# A COMPARISON OF THE TRADITIONAL AND INDIVIDUALIZED 

 IETHODS OF TEACHING SPELLING TO TWO FOURTH grade and four fifth grade classesby

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## CHAPTER I

## INTRODUCTION

## Statement of the Problem

The schools have frequently been criticized for the way in which they teach spelling. Business men complain that their secretaries can't spell many of the words in an ordinary business letter. College professors say that many incoming freshmen are semiliterate and relegate them to remedial English classes.

Several recent comprehensive studies tend to support the often expressed opinion that today's students can't spell.

In 1945 , Sifferd ${ }^{1}$ surveyed the spelling ability of 921 pupils in grades four to eight in Illinois. By using the Buckingham Extension of the Ayres Spelling Scale he was able to compare the spelling of children in 1945 with that of children of more than thirty years earlier. In every grade the spelling records of the children of thirty years earlier surpassed those of 1945 .
$1_{\text {Calvin }}$. Sifferd, "A Survey of Spelling Ability," Elementary School Journal, XLVII (February, 1947), p. 341.

Fitzgerald ${ }^{2}$ reports a 1947 study of the spelling proficiency of 82,833 children in grades two to eight in Indiana. An analysis of the data revealed that twentyseven percent of the children were spelling at grade level, twenty-five percent were accelerated, and fortyeight percent were retarded, the average retardation being one and one half grades.

Several years later Ayer ${ }^{3}$ conducted a survey of the spelling achievement of $40,000 \mathrm{high}$ school students in forty-eight states. He discovered that there was a great variation in spelling proficiency from school to school and within the same grade. However, a comparison of the median achievement scores of the then ninth grade pupils with those of the pupils of 1915 and 1925 showed that the students of 1950 were considerably poorer spellers.

It is true that today the children of all intellectual levels and cultural backgrounds attend school. This wasn't the situation fifty years ago and so it might be argued that these surveys give a distorted view of present conditions. Nevertheless, it would appear that the traditional method of teaching spelling has failed to develop the spelling abilities of a great many children.

[^0]Purpose of the Study
It was the purpose of this study to compare the relative effectiveness of the traditional and individualized methods of teaching spelling to two fourth grade and four fifth grade classes similar in respect to age, sex, intelligence, and socioeconomic background.

The control classes were taught in the traditional manner. The teachers of these classes followed the spelling program outlined in the adopted textbook, Basic Goals in Spelling, ${ }^{4}$ in which identical weekly word lists and exercises are assigned to the entire class.

An individualized spelling program was followed by the experimental classes. All the children were given a mimeographed word list 5 which consisted of all the words presented in the second, third, fourth, fifth, sixth, and seventh grade editions of the spelling series used by the control classes. The words of each grade were arranged alphabetically and titled List $A$, List B, List C, List D, List $E$, and List $F$ respectively, according to grade level. Each child made his own weekly list of spelling words by selecting words at his level as determined by the MorrisonMcCall Spelling Scale. 6 He was encouraged to include as

4Villiam Kottmeyer and Kay Ware, Basic Goals in Spelling, (St. Louis: Webster Publishing Company, 1960).

Shay be found in Appendix B.
$6 J$. Cayce Morrison and William A. McCall, MorrisonMcCall Spelling Scale, (New York: Harcourt, Brace, and World, Inc., 1923), 16. May be found in Appendix A.
many words as he felt he could learn in a week in addition to any common words he may have misspelled in a social studies, science, or creative writing assignment the previous week.

The experiment lasted one school year. At its conclusion, the initial spelling scores were compared with the final scores of two equivalent forms of the KorrisonMcCall Spellin Scale in order to determine if one teaching method was superior to the other.

