supowitz		✓	✓	✓	–	–	–	✓	–	–
Gail Tankard	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Jeffrey Fermon	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Robert Gladstone	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Stephen Hildebrand	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Robert Krachman	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Joseph Brin	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Robert Adelson	✓	✓	✓		–	–	✓	–	–	✓
George Daukes	✓	✓	✓	✓	–	✓	✓	✓	✓	✓
John Dunn	✓	✓			✓	✓			✓	✓
William Porter	–	–	–	–	–	–	–	–	–	–
Wayne Ward	–	–	–		–	✓	–	–		–

upper and a lower portion of the page. The center column of the upper section contained five of the words taught in the study. In each side column there were four pictures, allowing three extra pictures after the five words and pictures have been matched. The child was directed to read the word, find the corresponding picture and then draw a line from the word to the picture. Before the children actually started the test, there was a demonstration of this type of exercise at the blackboard. The physical set-up on the board was the same as in the test booklet--five words (from basal vocabulary) with four pictures on each side of the words. A child was asked to read the first word and locate the corresponding picture. A line was then drawn from the word to the picture. The same procedure was followed for the remaining four words. The child then received his test booklet, wrote his name, and saw on page 1 the identical exercise that had been done at the board. Each child proceeded to do the exercise with no time limit. Help was given whenever and wherever necessary on this sample page. When all the children had completed this, the page was then turned to page 2. There was an upper and a lower section, but the same set-up remained. Three minutes were allowed for this page. The children then turned to the next page which was the same type of item. Time for this page was set at three minutes also. Twenty words were tested in this way on two pages.

Some of the extra, unused pictures on these two pages had the same initial sound or blend as one of the tested words, such as lion and lasso, mouse and measles.

Other extra pictures of words beginning with the same sound or blend were more familiar objects or items than the tested words, as shoe and shadow, pear and puzzle, jacket and juice.

Some sections had more than one experimental word beginning with the same initial sound as telephone and trapeze.

After the two pages of word picture identification were completed, attention of the child was directed to the blackboard for a demonstration of the identification of words by category section. Before the test started, three boxes of three words each had been put on the board. Children were directed to look at the first box of words: Mother, jump, Father. One child was asked to give the words that tell about people. Mother and Father were named and a circle was placed around each of these two words. In the next box only one circle was required and in the last box three words were encircled in order to demonstrate that there was no set number of words to be encircled.

Children's attention was then returned to their test booklets. There were nine boxes on the last page, with three words in each box. The first two boxes were inserted for additional practice; help was given when needed in these two boxes. Seven boxes remained for the test, making a total of twenty-one words. One word, crunch, was repeated so there were actually only twenty words tested in this section. Sounding and telling words were combined. Fifteen seconds were allowed for marking the correct word or words in each box. It was assumed that the child would be required to read all of the words in order to mark them correctly.

The scores of the tests were analyzed and the results are presented in the next chapter.

CHAPTER III

ANALYSIS OF DATA

The data were analyzed to discover:

1. The number of words learned by both methods based on scores of the weekly tests.
2. The number of words learned by both methods based on scores on delayed tests.
3. A comparison of the number of words learned in different reading groups by both methods.
4. The per cent of words learned by both presentations.

Table IX shows the distributions and comparison of mean scores for the total population on the weekly tests.

TABLE IX

COMPARISON OF WEEKLY TEST SCORES FOR BOTH METHODS FOR THE TOTAL POPULATION

Number correct	Sound f	Tell f
20	10	11
19	11	8
18	6	7
17	6	8
16	7	10
15	6	6
14	8	6
13	3	9
12	6	2
11	3	3
10	8	9
9	7	4
8	1	4
7	6	5
6	5	12
5	9	4
4	3	2
3	4	1
2	1	1
1	2	

	Mean	S D	S E	Diff.m	S E Diff.m	C R
Sound	12.26	5.58	.53			
Tell	12.86	5.10	.48	.60	.715	.835

The range of correct responses for the sounding method was from 1 to 20 and for the telling method 2 to 20.

The mean for the sounding method was 12.26 words compared to 12.86 words for the telling method. The critical ratio of .835 shows that this was not a statistically significant difference.

Table X shows the distribution of the scores on the weekly tests for the best reading group, and the comparison of means on the same tests.

TABLE X

COMPARISON OF WEEKLY TEST SCORES FOR BOTH METHODS FOR THE BEST READING GROUP

Number correct	Sound f	Tell f
20	9	11
19	8	5
18	3	5
17	3	4
16	2	4
15	4	3
14	4	3
13	3	2
12	1	3
11	2	1
10	3	2
9	3	1
8		0
7		0
6		1

	Mean	S D	S E	Diff.$_m$	S E Diff.$_m$	C R
Sound	15.89	3.65	.54			
Tell	16.27	3.55	.53	.68	.76	.89

The range of correct responses for the sounding method was from 9 to 20 and for the telling method from 6 to 20.

The mean score for the sounding method of the best reading group's weekly test was 15.89 words compared with 16.27 words for the telling method. The critical ratio of .89 shows the difference is not statistically significant.

Table XI shows the distribution of scores on the weekly tests of the middle reading group, and the comparison of the mean scores on the same tests.

TABLE XI

COMPARISON OF WEEKLY TEST SCORES FOR BOTH METHODS FOR THE MIDDLE READING GROUP

Number correct	Sound f	Tell f
19	3	1
18	1	2
17	1	3
16	3	3
15	3	4
14	3	3
13	0	2
12	3	0
11	0	1
10	2	3
9	3	0
8	1	4
7	2	4
6	3	4
5	4	0
4	1	1
3	0	
2	1	
1	1	

	Mean	S D	S E	Diff.m	S E Diff.m	C R
Sound	10.77	5.16	.87			
Tell	11.74	4.40	.74	.97	1.14	.85

The range of correct responses for the sounding method was from 1 to 19 and for the telling method from 4 to 19.

The mean score for the sounding method of the middle reading group's weekly tests was 10.77 words and for the telling method was 11.74 words. The critical ratio of .85 shows the difference is not statistically significant.

Table XII shows the distribution of scores on the weekly test of the low reading group and the comparison of means on the same tests. The table appears on the next page.

TABLE XII

COMPARISON OF WEEKLY TEST SCORES FOR BOTH METHODS FOR THE LOW READING GROUP

Number correct	Sound f	Tell f
20	1	
19	0	2
18	2	0
17	2	0
16	2	3
15	0	0
14	0	0
13	0	5
12	2	0
11	1	0
10	3	4
9	1	3
8	0	0
7	4	1
6	2	7
5	5	4
4	2	1
3	4	1
2	0	1
1	1	

	Mean	S D	S E	Diff.m	S E Diff.m	C R
Sound	8.81	5.32	.94			
Tell	9.25	4.58	.81	.44	1.24	.36

The range of correct responses for the sounding method was from 1 to 20 and for the telling method from 2 to 19.

The mean score for the sounding method was 8.81 words compared to 9.25 words for the telling method. The critical ratio of .36 shows this was not a statistically significant difference.

Table XIII shows the distributions and comparison of mean scores for the total population on the delayed tests.

TABLE XIII

COMPARISON OF DELAYED TEST SCORES FOR BOTH METHODS FOR THE TOTAL POPULATION

Number correct	Sound f	Tell f
20	7	4
19	16	9
18	9	17
17	7	11
16	9	7
15	6	4
14	8	6
13	8	3
12	7	2
11	6	6
10	8	5
9	10	16
8	3	9
7	4	6
6	3	7
5	1	6
4		3
3		1

	Mean	S D	S E	Diff.m	S E Diff.m	C R
Sound	14.02	4.17	.39			
Tell	12.80	5.07	.48	1.22	.62	1.97

The range of correct responses for the sounding method was from 5 to 20, and for the telling method from 3 to 20 words.

The mean for the sounding method was 14.02 words compared to 12.80 for the telling method. The critical ratio of 1.97 shows this is not a statistically significant difference but there are 94 chances in 100 that this is a true difference in favor of the sounding method.

Table XIV shows the distribution of scores on the delayed tests of the best reading group and the comparison of the means on the same tests. The table appears on the following page.

TABLE XIV

COMPARISON OF DELAYED TEST SCORES FOR BOTH METHODS FOR THE BEST READING GROUP

Number correct	Sound f	Tell f
20	4	4
19	10	6
18	3	7
17	6	5
16	4	3
15	1	1
14	3	1
13	2	1
12	3	1
11	1	2
10	3	2
9	3	2
8	0	4
7	1	2
6	1	3
5		1

	Mean	S D	S E	Diff.m	S E Diff.m	C R
Sound	15.33	3.92	.58			
Tell	14.13	4.90	.73	1.20	.932	1.29

The range of correct responses for the sounding method was 6 to 20 and 5 to 20 for the telling method.

The mean for the sounding method was 15.33 words compared to 14.13 words for the telling method. The critical ratio of 1.29 shows this was not a statistically significant difference but there are 82 chances in 100 that this is a true difference in favor of the sounding method.

Table XV shows the distribution of scores on the delayed tests of the middle reading group and the comparison of the means on the same tests.

TABLE XV

COMPARISON OF DELAYED TEST SCORES FOR BOTH METHODS FOR THE MIDDLE READING GROUP

Number correct	Sound f	Tell f
20	2	
19	2	2
18	5	8
17	1	2
16	4	4
15	2	0
14	3	2
13	3	2
12	4	0
11	1	1
10	3	3
9	2	1
8	1	4
7	2	2
6		2
5		1
4		1

	Mean	S D	S E	Diff.m	S E Diff.m	C R
Sound	13.97	3.74	.63			
Tell	12.89	4.79	.81	1.08	1.03	1.05

The range of correct responses for the sounding method was 7 to 20 and from 4 to 19 words for the telling method.

The mean for the sounding method was 13.97 words compared to 12.89 words for the telling method. The critical ratio of 1.05 shows this was not a statistically significant difference but there are 70 chances in 100 that this is a true difference in favor of the sounding method.

Table XVI shows the distribution of scores on the delayed tests of the low reading group and the comparison of the means on the same tests.

TABLE XVI

COMPARISON OF DELAYED TEST SCORES FOR BOTH METHODS FOR THE LOW READING GROUP

Number correct	Sound f	Tell f
20	1	
19	4	1
18	1	2
17	0	4
16	1	0
15	3	3
14	2	3
13	3	0
12	0	1
11	4	3
10	2	0
9	5	3
8	2	1
7	1	2
6	2	2
5	1	5
4		1
3		1

	Mean	S D	S E	Diff.m	S E Diff.m	C R
Sound	12.22	4.27	.75			
Tell	10.87	4.93	.87	1.35	1.15	1.17

The range of correct responses for the sounding method was from 5 to 20 and for the telling method from 3 to 19 words.

The mean for the sounding method was 12.22 words compared to 10.87 words for the telling method. The critical ratio of 1.17 shows this was not a statistically significant difference but there are 74 chances in 100 that this is a true difference in favor of the sounding method.

Table XVII shows the percentage of children with correct responses for each word for both methods on the weekly and delayed tests. The table appears on the next page.

TABLE XVII

PERCENTAGE OF CORRECT RESPONSES FOR BOTH METHODS ON THE WEEKLY AND DELAYED TESTS

	Weekly		Delayed	
	Sound	Tell	Sound	Tell
acrobat	68.2	75.8	95.4	91.4
bacon	75.8	56.3	87.9	23.9
beautiful	44.8	67.3	65.5	51.1
blizzard	56.9	87.9	64.7	89.7
bracelet	81.2	62.7	81.2	31.4
butterfly	69.1	84.4	88.1	93.1
cocoon	61.9	86.2	100.0	94.8
crunch	47.8	65.5	36.9	55.2
delicious	55.2	52.3	94.8	88.6
difficult	63.8	52.2	65.5	71.7
dream	36.2	84.4	100.0	77.5
earth	72.4	68.7	75.8	12.5
excited	81.2	85.0	72.4	55.0
feathers	76.8	41.3	75.8	34.8
fever	84.4	40.0	91.4	88.9
fingers	74.5	60.3	23.4	75.8
gravel	58.7	72.4	93.5	91.4
helicopter	53.2	81.2	48.9	93.1
juice	84.4	91.3	84.4	17.4
lasso	86.2	61.5	91.4	19.2
lollipop	93.1	72.7	89.7	68.2
measles	77.5	82.6	79.3	39.1
mischief	55.5	72.4	86.7	94.8
naughty	42.2	62.1	73.3	81.2
noise	69.6	74.1	89.1	84.4
princess	65.5	83.7	84.4	36.7
puzzle	72.4	65.2	84.4	67.4
rodeo	84.4	73.0	96.6	15.4
satellite	72.4	64.6	67.2	81.2
shadow	31.9	55.2	8.5	76.8
sparkle	87.9	64.7	81.2	25.5
storm	43.1	81.2	45.1	91.4
telephone	59.1	74.1	40.8	94.8
television	74.1	35.0	96.6	82.5
thermometer	74.1	87.9	37.2	96.6
traffic	32.6	51.7	80.4	89.7
trapeze	25.0	62.1	63.6	81.2
weather	62.7	87.9	82.3	86.2
whisper	57.1	58.6	20.4	39.7
wigwam	77.5	44.7	89.7	76.6

On the weekly inventories 30 of the 40 words showed a difference of more than 10 per cent between the sounding and telling methods. Of these 30 words 18 favored the telling method and the differences ranged from 13.8 per cent to 48.2 per cent over the sounding method. The words favoring the telling method were:

beautiful	gravel	storm
blizzard	helicopter	telephone
butterfly	mischief	thermometer
cocoon	naughty	traffic
crunch	princess	trapeze
dream	shadows	weather

There were 12 of the 30 words favoring the sounding method and the differences ranged from 11.4 per cent to 44.4 per cent over the telling method. The words favoring the sounding method on the weekly tests were:

bacon	fever	rodeo
bracelet	fingers	sparkle
difficult	lasso	television
feather	lollipop	wigwam

On the delayed tests 28 of the 40 words showed a difference of more than 10 per cent between the sounding and telling methods. Of these 28 words, 17 favored the sounding method and the differences ranged from 13.1 per cent to 81.2 per cent over the telling method. The words favoring the sounding method were:

bacon	feathers	puzzle
beautiful	juice	rodeo
bracelet	lasso	sparkle
dream	lollipop	television
earth	measles	wigwam
excited	princess	

There were 11 of the 28 words favoring the telling method and the differences ranged from 14.0 per cent to 68.0 per cent over the sounding method. The words favoring the telling method on the delayed tests were:

blizzard	satellite	thermometer
crunch	shadow	trapeze
fingers	storm	whisper
helicopter	telephone	

Among the words showing a difference of more than 10 per cent between the sounding method and the telling method the following words were common to the lists for both the weekly inventories and the delayed tests:

Favored Sounding	Favored Telling
bacon	blizzard
bracelet	crunch
feather	helicopter
lasso	shadow
lollipop	storm
rodeo	telephone
sparkle	thermometer
television	trapeze
wigwam	

CHAPTER IV

SUMMARY AND CONCLUSIONS

The purpose of the study was to determine the relative merit of two different procedures employed in oral reading situations: the first procedure or alternative was to allow the child to sound all unknown words in oral reading, and the second was to tell the child all unfamiliar words immediately.