## CHAPTER II

## REVIEW OF THE LITERATURE

That individuals vary in ability and achievement is a recognized fact. It is usual for a classroom to contain children with a considerable range in both potential and performance. The span of abilities in a typical classroom roughly corresponds to the grade level. Thus, in a fifth grade room there will be some children whose language skills are similar to the average in third grade and others with skills comparable to those of an average seventh grade student. 7

Studies of the interrelationships among the language arts, that is reading, writing, speaking, and listening, have determined that language development is characterized by sequential development. "The child listens with comprehension before he speaks with meaning; he develops a substantial oral vocabulary before he reads; he makes considerable reading progress before he writes; and he usually begins to spell when he needs spelling in his own writing." 8

[^1]Spelling and reading abilities are closely related. Peake9 determined that the correlation between scores on vocabulary tests and spelling tests tends to average around .80. After making an extensive survey of spelling disability, Spache ${ }^{10}$ concluded that vocabulary knowledge is a more significant determinant of spelling suecess than intelligence, especially in the first five grades. of particular interest is the way in which spelling and reading are related. The child who is good in reading is usually good in spelling, although there are some excellent readers who are poor spellers. But the poor readers are rarely good spellers. ${ }^{11}$

Most teachers consider the fact of individual differences when organizing their reading program. It is the usual practice to group children for reading instruction according to their ability. On the other hand, the usual practice in spelling is to give all children identical spelling books and assign the same words regardless of individual capacity and achievement. 12 This malpractice

9Nellie L. Peake, "Relation Between Spelling Ability and Reading Ability," Journal of Experimental Bducation, IX (December, 1940), p. 193.

10George Spache, "Spelling Disability," Journal of Educational Research, XXXIV (April, 1941), p. 575.
$11_{\text {Gus }}$ P. Plessas and Walter T. Petty, "The Spelling Plight of the Poor Reader," Elementary English, XXXIX (May, 1962), p. 463.
$12_{\text {riale }}$ C. Reid and A. N. Hieronymus, An Evaluation of Five Methods of Teaching Soelling in the Second and Third Grades, A Research Report by the U. S. Office of Education (Washington, D. C.: U. S. Department of Health, Education,
results in unsuccessful learning experiences for many children.

Using nine year old boys as subjects, Lantz ${ }^{13}$ determined that success tended to enhance learning efficiency and that the experience of failure had an even greater inhibiting effect. Also, the personality and behavior traits of the boys appeared changed by the success or failure. Successful subjects were rated self-confident, bold, willing, and cheerful by the examiner. The boys who failed became uncooperative, dull, anxious, and antagonistic.

Equally important is the influence that success and failure have on an individual's aspirations (next-expected achievements). Working with fourth to sixth grade children Sears ${ }^{14}$ found that children who had regularly experienced success in the past--in their daily schoolwork, in tests, and in marks--continued to set aspiration levels just beyond their past achievements. However, those children who had been continually frustrated in their daily learning attempts and disappointed in their grades set unrealistic levels of aspiration--either too high or too low.

Because of the far reaching consequences of success or failure on an individual's interest, efficiency, and and Welfare, 1965), op. 22-33.
$13_{\text {Beatrice Lantz, "Some Dynamic Aspects of Success and }}$ Failure," Psychological llonographs, LIX (1945), pp. 15-21.
${ }^{14}$ Pauline Snedden Sears, "Levels of Aspiration in Academically Suceessful and Unsuccessful Children, "Journal of Abnormal and Social Psychology, XXXV (October, 1940), pp. 522-35.
aspirations, it is essential that all subjects, spelling included, be organized so that all children can know real success.

Various spelling programs have been tried in an attempt to gear spelling instruction to individual capacities. In one individualized approach adopted by many school systems between 1930 and 1955 spelling books were abandoned altogether. Each child was responsible for making his own spelling list by ariting in a notebook any word he found need of in his written work. These words were studied at intervals as they accumulated. 15 In 1953, Deacon ${ }^{16}$ made a comparative study of the effectiveness of a word list (textbook) method of teaching spelling with a program employing only the words needed by individuals in their writing. Over 400 second and third grade pupils were involved. The results of the spelling and reading tests and the analysis of the children's experience stories indicated that the children using the word list method had made significantly greater gains in reading and spelling. Deacon suggested that lack of effort and/or a poor choice of words had prevented the

15 Jean S. Hanna and Paul R. Hanna, "Spelling as a School Subject: a brief history," National Elementary Principal, XXXVIII (May, 1959), p. 14.
${ }^{16}$ Lawrence Deacon, "The Teaching of Spelling Can Become Too Individualized," Education, LXXVII (January, 1956), p. 301.
children in the individualized program from learning a basic vocabulary.

Another plan that has been tried is to have the children develop a class spelling list by suggesting words pertaining to current units and activities. According to Fitzgerald ${ }^{17}$ such a practice should be carefully evaluated because many of the words used in a unit of work may seldom, if ever, be written in the future by many of the children.

If improvement in spelling is to occur, if the weak spellers and the able spellers are to attain growth commensurate with their ability, provision must be made for the differences among children. ${ }^{18}$

Thus it is unwise to have poor spellers attempt to memorize the spelling of words which are not a part of their reading vocabularies. It is equally senseless to have the above average spellers "study" words they can already spell. The good spellers investigated by Schoephoerster ${ }^{19}$ were able to spell ninety-seven percent of the words in the weekly lesson prior to formal class

$$
\text { 17 Fitzgerald, loc. cit., p. } 13 .
$$

$18_{\text {Arnie Richmond, "Children's Spelling Needs and the }}$ Implications of Research," Journal of Experimental Education, XXIX (September, 1960), p. 19.

19 Hugh Schoephoerster, "Research into Variations of the Test-Study Plan of Teaching Spelling," Elementary English, XXXIX (1lay, 1962), p. 461.
presentation.
Gantz ${ }^{21}$ has stated that the success of the spelling program hinges on the children's acceptance of spelling as a personal obligation. This can best be accomplished when the children are encouraged to set appropriate goals for themselves in spelling and to assume responsibility for reaching them. 22

21Gertrude Gantz, "With Vast Delight, He Spells," National Elementary Principal, XXXVIII (May, 1959), p. 25.

22Neville Bremer, "Helping Pupils Toward Self-Motivation in Learning to Spell and Write," Elementary English, XLII (February, 1965), p. 129.

## CHAPTER III

DESIGN OF THE STUDY

## Hypothesis Tested

The hypothesis tested was that the differences between the means of the samples in terms of the initial and final scores of two equivalent forms of the MorrisonMcCall Spelling Scale would be no greater than the differences due to the vagaries of random sampling from a single, normally distributed, infinite population.

## Population and Samples Used

This study was limited to two fourth grade classes and four fifth grade classes. The fourth grade students attended the same school in Hales Corners, Wisconsin, an upper middle class commuity of 5,549 residents. The fifth grade students attended the same school in Oak Creek, Wisconsin, a lower middle class commity with a population of 9,372 . Both cities are suburbs of Milwaukee, Wisconsin. In both schools children are randomly assigned to rooms so the two fourth grade classes were similar in respect to age, sex, intelligence, and sociosconomic background, as were the four fifth grade classes. One of the fourth grade classes and two of the fifth grade classes comprised the
the control group. The other three classes made up the experimental group.

## Instruments Used

The test used to determine the spelling proficiency of the children of both groups was the Morrison-licCall Spelling Scale. Anton Thompson ${ }^{22}$ has noted that most of the test words are words commonly used in the writing of adults and upper grade children.

Both the verbal and nonverbal batteries of the LorgeThorndike Intelligence Test ${ }^{23}$ were used to establish the mental ability of the students considered in the study. Because of its good design, simple administration, and highly satisfactory norms, this series is rated one of the best of the group intelligence tests by Frank Freeman. 24

## Experimental Procedure

During the first week of school Test One of the Morrison-McCall Spelling Scale was administered to both groups and the spelling level in terms of grade norms was

[^2]determined for each child. Table 1 indicates the means and ranges of the spelling levels at the start of the study. It can be seen that the gipls of the experimental group were inftially botter spellers than the boys of the experinental group. Because of this it was necessary to analyze the achievement of the sexes separately.

## TABLE 1.

LEAANS AND RANGES OF SPELLING LEVELS IM TERMS OF GRADE MORUS AS DETERNINED BY TEST ONE OF TIIS MORRISON-MCGALL SPELLIMG SCALB

## Boys <br> Qucls <br> $\pm$

|  | N | M | R | N | M | R |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Control | 45 | 4.1 | $1.7-7.0$ | 34 | 4.3 | $2.2-3.0$ | $-1.22^{*}$ |
|  |  |  |  |  |  |  |  |
| Experi- <br> menta1 | 42 | 3.7 | $1.8-6.6$ | 32 | 4.5 | $1.8-7.5$ | $-3.11^{* *}$ |

*not significant
** significant at the . 01 level

In October, both batteries of the Lorge-Thorndike Intellizence Zest were given and the intelligence quotients ascertained. The means and standard deviations of the intelligence quotients of both groups, divided by sex, are shown in Table 2. The girls in the experimental group scored signiflcantily higher than the control girls on the verbal battery. A11 the other afincronces are not significant.