Comparative merit of both methods was determined by the child's word mastery, measured weekly during the study and also one week after the study had been completed. Reading groups were the basis of class division in the study and also for the comparison of number of words learned.

One hundred and twelve first grade children in two communities were given either Kuhlman-Anderson or Pintner-Cunningham tests prior to the study to determine intelligence.

The following conclusions may be drawn:

1. No statistically significant ratios were found in any of the comparisons of the two methods.
2. All the comparisons of the weekly tests, though not statistically significant, favored the telling method.
   (a) The mean score of the total data for the sounding method was 12.26 compared to 12.86 for the telling method.

(b) The mean score of the best reading group for the sounding method was 15.89 compared to 16.27 for the telling method.

(c) The mean score of the middle reading group for the sounding method was 10.77 compared to 11.74 for the telling method.

(d) The mean score of the low reading group for the sounding method was 8.81 compared to 9.25 for the telling method.

3. All comparisons of the delayed test scores, though not statistically significant, were greater than the weekly comparisons and favored the sounding method.

(a) The mean score of the total data for the sounding method was 14.02 compared to 12.80 for the telling method.

(b) The mean score of the best reading group for the sounding method was 15.33 compared to 14.13 for the telling method.

(c) The mean score of the middle reading group for the sounding method was 13.97 compared to 12.89 for the telling method.

(d) The mean score of the low reading group for the sounding method was 12.22 compared to 10.87 for the telling method.

4. Many words showed differences greater than 10 per cent between the sounding and telling methods.

   (a) On the weekly tests, 18 words favored telling and 12 favored sounding.

   (b) On the delayed tests, 17 words favored sounding and 11 favored telling.

   (c) Among the words that favored sounding were simpler words, many beginning with a single consonant and containing phonetic elements familiar to first grade children or word parts similar to words in the basal vocabulary.

   (d) Among the words that favored the telling method were many that began with blends and contained more difficult letters and parts which were unfamiliar to first grade children.

APPENDIX

gravel

crunch

earth

satellite

finger

shadows

princess

beautiful

vhisper

telephone

measles

fever

acrobat

trapeze

puzzle

difficult

noise

traffic

wigwam

feather

weather

thermometer

bracelet

sparkle

storm

blizzard

rodeo

lasso

dream

helicopter

television

excited

cocoon

butterfly

lollipop

delicious

naughty

mischief

bacon

juice

The Red Line

Tom said, "Look Patty."
"We have a big thermometer.
Do you have a big thermometer?"

"Oh no, Tom," said Patty.
"We do not have a thermometer."

"Come to my house, Patty,"
said Tom.
"You can see my thermometer."

"Oh," said Patty, "You have
two thermometers.
This little thermometer is
in the house.
This big thermometer is outside."

"See the red line
in the thermometer?" said Tom.
"It will go up in hot weather.
It will go down in cold weather.
The weather makes the line
go up.
The weather makes the line
go down."

"Oh, Ted," said Patty.
"I will get a thermometer.
I will get it for Father.
He will like to look
at the red line.
Hot weather will make it go up.
Cold weather will make it go down."

"Mother will like
a thermometer, too!
She likes hot weather," said Patty.

"Hot weather is fun," said Tom.
"It will make the red line go up."

"I like cold weather," said Patty.
"The red line will go down then."

Sparkle and the Bracelet

Sparkle was a little girl.
Her name was Sparkle because
she had red hair !

One day Mother said,
"Sparkle, today is your birthday.
What would you like for
your birthday?"

Sparkle said, "Mother may I have
a bracelet?
A red bracelet like my hair?"

Mother said, We will go
to the store.
We will look for a bracelet for you.
A bracelet that sparkles."

So Mother and Sparkle went to the store.

At the store Sparkle saw balls, boxes, dolls, dishes and mittens. She did not see a bracelet.

Sparkle said, "Mother do you see a bracelet?
A red bracelet?
I can not find a bracelet.
I do want a red bracelet that sparkles for my birthday.

Mother looked and looked.
Sparkle looked and looked.
They could not find a bracelet.

Mother said, "Sparkle, there is
no bracelet here.
We will have to go home."

Sparkle said, "Look Mother.
Here is Daddy.
He will go home with us."

Daddy said, "Happy Birthday.
Here is a box for you."

Sparkle said, "Daddy, Daddy!
A red bracelet that sparkles
like my hair!
Thank you. Thank you."

Winter at the Farm

"We have fun at the farm,"
said Ted to Grandmother.

Grandmother laughed and said,
"We like you and Sally to come
to the farm.".

Ted and Sally liked to go out
and play.
One day Ted looked up.
He saw gray clouds.

Ted said,"It is going to storm.
It may be a blizzard, Sally."

"What is a blizzard?" asked Sally.

"A blizzard is a big, big snow storm,"
said Ted.
"Snow, cold and big winds
make a blizzard.
It storms and storms and storms."

The snow storm did come.
The wind came.
It got cold out, too.

Sally wanted to go out and play.
Grandfather said,"No, no, Sally.
We do not go out in a blizzard."

It stormed and stormed.

"You have to go to bed now,"
said Grandmother.
Ted wanted to look at the snow.

"It will snow all night,"
said Grandfather.
"This is a big, big storm.
It is a blizzard."

Ted and Sally went to bed.

"Get up, Ted.
Get up, Sally," said Grandmother.
"Look at the sun.
Look at all the snow."

"A blizzard is a big, big storm.
Look at all the snow," said Ted.
"We will have to help Grandfather."

A Day at the Rodeo

Father said to Jack,
"Do you want to go to the rodeo?"

"Yes, yes," said Jack.
"I like to go to the rodeo."

Jack and his father went
to the rodeo.
They went on the train.
Jack liked the train ride.

But he liked the rodeo best.
At the rodeo he saw many cowboys.
Every cowboy had a pony to ride.

The cowboys had to ride fast.
The cowboys had to get the cows.
Every cowboy had a lasso.
The lasso was very big.

A cowboy made his lasso go
up and out.
The lasso came down on the cow.
The cow could not get away.
He was a good cowboy.

"We must go home," said Father.
"The rodeo is over.
Did you like the rodeo, Jack?"

"Yes, yes," said Jack.
"It was a very good rodeo."

Just then Jack saw a man
with toys.
The man had a toy pony.
He had toy cows.
And he had a little toy lasso.

"Father, Father," said Jack.
"May I have a toy lasso?"

"Yes, you may," said Father.
"You may have the toy lasso."

"Good, good," said Jack.
"I can have fun with
my toy lasso.
I can play rodeo with Jerry.
Jerry will like to play rodeo.
We can have a rodeo every day."

A Dream Ride

One night Alice had a dream.
It was a good dream.
It was a happy dream.

In her dream Alice went
for a ride.
It was a ride in a helicopter.
Do you like to ride
in a helicopter?
Alice did.

Alice saw the helicopter
at the airport.
The man said,
"Do you want to ride?"

She said, "Yes I want to ride
in the helicopter."
Alice got in the helicopter.

Up, up, up they went.
Up and up and up.

Alice looked down.
She saw her house.
She saw Jip and Jerry playing.
She saw Mother at work.

On and on she went.
She looked down again.
She saw the little brown store.

On and on she went.
She saw a barnyard.
She saw cows and pigs.
She saw a pony, too.

Then the helicopter went
to the airport again.
Down, down, down went the helicopter.
Down and down and down went Alice.

Then the dream was over.
Alice got up.

"Mother, Mother," said Alice.
"I had a ride in a helicopter.
It was a good ride.
The helicopter went up, up, up.
The helicopter went down, down, down.
But now I can not find
the helicopter."

"Oh, Alice," said Mother.
"You had a dream.
There is no helicopter."

"Was it a good dream ride?"

"Oh, yes," said Alice.

"My dream ride was fun."

Two Excited Boys

Tom and Jack are friends.
When school is over,
they play together.
Sometimes they go in the house
to look at television.

One day they were very excited.
They ran to Mother.

"Come and look at television,"
Tom said.
"Dick is on it."

Mother was excited too.
She came in to look at television.
They all saw Dick playing
the piano.

"We would like to be on television,"
said the excited boys.

"May we?" said Tom.
"There is a pretty song that
we sing in school.
Could we sing that on television?"

"Maybe you can," said Mother.
"I would like you to sing the song
for me now."

"We are very excited
but we will sing it," said the boys.

"Good," said Mother.
"I will make believe that
you are on television."

The two boys sang and sang.
Soon they were very tired.

The next day they told the teacher
about seeing Dick on television.
She had the two boys sing
to the children.
They were happy and excited.

The teacher said, "You may sing
in school every day.
Maybe soon you can be
on television too.

A Surprise

One day Jerry went
for a walk.
He looked up in a tree.
He saw a big blue bird.
And he saw something little.

Jerry ran to Mother.
"What is this?" said Jerry.
"It is little and it is white.
What is it?"

"It is a cocoon," said Mother.
"Put it in a box, Jerry.
One day that cocoon will
surprise you.
Put it in a box and look at it
every day."

"It will surprise you,"
said Mother.

Jerry ran to get a box.
He put the cocoon in the box.
Every day he looked
at the cocoon.
But he saw no surprise.

"This cocoon is no good,"
said Jerry.
"I can not see a surprise."

Mother said,
"This cocoon is good, Jerry.
You will see."

One day the cocoon did
surprise Jerry.

He looked in the box and saw
a butterfly.
It was a pretty yellow butterfly.

"Mother, Mother," he said.
"Come and see.
See the pretty yellow butterfly.
The butterfly is in my box."

Mother came to see
the yellow butterfly.

"Yes, Jerry," she said.
"I can see the pretty butterfly.
The butterfly came
out of the cocoon.
The butterfly is the surprise.
Do you like the surprise?"

"Yes, Mother," said Jerry.

"It is a good surprise.

I want Alice to see my butterfly."

Jerry ran to get Alice.

At the Store

Jane and Sally were playing
in Pat's yard.
They saw Mother and Spot.

Mother called to the children.
They ran home fast.

Mother said, "I am going
to the store.
Do you want to go with me?"

Jane and Sally liked going
to the store.
So they said, "Yes.
Can Pat go with us?"

Mother said, "Yes, she can go."

They all got in the car.
They came to the store.
Mother stopped the car.
They all went in the store.

Mother gave the children
some pennies.

What could they get
with the pennies?
They looked and looked.

Jane said, "I will get
some delicious candy.
It all looks so delicious.
I know what I will get.
I will get lollipops.
I like lollipops.
They are delicious."

The children saw Jane with
her lollipops.
They wanted to get lollipops too.
They looked so delicious.

They all liked to eat the lollipops.
They were so delicious.
They ate the lollipops
all the way home.

The Naughty Kitten

Janet said, "See what I have."

Penny said, "What is in the box?"

Janet said, "Look and see."

Penny said, "It is a little kitten.
"We will call her Mischief."

"Mischief, Mischief,
Come and play with me."

Janet said, "Mischief will not play.
She has to have her milk."

"Come Mischief. Come Mischief.
Here is your milk."

But Mischief did not come.

Mischief ran away.
Mischief ran and ran.
She came to a little boy.

Mischief said, "Little Boy,
I am a naughty kitten.
I am naughty and I like to get
into mischief.

The little boy said,
"Mischief, someone will be looking
for you.
Go home you naughty kitten."

Mischief said,
"No I will not go home."

The little boy said, "Mischief,
You are a naughty kitten."

The naughty kitten went on.
She came to a dog.

The dog said, "Little kitten,
What are you doing here?"

Mischief said,
"I am a naughty kitten.
I did not want my milk.
I ran away."

The dog said, "You naughty kitten.
I will go and find your milk.
I like milk."

Mischief said, "No, no.
You can not have my milk.
I will not be naughty.
I will be good.

"I will go home.
You are a naughty dog.
Janet will not give my milk
to a naughty dog."

So the naughty kitten went home.

Janet said, "Here comes
my naughty kitten."

"You naughty kitten,
Where have you been?"

The naughty kitten
looked at Janet and Penny.

She said, "My name is Mischief.
I have been naughty.
I will not be naughty again.
May I have my milk?"

Janet said, "Yes, Mischief.
Here is your milk.
I did not give it to the naughty dog."

Mischief said, "I like my milk.
I will not be naughty.
I will stay home and be good."

A Birthday Breakfast

Dick and Jane had a surprise
for Mother.
It was her birthday.
They were going to give her
breakfast in bed.

What fun it was going to be.
What will they give her?

Sally asked, "May I help you?"

Dick and Jane said, "Yes.
What will we cook?"

"Mother likes juice," said Sally.
"I will get some orange juice."

"Good," said Jane.
"I know she will like the juice.
I will cook some eggs.
Will you get the eggs for me, Dick?"

Dick said, "Here is some bacon.
I know Mother likes bacon."

Jane said, "Oh, good.
I can cook bacon and eggs.
What fun this is."

Sally put the orange juice on the tray.
She put the bacon and eggs on the tray.

Then they took the tray up to Mother.

They said, "Happy Birthday, Mother."

Mother was so surprised to see the orange juice, bacon and eggs on the tray.

She said, "Thank you.
I wish every day was my birthday."

Big Crunch and Little Crunch

Big Crunch and Little Crunch
were two rabbits.
They lived with Mother and
Daddy Crunch.

They were called Crunch
because they went "Crunch,
crunch, crunch" when they
hopped on the gravel by
their home.

They went "Crunch, crunch,
crunch" when they ate, too.

One day Little Crunch said,
"I want some gravel for
my play box."

Big Crunch said, "No.
Mother does not want you to go
out of the house.
Do not go for gravel now."

Little Crunch said, "I will go."
And he did.

Up came a big dog.
The big dog said,
"What are you doing here?
Do not take my gravel."

Little Crunch said,
I want the gravel for my play box."

The dog said,"Do not take
my gravel.
I will crunch you all up."

Little Crunch said.
"I will go home and get Big Crunch.
He will not let you crunch me up."

Crunch, crunch, crunch.
Here comes Big Crunch.

Big Crunch said, "Go away dog.
Come home Little Crunch.
I will get the gravel
for your play box."

Little Crunch said,
"It will be fun to play
with the gravel in the box."

Blinky the Satellite

Blinky was a little satellite.
He went up in the sky.
He was afraid.

When he got up there
he was happy.
He could see mother earth.
He could see the other satellites too.

As he went up in the sky,
the earth looked little.
The satellites looked far away.

Blinky said hello to his friends
by blinking to them.
That is how he got his name
down on earth.

Blinky blinked at mother earth.
He blinked at the other satellites.

He saw a star in the sky.
He blinked at her.
She blinked at him.

Blinky wanted to go to the star.
He went as fast as he could.
He looked at the earth.

It was so little.
It looked like a little ball.

Soon he could not see the earth at all.
He could not get to the star.
But they blinked at each other.

Go out tonight.

Look up in the sky.

You may see a little satellite.

It may be Blinky.

Fun With Shadows

"Will you play with me Kathy?"
said Mike.
"We can play with shadows."

Kathy said, "I like to play
with you.
How do you play with shadows, Mike?"

"Look at me," said Mike.
"See my shadow.
I stand and my shadow stands.
I run and my shadow runs.
I jump and my shadow jumps."

"That is fun," said Kathy.
"I will play too."

"Look, Mike," said Kathy.
"My fingers have shadows too.
I can make a bunny shadow.
See the two big ears.
They are shadows of my fingers."

"I will make a bunny too.
Look. Kathy," said Mike.
"My fingers have shadows too.
Here is my funny bunny."

"Put up all ten fingers, Mike,"
Kathy said.
"See the finger shadows go up.
See the finger shadows go down."

"Look at my fingers, Kathy,"
said Mike.

"The fingers make a crocodile.
He wants to eat you.
Up and down go the finger shadows."

"Here comes Mother," said Kathy.
"Mother, can you make
finger shadows?"

"No, Kathy, I can not," said Mother.
"May I see the shadows you make?"

Mike and Kathy did make
finger shadows.
Mother laughed at the shadows.

Mother liked to see
Mike and Kathy play.

"They have fun playing," said Mother.

The Princess Ran Away

Once there was
a beautiful little girl.
The beautiful girl was a princess.
Her name was Princess Alice.
She was just six.

Princess Alice had
a beautiful big house.
She had beautiful dolls and toys.
She had a big black dog
and a beautiful white kitten.

But Princess Alice was not happy.
She had no one to play with her.

One day she said, "I have
no one to play with me.
I will find a little girl
to play with me."

So she ran away.

She came to
a big beautiful garden.
A big girl was in the garden.

"Please play with me,"
said Princess Alice.

"I can not play now.
I have work to do," said the girl.
"I must work in this garden."

Princess Alice walked on and on.

By and by she came to the sea.
The sun was shining
on the beautiful blue sea.
A little girl was playing
with a brown dog.

"I have no one to play with me.
Will you play with me?"
said the beautiful little princess.

"I can not play now,"
said the little girl.
"I must go home now.
I must go home to eat."

So she ran home with her dog.

Then the little princess said,
"This is no fun."

"There is no one here to play
with me.
I will go home again."

So she went home.

By and by she saw
her beautiful big house.
She saw her mother and father.
And .....
She saw a little girl.

Her mother said,
"This is Princess Susan.
She has come to play with you.
She is just six, like you.

"Hello," said Princess Alice.
"I am happy you have come
to play with me."

"I am happy, too,"
said Princess Susan.
"I will come every day to play
with you.
We can have fun."

So every day the two girls played.
They were happy.

A Surprise Party

Susan wanted to have a party.
She ran to Mother.

"May we have a surprise party
for Alice?" she said.
"She will be seven tomorrow.
We must whisper."

"Yes you may," said Mother.
"You must help with the work.
Telephone for a birthday cake."

"Telephone Alice's friends.
Whisper on the telephone.
I do not want Alice to hear you.
She is up in her room."

Then the telephone rang.
Susan ran to get it fast.

"Why did you run so fast?"
said Alice.

"Oh, Mother is working.
I did not want her to get
the telephone," said Susan.

The next day the children were
at school.
They had to whisper.
They did not want Alice to hear.

After school Alice came home.
Her friends were in the house.

"Surprise, surprise," they all said.
"We do not have to whisper now."

"Now I know why I saw
you and Mother whisper," said Alice.
"Now I know why you ran
to the telephone, Susan."

"Oh, look at the pretty cake,"
said Alice.
"I wish we could have
a surprise party every day."

No School

"Good morning, Miss Brown,"
said Mother.
"Billy is at home today.
He can not go to school.
He has the measles.
He has a fever too."

"Is Billy in bed?"
said Miss Brown.

"Oh yes, Miss Brown," said Mother.
"The doctor will come today.
He will have something for Billy.
It will help Billy's fever.
It will help the measles, too."

Billy said, "I look funny.
See the red spots on me."

"The measles make the spots,"
said Mother.

"May I get up and play, Mother?"
said Billy.

"Oh no, no, Billy," said Mother.
"You have a fever.
You can not get up with a fever."

"Mother," said Billy.
"Will the red spots go away?"

"Yes, Billy," said Mother.
"They will go away.
The fever will go away, too.
Then you can get up and play."

"I may get up Sunday," said Billy.
"I will play and I will have fun.
Will the measles go away by Sunday?"

"We will see, Billy," said Mother.
"The measles may go away by Sunday.
The fever may be gone.
Then you can get up.
Then you can go out and play.
Then you can go to school.

A New Toy

"Come to my house and see something funny," said Jane to her friends.

"What is it?" said Susan.

They ran very fast.
They wanted to see what it was.

"It is a new toy that Mother and Father gave me," said Jane.
"It is a circus game.
Do you want to play with me?"

They all said, "Yes."

They all helped to put up
the tent.
Then they took out the animals.
Then came the clowns.
The clowns looked so funny.

Next they put up the trapeze.
They put the acrobats on it.

"How I wish I could be
an acrobat," said Jane.
"I want to ride on the trapeze.
It looks like fun.
I like to ride up and down.
Up and down on the trapeze."

All the children wanted to be
acrobats.

Jane said, "It looks like fun
up on the trapeze.
It would be fun to go up so far.
What fun the acrobats have."

The children all liked playing
with the new toy.

Then it was time to go home.
They all said, "Thank you, Jane.
We liked playing with the new toy."

That night when they went to bed
some children had a dream.
A dream of a circus.

Some day they would be acrobats.
Acrobats that could ride up
on the big trapeze.

The Night Before Christmas

It was difficult to wait.
Now it was the night before Christmas.
Sally was happy.

She wanted .....

A pretty walking doll
A red party dress
A big toy animal
And a difficult puzzle.

Sally said to Mother,
"I want a puzzle that is difficult.
I have one puzzle.
But it is not difficult.
Now I want a difficult puzzle."

Mother was so surprised.

Sally could not stay in bed.
She wanted to look
under the Christmas tree.

She got out of her bed.
It was quiet.
It was difficult to see.

"The family is all in bed,"
she said.
"It will be difficult to see.
But I can not wait.
It will be difficult to walk.
But I can not wait."

Then she came to the tree.
Then she saw.....

A big doll

A big toy cat

A party dress

And a puzzle-- a new puzzle.

"Now I can go to bed.
Now I can sleep," said Sally.

It was difficult to see.
She bumped into a table.

She could hear Jack say,
"That must be Santa Claus.
I can hear him come
down the chimney.

Sally laughed.
She ran to her room.

Fun at the Parade

Dick, Jane and Sally were happy.
They were going to see
Grandmother and Grandfather.

They liked to go
to Grandmother's house.
There were many surprises there.
They liked the funny cookies
that Grandmother made.

Father got the car.
They all got into the car.
They went on the way.

What traffic there was.
Then the children could hear a noise.

They said,
"What is the noise?"

They could not guess
what the noise was.
Then the cars stopped.
There were cars and cars.
Oh, what traffic!

Then the children said,
"It is a parade.
The parade made the traffic stop.
The parade made the noise.

They jumped out of the car.
They wanted to see the parade.

A man was there to help the traffic.
He said to the children,
"Look out for the traffic."

The parade was fun to look at.
What noise it made!
They laughed at the fat girl
in the little red wagon.

They laughed at the funny clown.
He jumped up and down.
Then the parade was over.

The cars made noise.
The traffic started to go.
The children got into the car.
They went to Grandmother's.

What Do I See?

Jack was playing wigwam.
Janet was playing wigwam.

They played that a box was
a wigwam.

Jack said,
"Janet, what do I see?
I see funny boy in the wigwam.
He has feathers on his head!"

Janet said,
"Yes, I see a funny boy
in the wigwam, too.
I see feathers on his head, too."

Jack said, "Little boy,
you look funny with feathers
on your head!"

The little boy said,
"I like feathers on my head.
Where are your feathers?"

Jack said, "I have no feathers."

Janet said, "I have no feathers.
We are playing wigwam.
This is our wigwam.
Go away, go away."

The little boy said,
"Please be good.
Let me play wigwam with you.
I will give you red feathers.
I will give you blue feathers.
I will give you yellow feathers.

"Indians live in wigwams.
Indians have feathers.
We will have fun in your wigwam.
We will play we are Indians."

Jack said, "You may stay
in the wigwam.

Janet said, " You may stay
in the wigwam.
We will all play Indians."

"We like the red feathers.
We like the blue feathers.
We like the yellow feathers."

"How!"

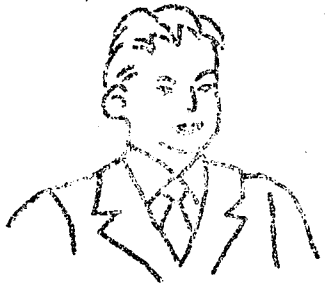
First Week

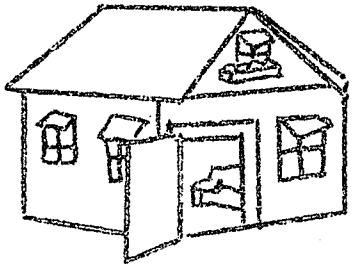
	Sound		Tell		Sound		Tell		Sound		Total	
	thermometer	weather	sparkle	bracelet	storm	blizzard	rodeo	lasso	dream	helicopter	sound	Te
Alex	✓	✓	✓	✓	o	✓	✓	✓	o	✓	4	4
Tom	o	o	o	o	o	✓	o	o	o	o	1	0
Chris	ab	ab	ab	ab	ab	ab	ab	ab	ab	ab	ab	
Vincent	✓	✓	✓	✓	✓	✓	✓	✓	✓	o	5	4
Bob	✓	✓	✓	✓	o	✓	✓	✓	ab	ab	3	4
John	o	o	o	o	o	o	o	✓	ab	ab	0	
Dayne	o	✓	✓	o	o	✓	✓	✓	o	✓	3	
Hans	ab	ab	ab	ab	ab	ab	ab	ab	o	✓	1	
Billy	ab	ab	ab	ab	ab	ab	✓	o	o	✓	1	
Alden	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	6	
Michael	o	o	o	o	o	o	✓	o	o	o	o	
Mary	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	6	
Donna C.	✓	o	o	o	o	o	o	o	o	o	1	
Sharon	o	o	o	o	o	o	o	o	o	o	0	
Carol Ann	✓	✓	✓	✓	✓	✓	✓	✓	o	o	4	
Jeanette	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	6	
Linda	o	o	o	✓	✓	✓	✓	✓	o	o	2	
Lorraine	✓	✓	o	✓	✓	✓	✓	o	✓	✓	6	
Donna L.	✓	✓	o	o	o	✓	✓	✓	o	o	3	
Frances	o	o	✓	o	o	o	o	o	o	o	0	
Julie	✓	✓	✓	o	o	o	✓	o	o	o	2	
Patty	✓	✓	✓	o	✓	o	✓	✓	o	o	3	
Nancy	✓	✓	✓	✓	o	✓	✓	✓	o	o	3	
Diane	✓	o	✓	o	o	o	✓	✓	o	o	1	
Karen	✓	✓	✓	✓	o	✓	✓	o	o	o	3	
Carolyn	✓	o	o	o	o	o	o	o	o	o	1	
Barbara	✓	✓	✓	✓	o	o	✓	✓	o	✓	3	
Kathy	✓	o	o	✓	✓	✓	o	o	✓	o	4	

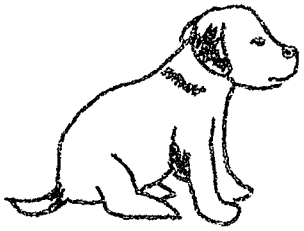
Name _____

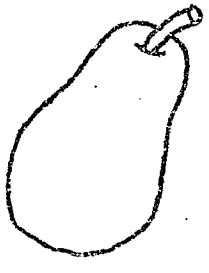
Date of Birth _____ IQ _____
yr. mo. day