TABLE 2
MEANS AND STANDARD DEVIATIONS OF INTELLIGENCE QUOTIENTS AS DETEREINED BY LORGE-THORNDIKE INTELLIGENCE TGSTS

|  | Control |  |  | Experimental |  |  | $t$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | H | SD | N | 14 | SD |  |
| Boys | 45 | $\begin{gathered} 110.0 \\ \text { (verba1) } \end{gathered}$ | 14.11 | 44 | $\begin{gathered} 108.3 \\ \text { (verba1) } \end{gathered}$ | 15.38 | - 54\% |
|  |  | $\begin{gathered} 109.6 \\ \text { (nonverbal) } \end{gathered}$ | 12.45 |  | $\begin{gathered} 107.4 \\ \text { (nonverbal) } \end{gathered}$ | $11.41$ | .80* |
| Girls |  | $\begin{gathered} 107.6 \\ \text { (verbal) } \end{gathered}$ | 12.94 | 32 | 115.3 <br> (verbal) | 12.19 | 2.50** |
|  |  | $\begin{gathered} 109 \cdot 9 \\ \text { (nonverbal) } \end{gathered}$ | 13.42 |  | $\begin{gathered} 111.4 \\ \text { (nonverbal) } \end{gathered}$ | 14.36 | -. 4 3* |
| *not significant <br> **significant at the . 02 level |  |  |  |  |  |  |  |

The teachers of the control classes followed the program outlined in the adopted spelling book. All the children in each class used the book for their grade and studied twenty words a week. A typical weekly schedule is outlined below.

Monday:
The teacher introduced the week's spell-
ing words by pronouncing them and clar-
ifying meanings when necessary, The
children pronounced the words and wrote them.

Tuesday:
The children used the spelling words to
complete exercises in the textbook.

## Wednesday:

The teacher dictated the words for a trial test which the children checked themselves. While the teacher walked about rechecking the papers, the chilstudied any misspelled words. In studyjng these words the children were directed to follow the five steps suggested by the authors of the text:

1) Look at the word
2) Say the word
3) Think how to spell the word
4) Write the word and check its spelling
5) Practice writing the word

## Thursday:

The children continued their study of misspelled words and completed the spelling exercises.

Friday:
The children checked the spelling exercises together. The teacher dictated the final test and corrected the papers. The children graphed the results on individual progress charts. Every sixth week there was a review lesson. Each week seventy-five minutes, divided into five fifteen
minute periods, was devoted to spelling.
The children in the three experimental classes used no spelling book. Their main source of words was a mineographed list of all the words taught in the second, third, fourth, fifth, sixth, and seventh grade editions of the text used by the control classes. The words of each grade were arranged alphabetically and titled List, A, List B, List C, List D, List E, and List F respectively, according to difficulty.

The teachers of the experimental classes used the scores from Test One of the Morrison-licCall Spelling Scale to determine the spelling level of each child and to decide with which list of words (List A, B, , , , E, or E) he was to begin. Each child was informed of his starting level but not of its grade equivalency. The children were told that they were going to make their own weekly spelling lists by choosing as many words as they wanted to learn how to spell. They were encouraged to take as many words as they felt capable of learning. It was emphasized that they were to list only those words they could read, knew the meaning of, but didn't know how to spell. The children were told that as soon as they could spell all the words at one level, they would be able to move on to the next list. Below is a typical weekly program. 14onday:

The teacher passed out a worksheet which
dealt with a particular word analysis skill. 25 Under the teacher's guidance the ehildren worked out the first part of the exercise together. When it was apparent to the teacher that the children understood the principle involved, she instructed them to compile their spelling lists including all the words from their level that exemplified that particular principle. The children also listed any words misspelled in the previous final test, any common words misspelled in any written assignment the week before, and other words that they wanted to learn how to spell from their level. Any extra time was used to complete the worksheet exercises.

## Wednesday:

Each child had a spelling partner of approximately the same spelling ability to whom he gave a trial test and from whom he received his trial test. Each child corrected his own test and studied any misspelled words following the same five steps used by the control group.