Score _____









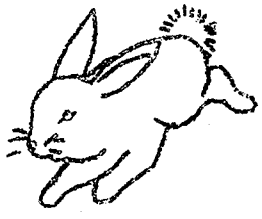
ball

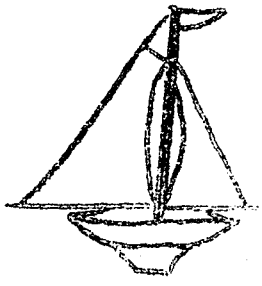
house

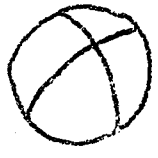
Mother

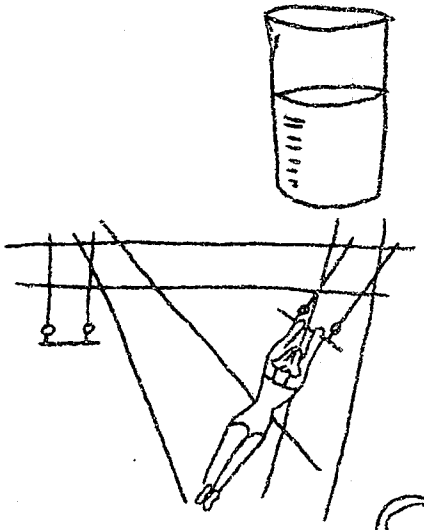
Father

boat





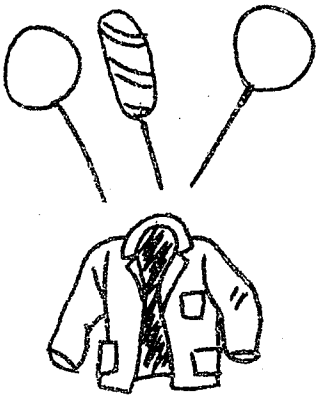




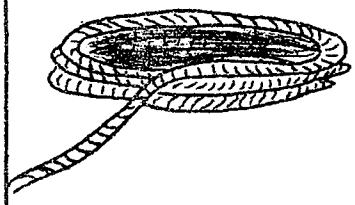
telephone

lollipops

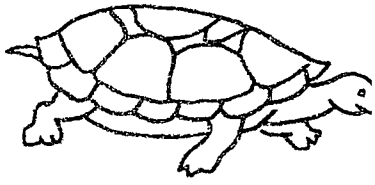
trapeze

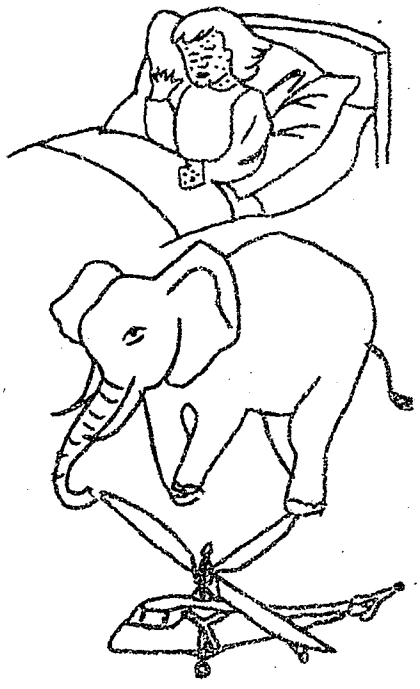


juice



lasso



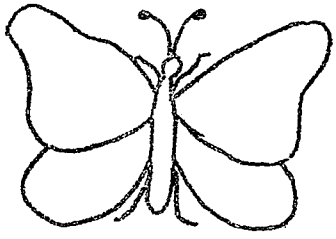


helicopter

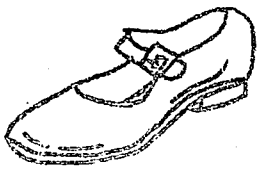
shadow

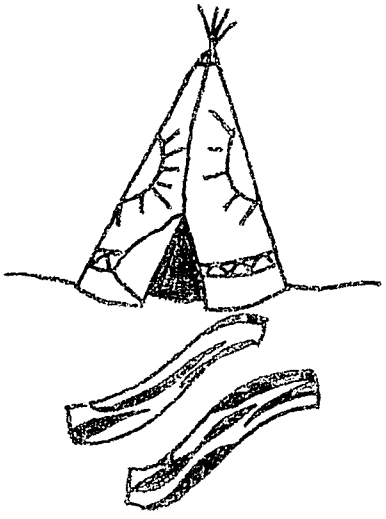
measles

butterfly



earth





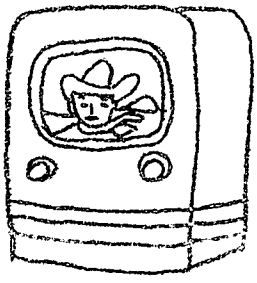
television

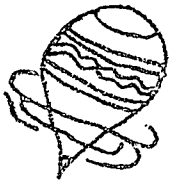
bracelet

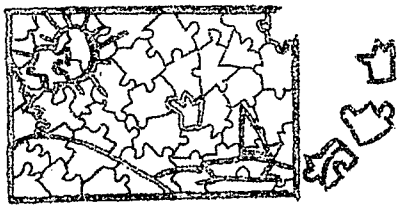
thermometer

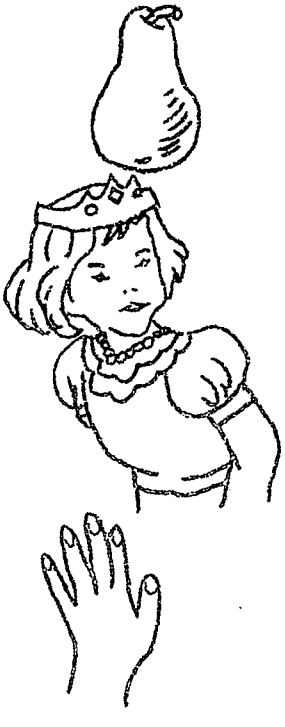
bacon

wigwam









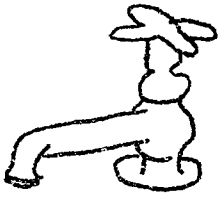
feathers

princess

puzzle

rodeo

fingers



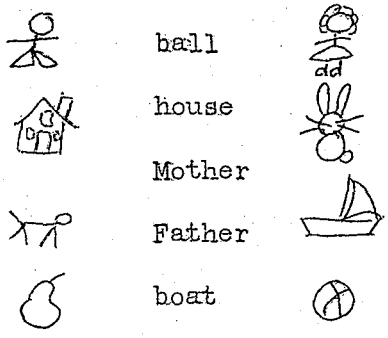
A	B	C
boat	come	blizzard
big	ride	mischief
little	green	storm
2.	3	4
fever	dream	whisper
naughty	traffic	noise
excited	satellite	crunch
5.	6.	7
gravel	sparkle	acrobat
cocoon	beautiful	delicious
crunch	difficult	weather

VOCABULARY TEST

DIRECTIONS FOR ADMINISTERING

The following should be on the board or on large poster paper before test booklets are given to the children. They are additional practice exercises to insure that the children understand the directions fully.

A



B

Father	to	red
jump	see	blue
Mother	the	yellow

The teacher points to exercise A and says, "Look at these five words. Now look at the pictures. The words match some of the pictures. Who can read the first word? Draw a line from the word ball to the picture of the ball. Now who can read the next word?" Continue in this manner untill all five words have been matched. When this is completed the teacher says, "Did we use all the pictures? No, there are three pictures which did not match the words. We did not use these three pictures."

The teacher says, "I am going to give you a little test booklet in which we will match the words to the pictures. Do not open the booklets until I tell you. Put your pencils on your desks." Pass out the tests.

"Write your name on the top line where it says name. Do not write anything else. Put down your pencil when you have finished your name."

"Look at the five words down the middle of the page. What does the first word say? Yes, it says ball. Draw a line from the word ball to the picture of the ball. Now see if you can match the rest of these words to the pictures. There will be some pictures you will not use." The teacher will carefully observe the children and give help where needed.

"Turn to the next page." The teacher should make certain that all children have the correct page. "Now we shall match these words to the pictures. Remember that we do not need all the pictures. Use only those pictures that you need. Do as many as you can."

At the end of three minutes say, "Pencils down. Turn to the next page." The teacher should make certain that all children have the correct page. Say, "Do this page the same way." Allow three minutes. Say, "Pencils down."

Indicate exercise B on the board and say, "Look at these three words. Two of these words tell about people. Who can tell which words tell about people? Draw a ring around Mother and around Father because they are people. Now look at the next three words. Which words tell about things we can do? Yes, we can see. Draw a ring around see because it is something we can do. Now look at the last three words. Who can draw a ring around the color words? Yes, they are all color words. We will draw rings around all these words.

In the first box we used two words; in the second box we used only one word; and in the third box we used all three words. Now turn to the last page of your test booklet." The teacher should make certain that all children have the correct page.

"Look at box A. Draw a ring around the words that tell about size. Look at box B. Draw a ring around the color words." Give help where needed for these practice exercises. No further help is given.

"Look at box one. Draw a ring around the words that tell about weather."

15 seconds
"Look at box two. Draw a ring around the words that tell how a child might act."

Follow the above pattern.

3. ..... tell about cars.

4. ..... tell about sounds we can hear.

5. ..... tell about things butterflies can make.

6. ..... tell how things can look.

7. ..... tell how things can taste.

Allow 15 seconds for each exercise.

PINTNER GENERAL ABILITY TESTS: VERBAL SERIES

Pintner-Cunningham Primary Test: Form A

Chron. Age	
Mental Age	
IQ	

By RUDOLF PINTNER, PH.D.
Formerly Professor of Educational Psychology, Teachers College, Columbia University

BESS V. CUNNINGHAM, PH.D.
Professor of Education, University of Toledo

and WALTER N. DUROST, PH.D.
Associate Professor, School of Education
Boston University

Prim.
A
(Verbal)

For Kindergarten and First and Second Grades

Name.....

Age.....years.....months. Date of birth.....

Grade..... Teacher.....

Date of test.....19.... Examiner.....

School.....

City.....State.....

TEST	SCORE
1	
2	
3	
4	
5	
6	
7	
Total	

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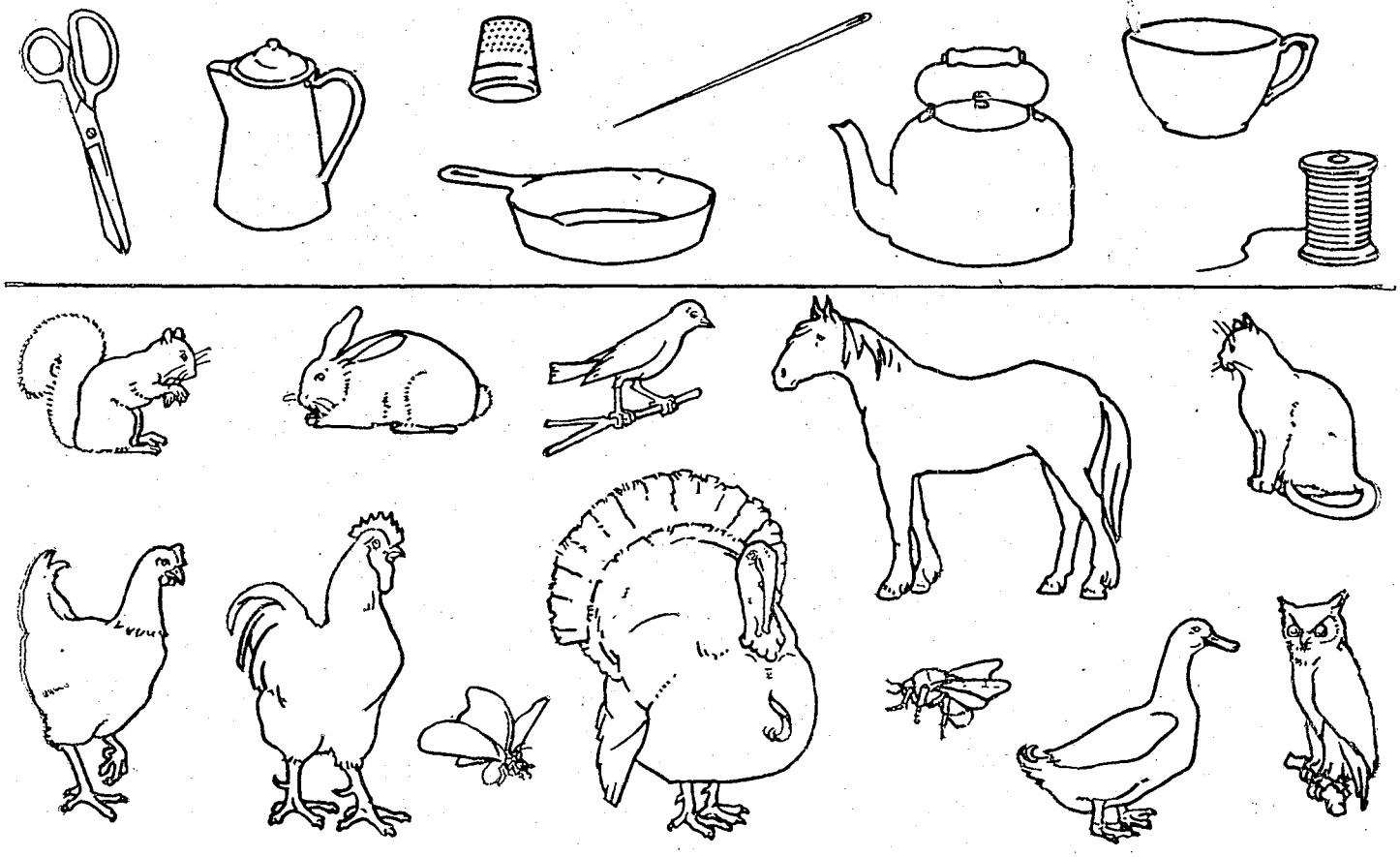
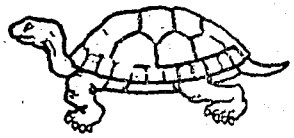
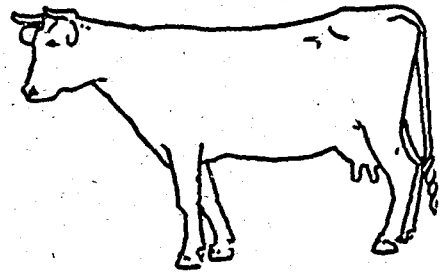
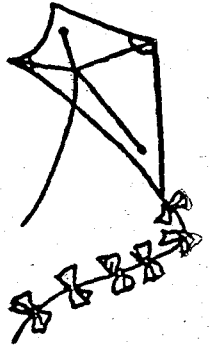
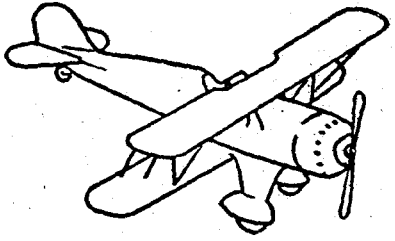


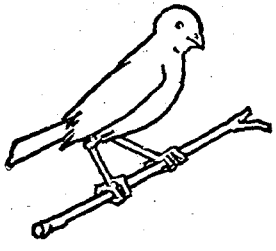
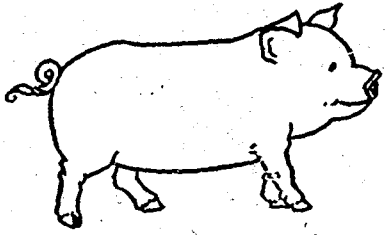
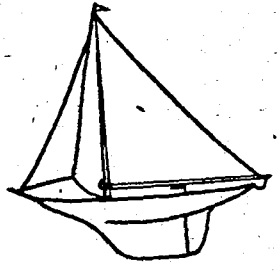
Form A

TEST 1 — *Continued*

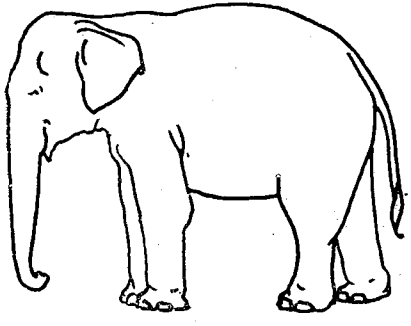


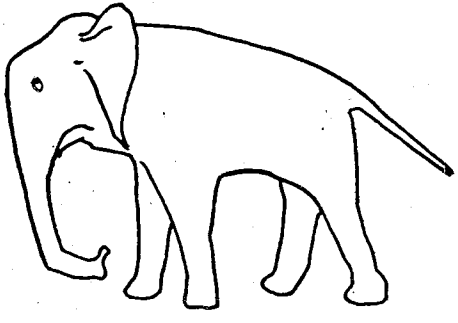



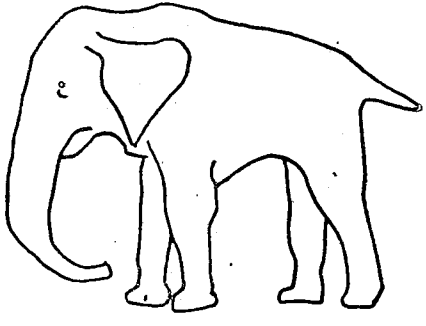




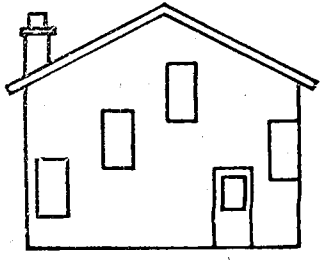

Total number right..... *Total number wrong*..... *Score* $\left(\frac{R-W}{3}\right)$.....