The children then finished the worksheet exercises while the teacher rechecked the trial tests to make sure that no misspelied words had gone undetected.

## Friday:

The children checked the exereise: together. Each child dictated a final test to his partner and wrote his final test. These tests were checked by the teacher and returned. The children graphed the results on individual progress charts.

The experimental classes spent the same total amount of time (seventy-five minutes) on spelling as the control classes but it was divided into three periods of twentyfive minutes each.

## CHAPTER IV

## ANAIYSIS OF THE DATA

This study of two ways of teaching spelling lasted one school year. Six classes, two fourth grades and four fifth grades, participated in it.

During the first week of school all the teachers involved administered Test One of the Morrison-McCall Spelling Scale to their classes. Approximately six weeks later the verbal and nonverbal batteries of the Lorge-Thorndike Intelligence Test, Level 3, Form A were given. At the end of the school year an equivalent form of the Morrison-McCall Spelling Scale was administered.

The first test of the Morrison-MeCall Speling Scale revealed that the girls in the experimental group were significantly better spellers than the boys of the experimental group, so all subsequent comparisons differentiated between the sexes of both the control and experimental groups. Table 3 indicates the means and standard deviations of the initial spelling achievement of the four groups.

## TABLE 3

MEANS AND STANDARD DEVIATIONS OF WORDS SPELLED CORRECTLY ON TEST ONE OF THE MORRISON-MECALL SPELLING SCALE

|  | Boys |  |  | Girls |  |  | t |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | M | SD | N | M | SD |  |
| Control | 45 | 20.9 | 8.55 | 34 | 23.3 | 8.76 | 1.22* |
| Experimental | 44 | 19.1 | 8.83 | 32 | 24.2 | 8.23 | 3.11** |

*not significant
** significant at the . 01 level

At the conclusion of the study, each child's gain in spelling was determined by computing the difference between the scores of the two spelling tests. The average gains of the children grouped according to sex and method are found in Table 4. Although the scores of the boys in the experimental group revealed the most improvement, the gain was not statistically significant.

TABLE 4
MEANS AND STANDARD DEVIATIONS OF THE DIFFERENCES BETWEEN THE SCORES OF SPELLING TESTS ONE AND TWO

|  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Control |  | Experimental |  |  |  |
|  | N | M | SD | N | M | SD |  |
| Boys | 45 | 7.53 | 3.88 | 44 | 8.95 | 3.88 | $1.73^{*}$ |
| Girls | 34 | 7.50 | 3.89 | 32 | 7.81 | 4.27 | $.31^{*}$ |

*not significant

In order to determine if one of the methods was significantly more effective with either the bright average and above children or the average and below average children, the four groups were further divided according to the intelligence quotients determined by the verbal battery of the Lorge-Thorndike Intelligence Test. The means of the differences between the scores of the two spelling tests were then compared. Tabie 5 shows that for children of average and below intelligence, neither method was consistently more effective than the other. The boys improved most with the traditional method while the girls did better in the individualized program. However, the differences were not statistically significant.

## TABLE 5

MEANS AND STANDARD DEVIATIONS OF THE DIFFERENCES BETWEEN THE SCORES OF SPELLING TESTS ONE AND TWO OF CHILDREN WITH INTELLIGENCE QUOTIENTS OF 110 AND BELOW

|  | Control |  |  | Experimental |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | M | SD | \$ | M | SD |  |
| Boys | 24 | 8.67 | 4.09 | 26 | 8.62 | 4.65 | . $04 *$ |
| Girls | 19 | 6.95 | 4.67 | 12 | 7.33 | 4.16 | -. 25 * |

[^3]For the brighter than average boys, one teaching method was decidedly more effective. As Table 6 shows, the boys in the individualized program made significantly greater improvement than their counterparts in the control group. The opposite is true of the girls in the experimental group who made slightly less improvement than the control girls.