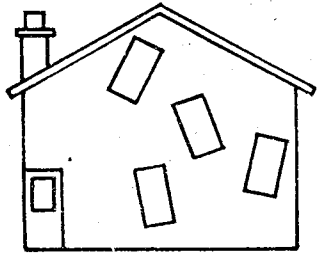
TEST 2

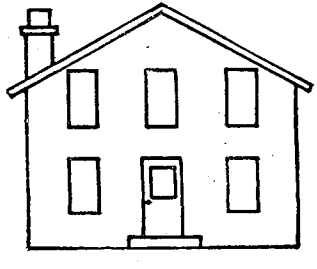


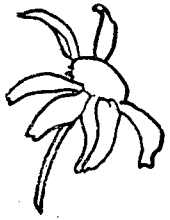


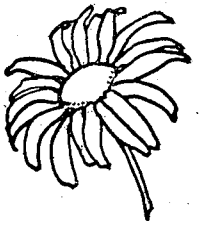


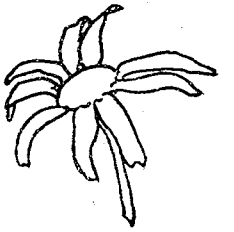




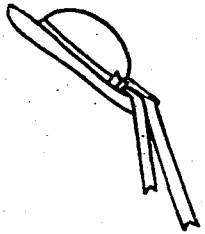


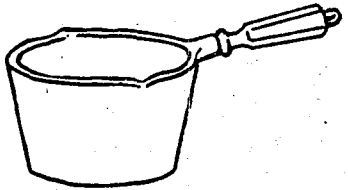


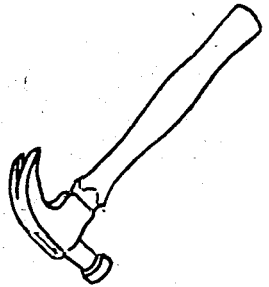


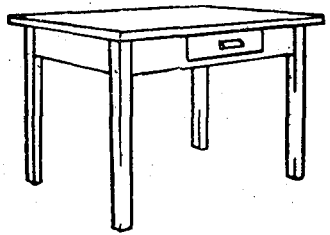


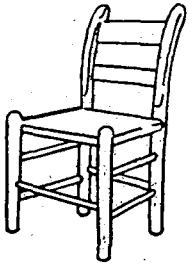
Score.....

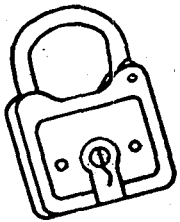


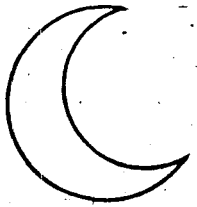


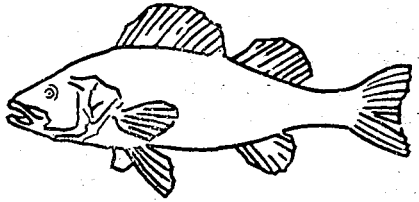


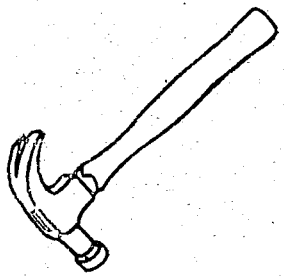


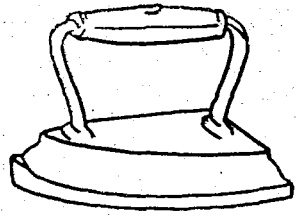


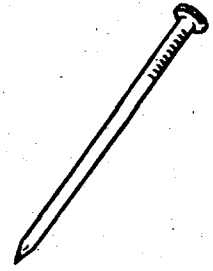


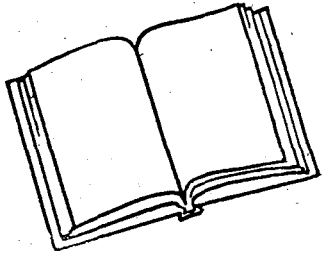


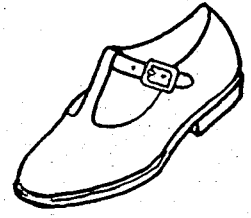


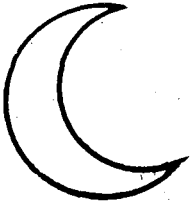


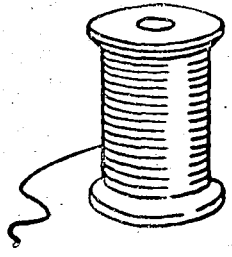


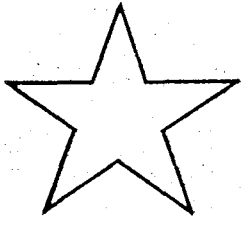


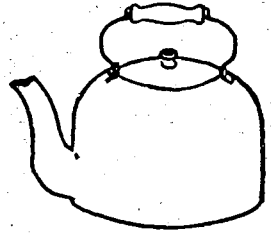












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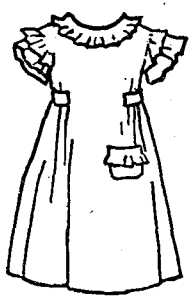
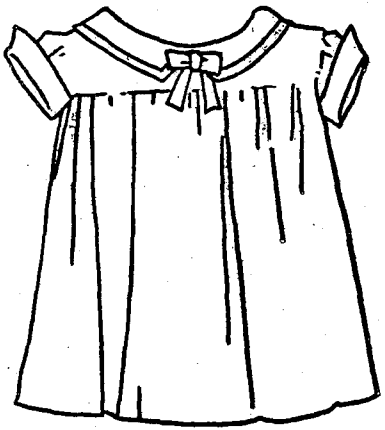
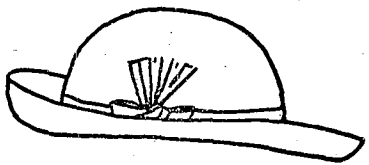
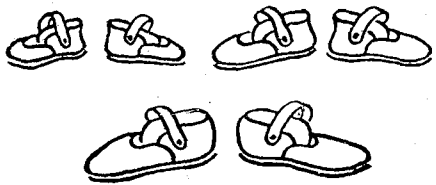
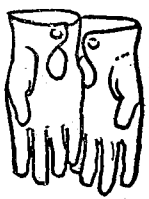


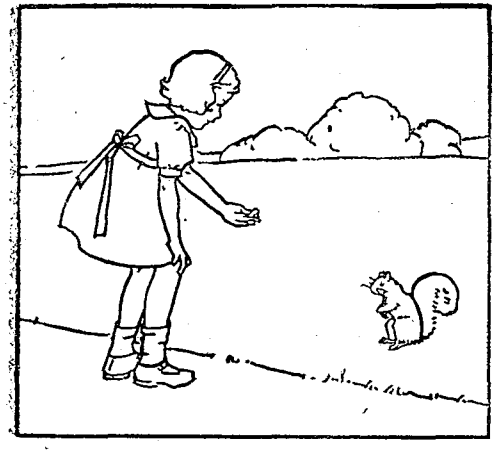


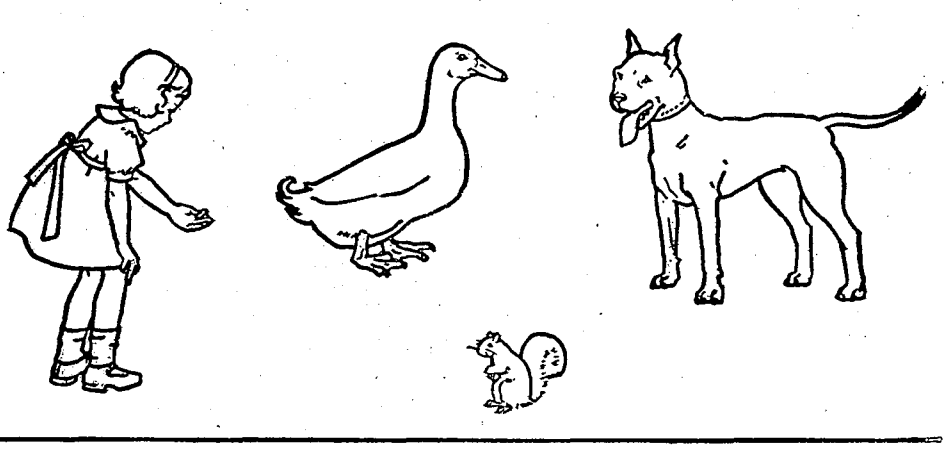


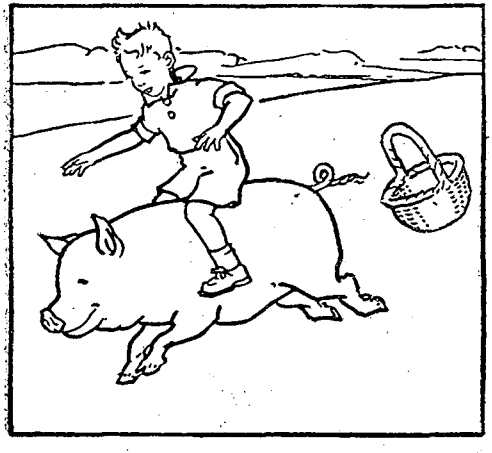


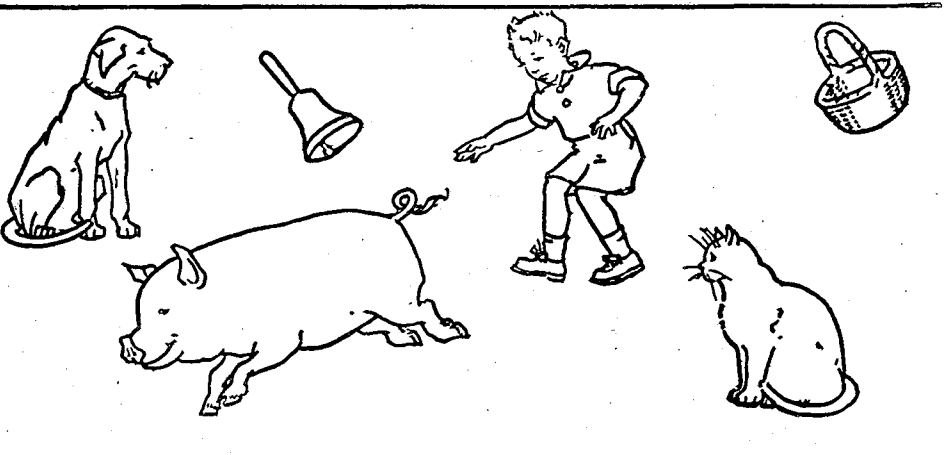


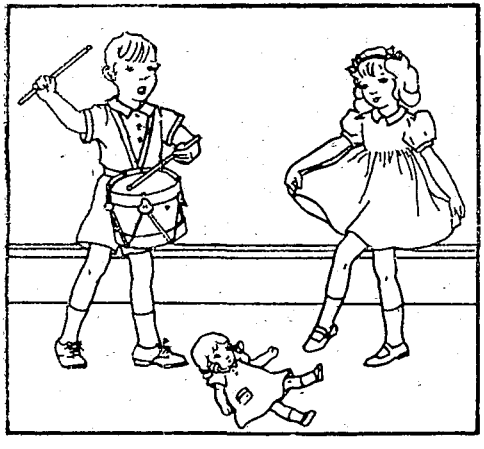
Score.....

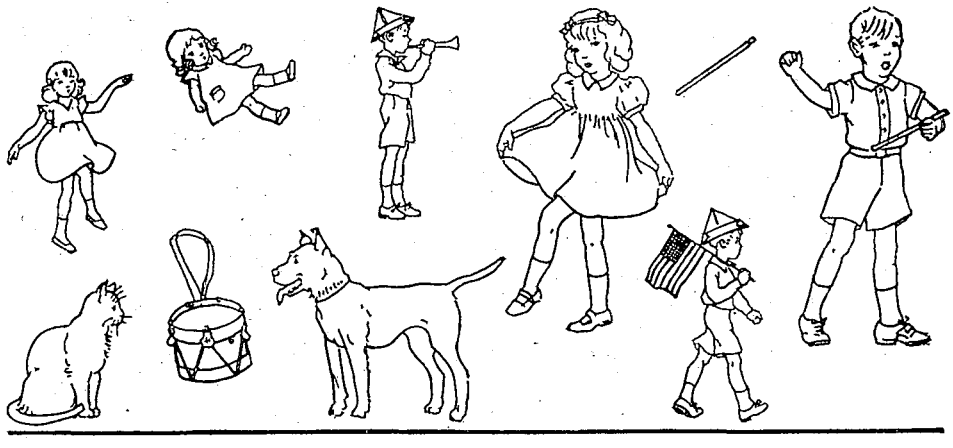


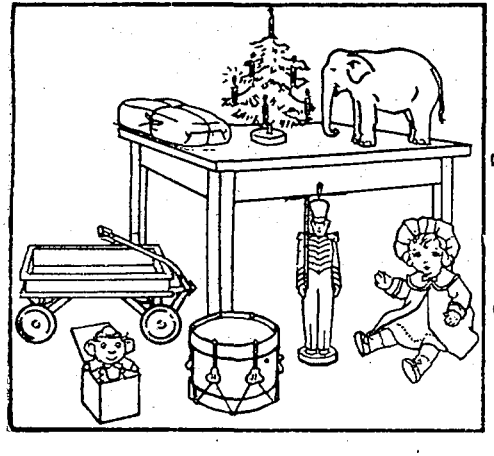


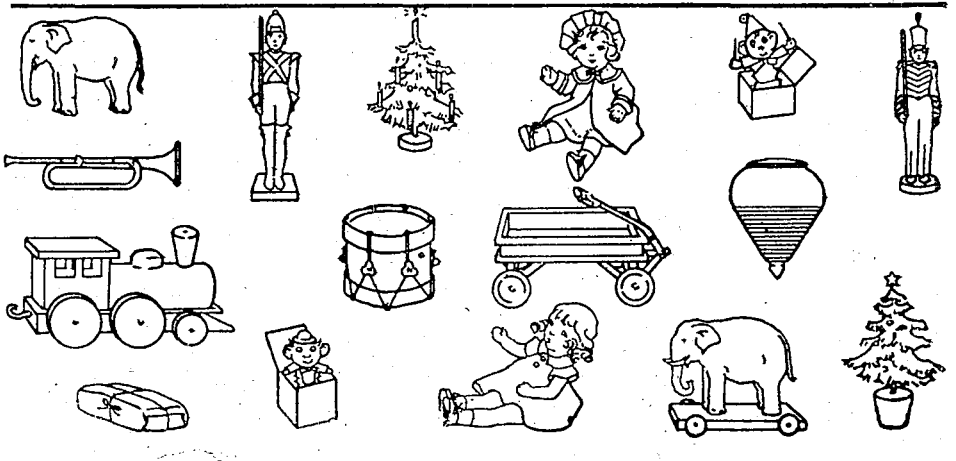


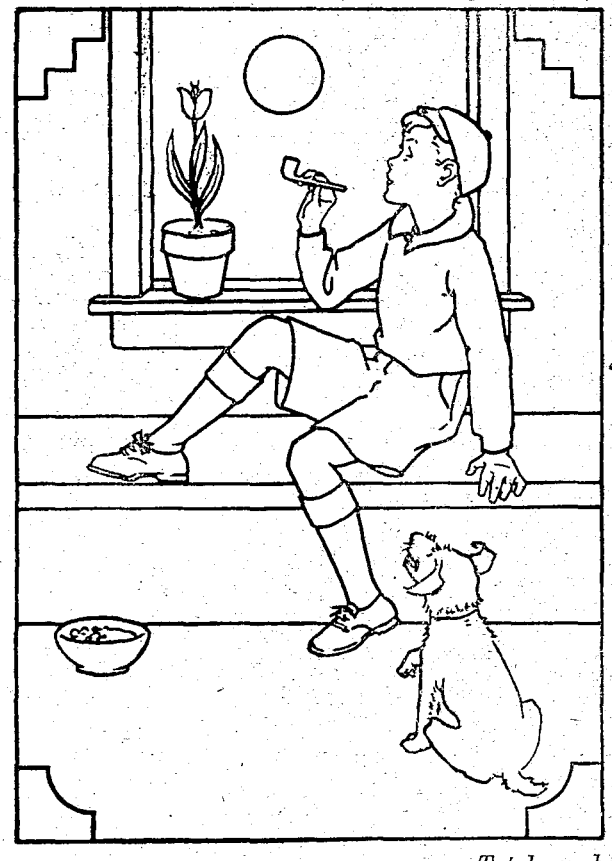


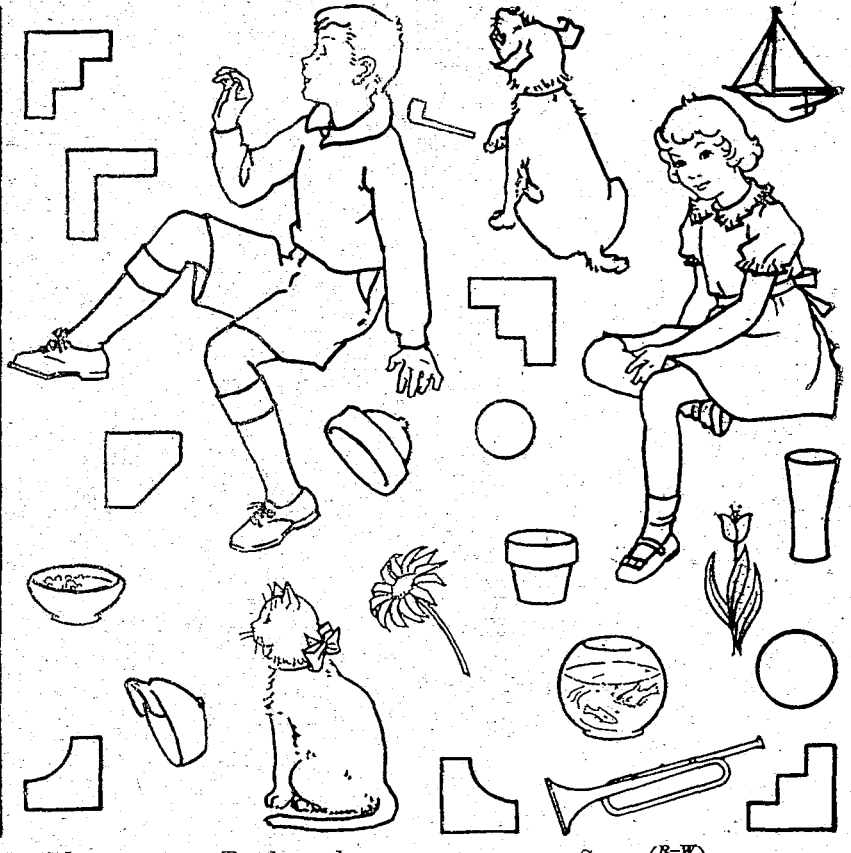




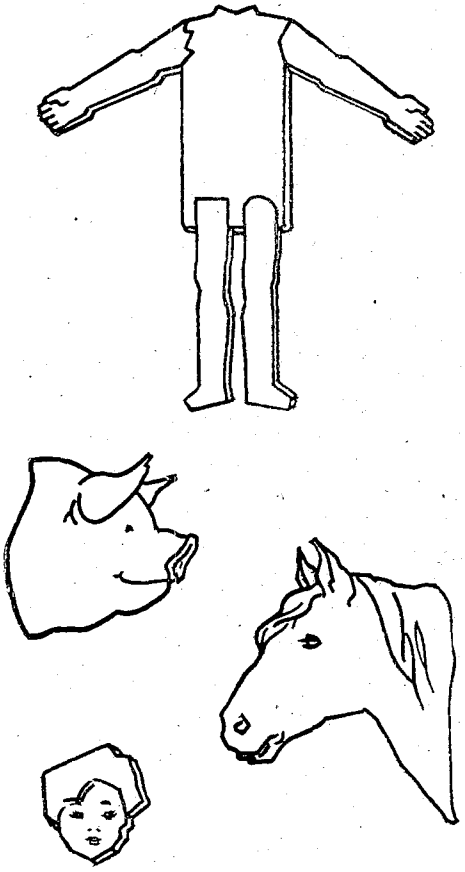


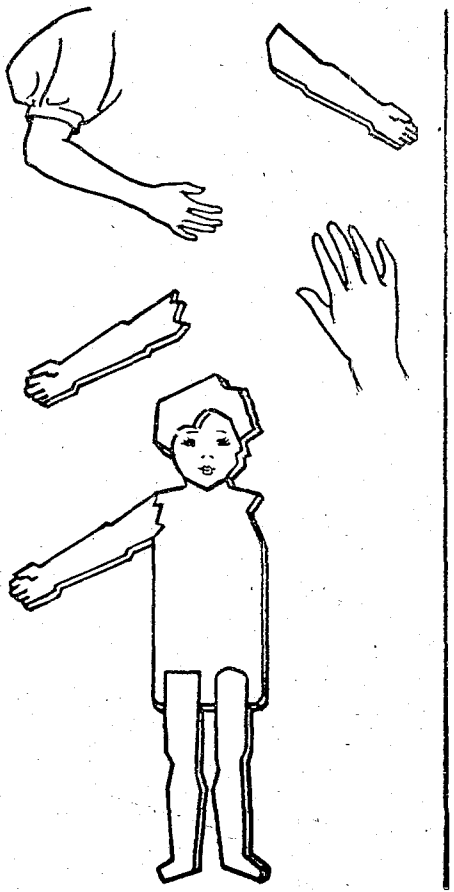


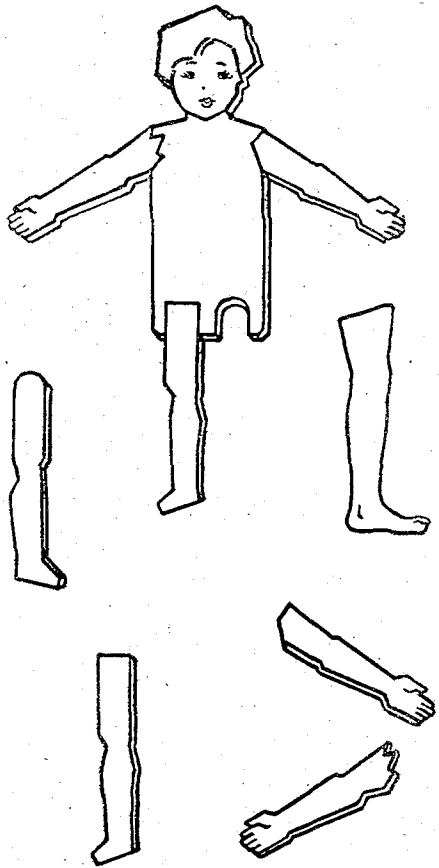


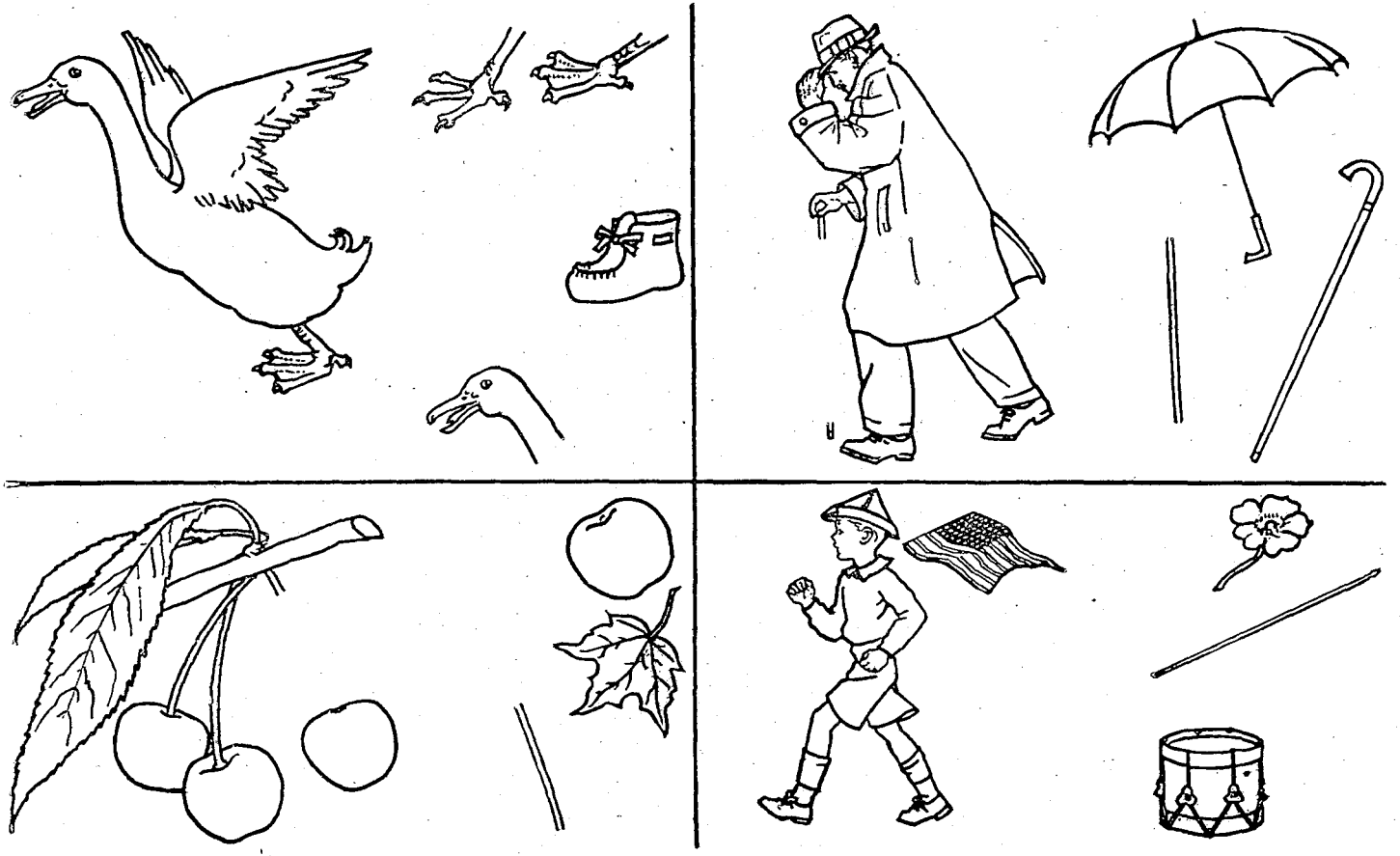


Total number right..... *Total number wrong*..... *Score* $\left(\frac{R-W}{2}\right)$.....