## TABLE 6

MEANS AND STANDARD DEVIATIONS OF THE DIFFRRENCES BETYEEN THE SCORES OF SPELLING TESTS ONE AND TWO OF CHILDREN WITH INTELLIGENCE QUOTIENTS ABOVE 110

|  | Control |  |  | Experimental |  |  | t |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | M | SD | N | M | SD |  |
| Boys | 22 | 5.29 | 4.72 | 18 | 9.44 | 3.66 | -3.26** |
| Girls | 15 | 8.20 | 2.58 | 20 | 8.11 | 4.42 | .84* |
|  | $\begin{aligned} & \text { ot } \\ & \text { igni } \end{aligned}$ | $\begin{aligned} & \text { nifical } \\ & \text { cant a } \end{aligned}$ | the | leve |  |  |  |

Table 7 indicates that the brighter boys in the experimental group were not better spellers than the brighter girls in the experimental group at the start of the experiment. In fact, the mean number of words spelled correctly by the girls on Test One was higher than that of the boys, although the difference was not great enough to be statistically significant.

## TABLE 7

MEANS AND STANDARD DEVIATIONS OF WORDS SPELLED CORRECTLY ON TEST ONE BX CHILDREN WITH INTELLIGENCE QUOTIENTS ABOVE 110 IN THE EXPERIMENTAL GROUP

| Boys |  |  | Girls |  |  | $t$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | M | SD | N | H | SD |  |
| 18 | 24.05 | 8.26 | 20 | 26.55 | 7.17 | -.99* |

*not significant

## CHAPTER V

## SUMMARY AND CONCLUSIONS

## Summary

The purpose of this study was to compare the relative effectiveness of the traditional and individualized methods of teaching spelling to two fourth grade and four fifth grade classes similar in respect to age, sex, intelligence, and socioeconomic background.

The fourth grade students attended the same school in Hales Corners, Wisconsin. The fifth grade children attended the same school in Oak Creek, Wisconsin. Both small communities are suburbs of Milwaukee, Wisconsin. The study was limited to one school year. At the onset, all teachers administered Test one of the MorrisonMcCall Spelling Scale and the verbal and nonverbal batteries of the Lorge-Thorndike Intelligence Test to their students. At the conclusion of the experiment Test Two of the Morrison-McCall Spelling Scale was given to all children. The children in the three control classes followed the traditional approach outlined in the adopted textbook, Basic Goals in Spelling. All the children used the book for their grade level. The children in the experimental classes selected their own spelling words from a mimeo-
graphed list which included all the words taught in the second through seventh grade editions of the spelling series used by the control group. The children chose words at their spelling level as determined by Test One of the Morrison-McCall Spelling Scale. Unlike the children in the control classes who were limited to twenty words a week, the children in the experimental classes were encouraged to study as many words as they felt capable of learning. Both groups were instructed in structural and phonetic word analysis. The control classes worked the exercises in the spelling book and the experimental classes were given weekly worksheets which dealt with similar skills.

Because the first spelling test indicated that the girls in the experimental group were initially better spellers than the boys in the experimental group, the subsequent comparisons of the control and experimental groups differentiated between the sexes.

Although the mean differences between the scores of the first and second spelling tests were greater for the boys and girls of the experimental group, the mean gains in achievement were not statistically significant.

When the control and experimental groups, already divided by sex were separated by intelligence level into those with intelligence quotients above 110 and those with intelligence quotients of 110 and below, and the mean differences of the scores of the two spelling tests were
compared, it became apparent that the boys in the experimental group with an intelligence quotient above 110 had made significantly greater improvement than the brighter than average boys in the control group.

## Conclusions

Based on this limited study it would appear that for boys of better than average intelligence the individualized spelling method is superior to the traditional approach. For all other sub groups--girls of above average intelligence, girls of average and below average intelligence, and boys of average and below average intelligence--both spelling methods seemed to be similarly effective.

However, because of its limited nature, conclusions and implications regarding the generalization of the data are somewhat questionable. Substantially different results might have been obtained from a longitudinal study which included grades two to six and extended at least two years. Such a study would take into consideration the part that maturation plays in the development of spelling ability, a factor which wasn't included in this study.

Also, the method used to determine improved spelling ability was not entirely satisfactory. It is a common observation that many pupils spell with a high degree of accuracy during spelling period but much less accurately during other writing periods. A test that indicated the
children's sensitivity to spelling errors in a proofreading situation would have revealed the extent to which the methods had contributed to a practical application of apelling ability.

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## APPENDIX A

## Morrison-McCall Spelling Scale

and

Lorge-Thorndike Intelligence Tests

# MORRISON-McCALL SPELLING SCALE 

For Grades 2 to 8

By J. Cayce Morrison, Ph.D.<br>Specialist in Educational Measurements<br>State Department of Education, Albany, New York<br>and William A. McCall, Ph.D.<br>Professor of Educational Psychology<br>Teachers College, Columbia University, New York

## General Directions

Select for testing purposes any one of the eight lists of 50 words each given in this booklet.

The eight lists are of equal difficulty, so that all directions given herein apply equally to all of them.

Use the illustrative sentences in which these words are contained. Do not use any others.

Before beginning the test, remove all distracting elements from the environment and make pupils as comfortable as possible. Provide against any disturbances while the test is in progress. Preferably there should be no visitors.

Follow with literal exactness the instructions for giving the test. Avoid preliminary coaching, special helps during test, and unstandardized introductory remarks. Secure attention and coöperation of pupils by your own poise and pleasant manner.

Give directions distinctly, at moderate speed, with careful attention to emphasis, loudly enough for all pupils in the room to hear without difficulty, and confidently enough to secure instant obedience from every pupil. Insist courteously but firmly upon this prompt obedience from the start.

Pronounce all words to all pupils. Do this regardless of whether Grade 2 or Grade 8 or a mixture of several grades is being tested. Pupils will often surprise their teachers by spelling words normally too difficult or by failing to spell words normally too easy for their grade. While the same scale is used for measuring all grades, the norms for upper-grade pupils are much higher than for lowergrade pupils.

Practice pronouncing the words until sure of the exact pronunciation of each and until sure of your ability to enunciate clearly without distorting the correct pronunciation. Use Webster's New International Dictionary as the standard.

Prevent copying by carefully watching any one who attempts to do so. Do not distract others by oral reprimands while a word is being spelled.

[^4]
## Instructions to Pupils

zlear desks. Provide them with sharpened pencils and uniform few extra pencils available. Have each child write at the top of te, age in years at last birthday, date of birth, school, teacher's le, and whether in the first half or second half of the grade.
number the lines on their papers from 1 to 50 .
ils: "We will now have a spelling lesson. There will be 50 ronounce each word, use it in a sentence, and pronounce it a f you do not understand any word, leave the space blank and at word. Try to spell each word. Be sure to dot the i's and In rooms having two or more grades the examiner will add, spell the same words."
ach word as in the following illustration: "Your-Your books - Your." Each examiner will pronounce words at such rate ited to the class.
rs as soon as children have written the last word.
of the test, younger pupils should seem bewildered and confused, ould smilingly encourage them by explaining that he didn't exell all the words. He should endeavor to close the test period Iren uniformly happy.

## Directions for Scoring

ord either right or wrong. The standard of correctness is absoorder to avoid subjective scoring.
r more spellings are allowed for a word by any standard dictionr spelling as correct.
ong if the letter " i " does not have a dot or if the letter " t " is ess it be a special " final t" construction.
credit for spelling words not pronounced; e.g., " tops" for the " men" for the word " man."
tempts to rewrite a word, consider the obvious intention of the ling to be scored.
tion to capitalization.
loubt as to the child's spelling, count as wrong.

When the spelling papers are scored, the classroom teacher will want to ask four questions:
(1) How does the class or individual pupil compare in spelling achievement with the norms obtained from testing thousands of pupils of the same grade?
(2) What is the grade status of the individual pupil or of the class? That is, for what grade is the spelling ability of the pupil or class normal?
(3) How does the pupil compare in spelling achievement with other pupils of the same age?
(4) For what age is the spelling ability of the pupil normal?

Two methods are offered for answering the first question. By the first method the teacher simply compares the score of the pupil or class with the grade norms given in Table I. For example, Table 6 shows the scores of some sixth-grade pupils. Pupil A's score was 16 words spelled correctly. Comparing this score with the grade norms in Table I, we see that it is less than the midyear average for third-grade pupils. Pupil C of the same table spelled 37 words correctly, which is better than the standard for sixth-grade pupils of midyear. The class average was 3 I .4 , which was nearer to the fifth-grade norm than to the sixthgrade norm. This method answers roughly the second question as to the grade status of the pupil or class.