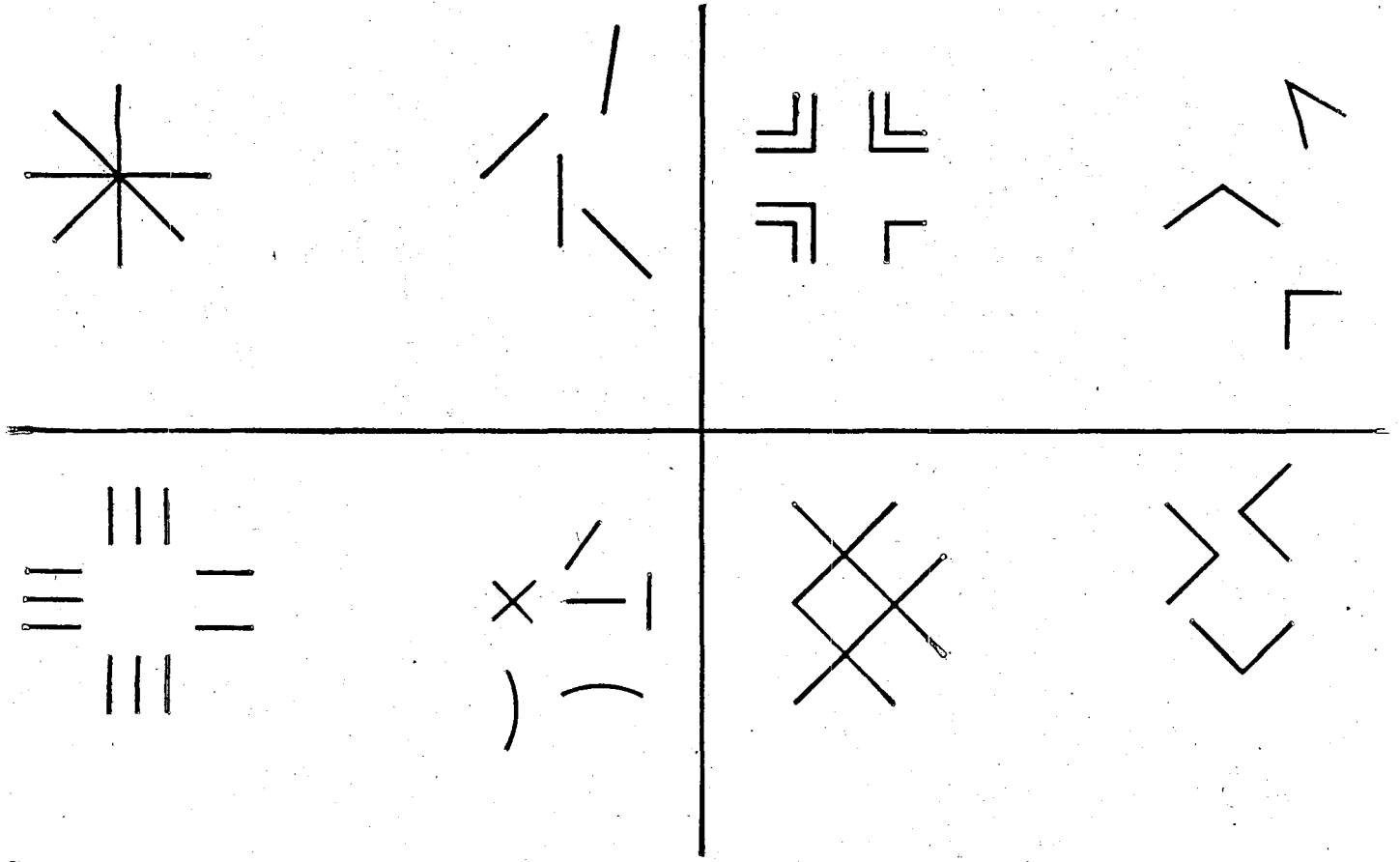




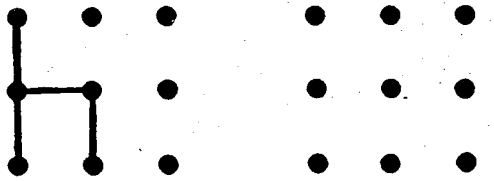


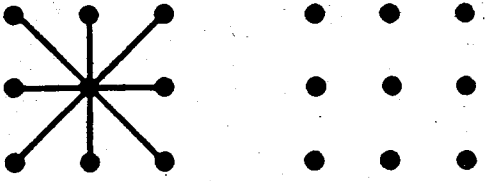


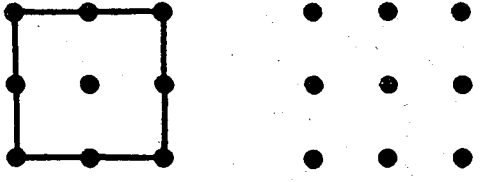
TEST 6 — *Continued*

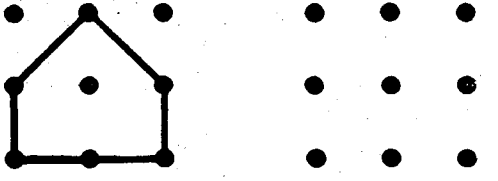


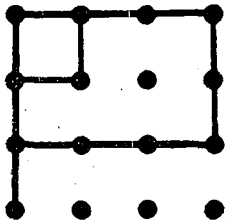
Score.....

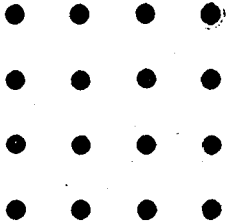


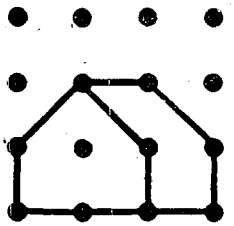


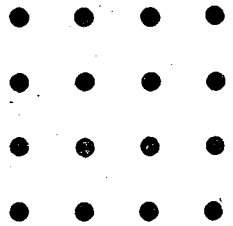


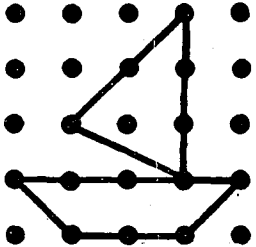


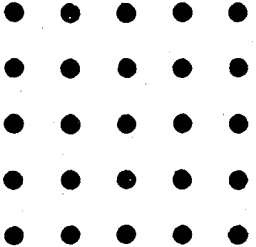


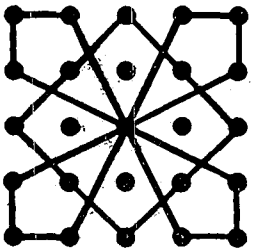


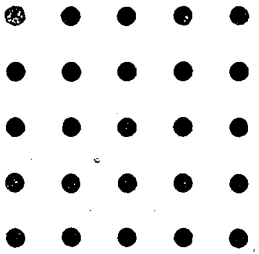












Score.....

Kuhlmann-Anderson Test A

Sixth Edition

NAME _____

GRADE _____ BOY_____ GIRL_____

TEACHER _____

SCHOOL _____ CITY _____

DATE TESTED _____ Year _____ Month _____ Day

DATE OF BIRTH _____ Year _____ Month _____ Day

AGE _____ Years _____ Months _____ Days

Test Results _____ _____ _____

Test administered by _____

Test scored by _____

Comments: _____

_____

PERSONNEL PRESS, INC. PRINCETON, NEW JERSEY

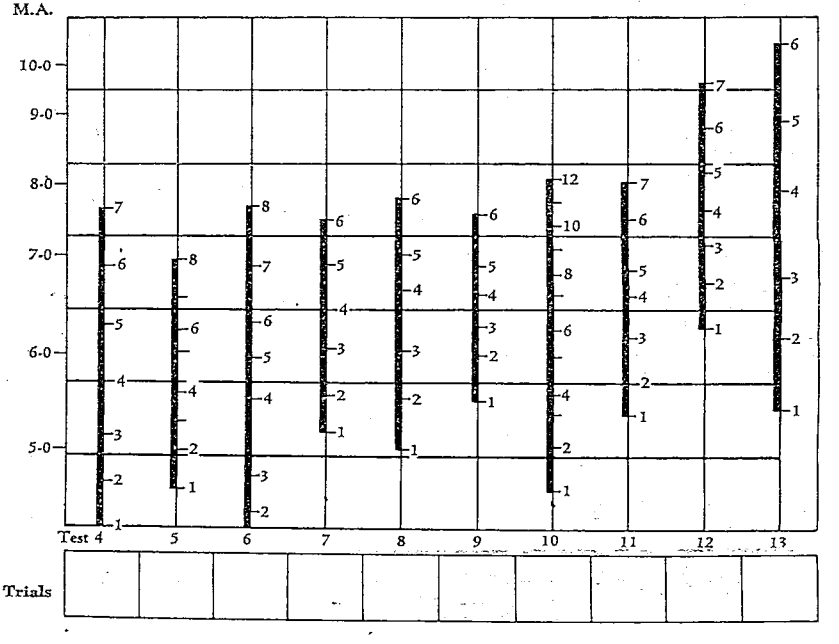
TEST A SUMMARY

M.A.

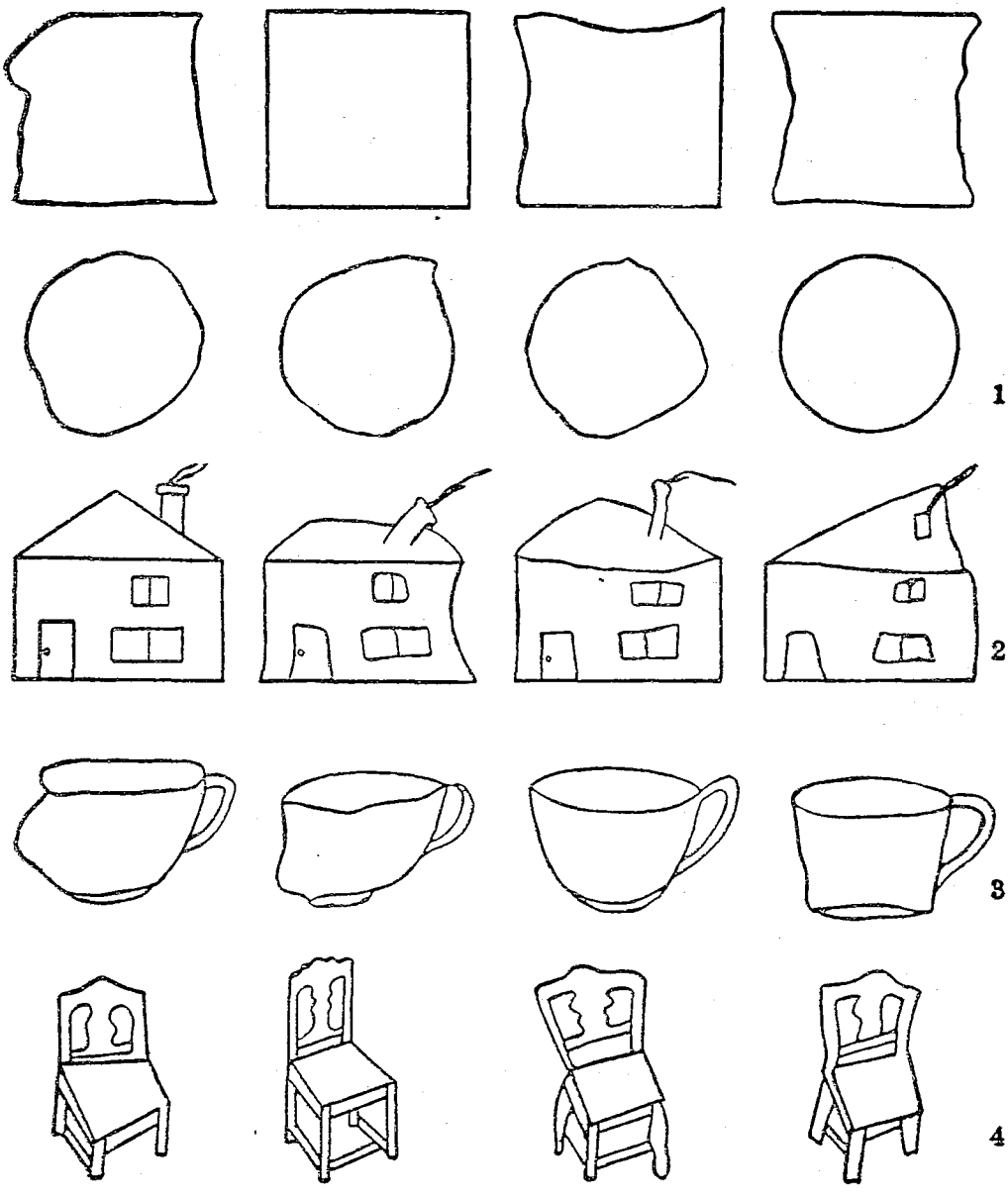
*. . . . _____	5-0 _____	7-0 _____	9-0 _____
. . . . _____	5-1 _____	7-1 _____	9-1 _____
. . . . _____	5-2 _____	7-2 _____	9-2 _____
. . . . _____	5-3 _____	7-3 _____	9-3 _____
. . . . _____	5-4 _____	7-4 _____	9-4 _____
4-0 _____	5-5 _____	7-5 _____	9-5 _____
4-1 _____	5-6 _____	7-6 _____	9-6 _____
4-2 _____	5-7 _____	7-7 _____	9-7 _____
4-3 _____	5-8 _____	7-8 _____	9-8 _____
4-4 _____	5-9 _____	7-9 _____	9-9 _____
4-5 _____	5-10 _____	7-10 _____	9-10 _____
4-6 _____	5-11 _____	7-11 _____	9-11 _____
4-7 _____			
4-8 _____	6-0 _____	8-0 _____	10-0 _____
4-9 _____	6-1 _____	8-1 _____	10-1 _____
4-10 _____	6-2 _____	8-2 _____	10-2 _____
4-11 _____	6-3 _____	8-3 _____	10-3 _____
	6-4 _____	8-4 _____	
	6-5 _____	8-5 _____	
	6-6 _____	8-6 _____	
	6-7 _____	8-7 _____	
	6-8 _____	8-8 _____	
	6-9 _____	8-9 _____	
	6-10 _____	8-10 _____	
	6-11 _____	8-11 _____	

*In these spaces write zero scores and M.A. scores below those listed.
To find the Median M.A. take average of the 5th and 6th highest scores.

Profile of Trials Passed



Median M.A. _____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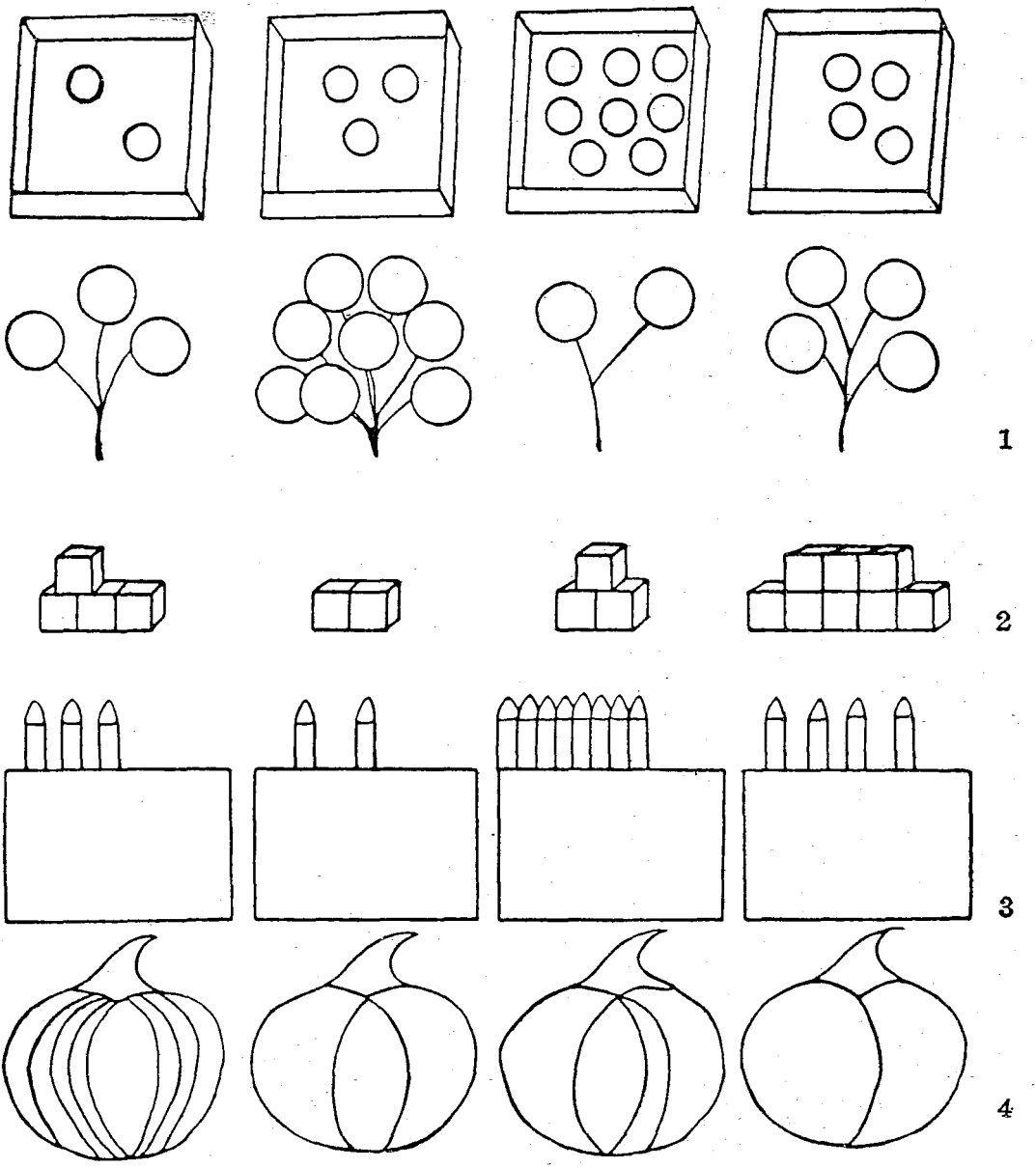
2
3
4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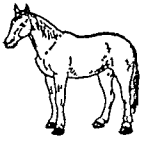
2
3
4

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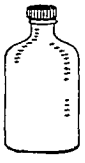
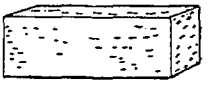
2

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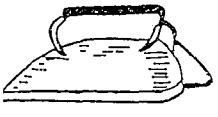
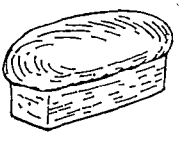
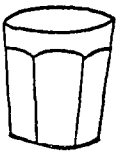
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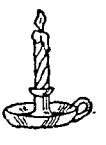
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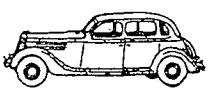
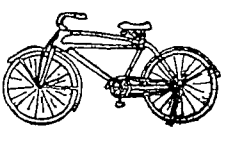
6

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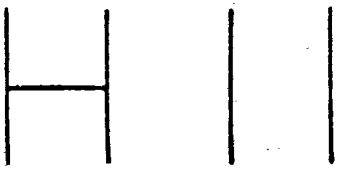
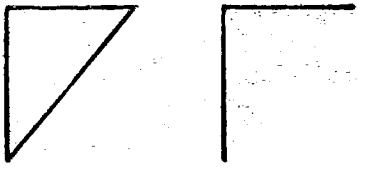
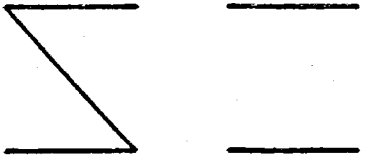
1 

2 

3 

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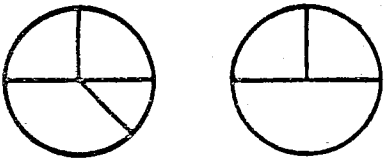
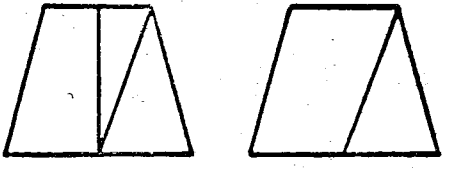
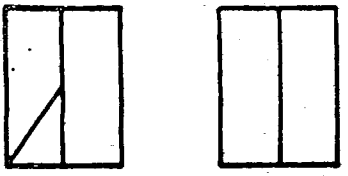
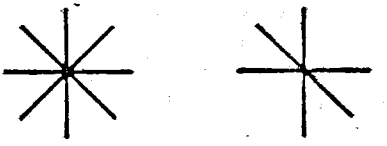
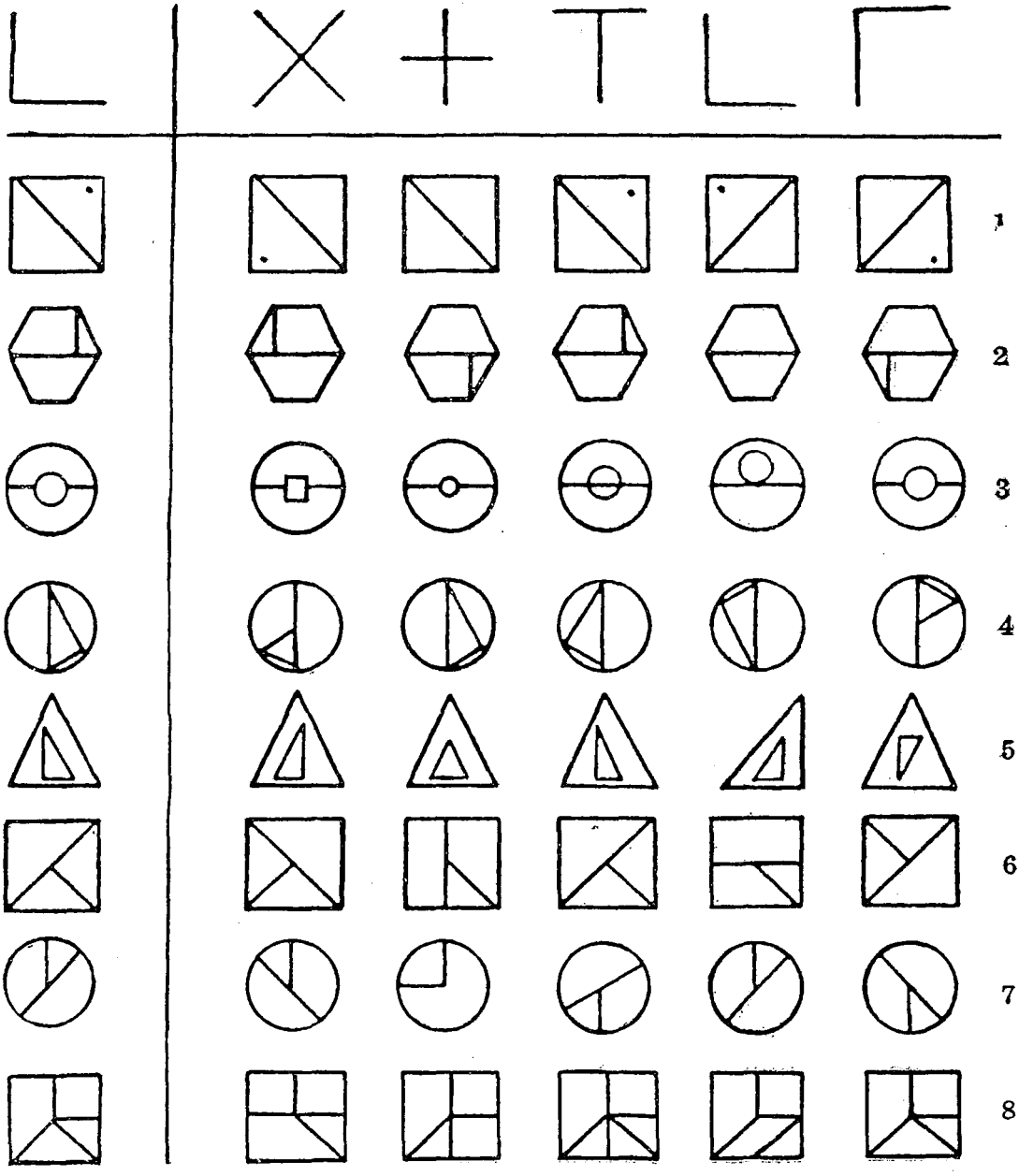
5 

6 

7 

8 



Test No. 6







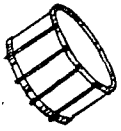
1




2




3

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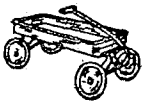

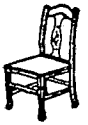


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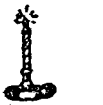


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Test No. 7

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Test No. 8

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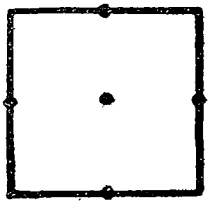

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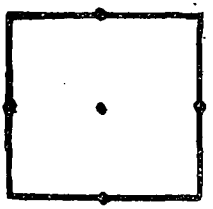

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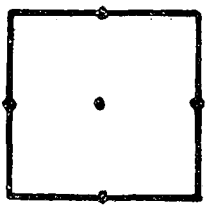

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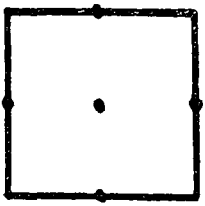

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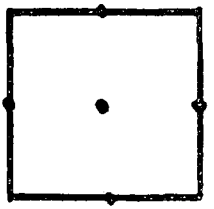

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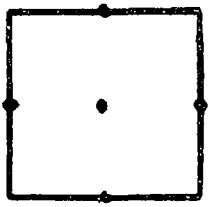

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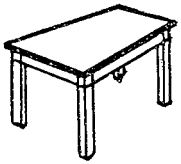
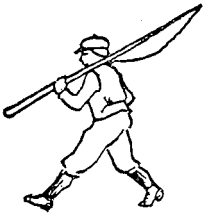

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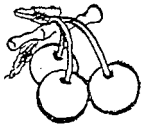

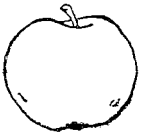
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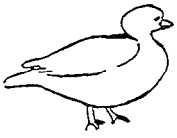


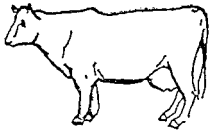
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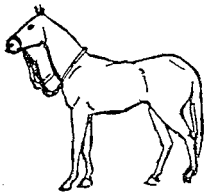
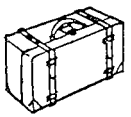
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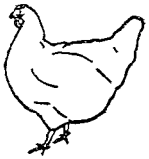

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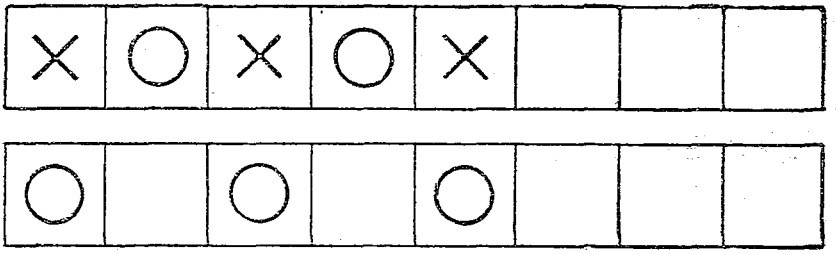

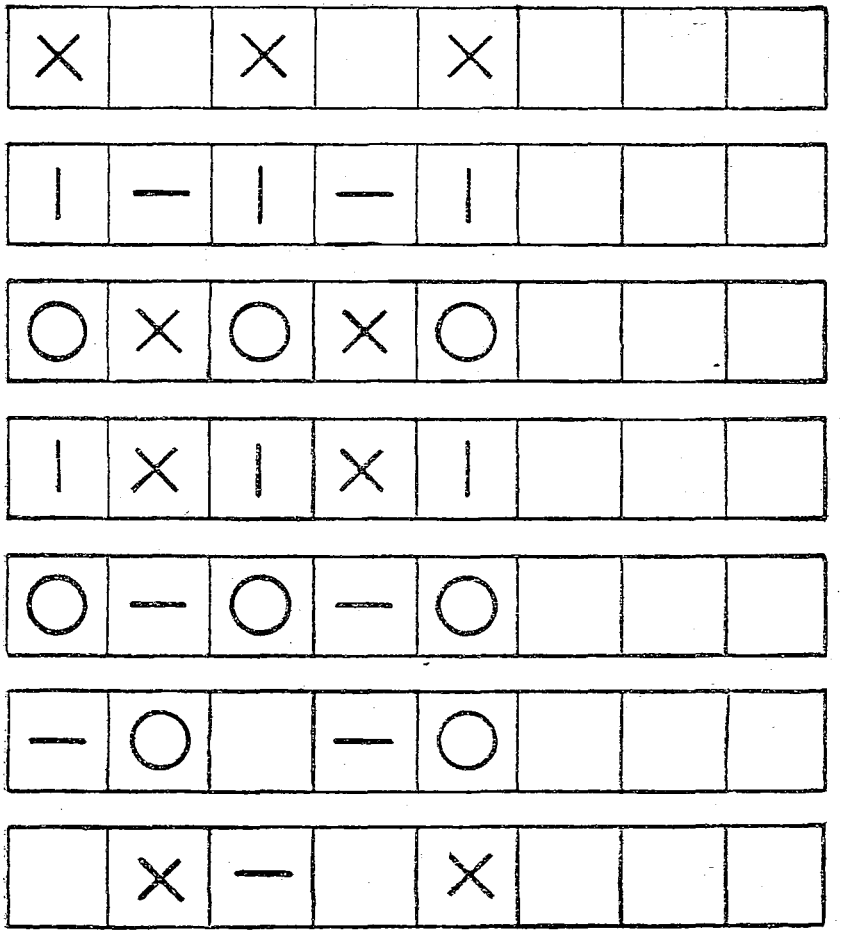

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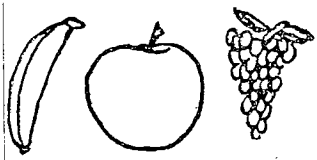

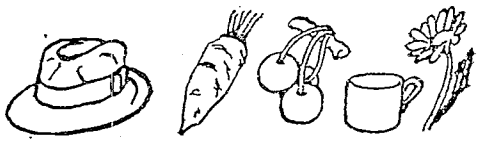

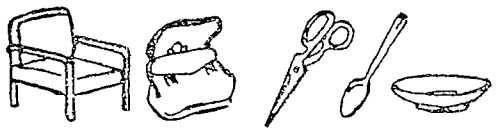

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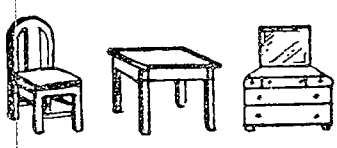

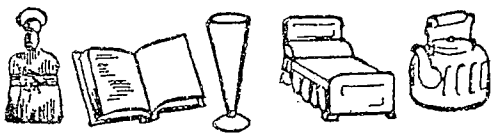

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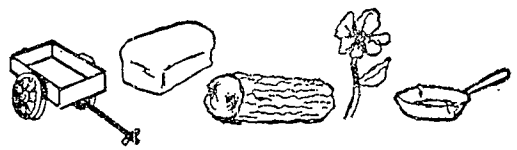

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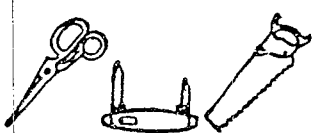

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Test No. 13

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