The second method is the more exact one. It is known as the T-score method and is explained in the section on "T-score in spelling," below, and "Grade status in spelling," page 6. The T-score method enables the teacher to answer the second question also with greater precision.

The T-score method is also used to answer the third question. A measure of a child's spelling achievement in comparison with that of other children of his own age is known as his "Brightness in Spelling" and is represented by the symbol "Bs." The section on "Brightness in spelling," page 5, explains how to find the Bs of a pupil or class.

A convenient method for answering the fourth question is to find what is known as the spelling age of the pupil. Thus, a pupil whose spelling achievement is just equal to that of a ro-year-old child is said to have a spelling age of Io years (or 120 months) no matter what his actual age may be. The section "Spelling age," page 4 , explains how to find the spelling age of a pupil.

## Instructions to Pupils

Have pupils clear desks. Provide them with sharpened pencils and uniform paper. Have a few extra pencils available. Have each child write at the top of his page his name, age in years at last birthday, date of birth, school, teacher's name, date, grade, and whether in the first half or second half of the grade.

Have pupils number the lines on their papers from I to 50.
Read to pupils: "We will now have a spelling lesson. There will be 50 words. I will pronounce each word, use it in a sentence, and pronounce it a second time. If you do not understand any word, leave the space blank and wait for the next word. Try to spell each word. Be sure to dot the i's and cross the t's." In rooms having two or more grades the examiner will add, "Every one will spell the same words."

Pronounce each word as in the following illustration: "Your - Your books are in the desk - Your." Each examiner will pronounce words at such rate as seems best suited to the class.

Collect papers as soon as children have written the last word.
If, at the close of the test, younger pupils should seem bewildered and confused, the examiner should smilingly encourage them by explaining that he didn't expect them to spell all the words. He should endeavor to close the test period leaving the children uniformly happy.

## Directions for Scoring

Mark each word either right or wrong. The standard of correctness is absolute accuracy, in order to avoid subjective scoring.

Where two or more spellings are allowed for a word by any standard dictionary, count either spelling as correct.

Count as wrong if the letter " i " does not have a dot or if the letter " t " is not crossed, unless it be a special " final t " construction.

Do not give credit for spelling words not pronounced; e.g., "tops" for the word " top," or " men " for the word " man."

If a child attempts to rewrite a word, consider the obvious intention of the child as the spelling to be scored.

Pay no attention to capitalization.
If in actual doubt as to the child's spelling, count as wrong.
Count the number of words spelled correctly by each pupil.

## Directions for Recording

In order to record the scores made by pupils, it is suggested that the teacher or examiner draw up a class record similar to the sample shown on the last page. On this class record will be written the name of the school, grade, etc., the list number and date of the test, the name of each pupil taking the test, his age in years and months, the number of words correct, and, if desired, his Ts, Gs, and Cs, or spelling age. The meanings of these symbols are given below.

If a large sheet of paper is used, the last four columns may be repeated so as to provide for recording two or three scores of each pupil. This will save writing the names and ages again and bring the scores closer together for reference. It will be understood that the age of the child is his age on the date of the first test.

When the spelling papers are scored, the classroom teacher will want to ask four questions:
( 1 ) How does the class or individual pupil compare in spelling achievement with the norms obtained from testing thousands of pupils of the same grade?
(2) What is the grade status of the individual pupil or of the class? That is, for what grade is the spelling ability of the pupil or class normal?
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table 1, Grade Norms in Terms or Average Number of Words Spelled Correctiy

| Grade. | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average number of words spelled correctly | 11 | 18 | 24 | 30 | 35 | 39 | 42 | 44 |

These norms represent average achievement for 57,337 pupils in rural and village schools. There were approximately 8000 pupils tested in each grade except the ninth. The ninth-grade score represents the achievement of nearly 1000 pupils.

T score in spelling. The score of a pupil in any test may be expressed as a T score ${ }^{1}$ in spelling ( Ts ) by means of Table 2.
${ }^{1}$ A term introduced by William A. McCall in "Uniform Method of Scale Construction," Trachers College Record, January, 1921.

Page 4
A Ts of 50 denotes the median spelling ability of unselected pupils whose age last birthday was 12 years. The units of Ts above and below 50 indicate theoretically equal increments of spelling ability, according to the assumption that the spelling ability of 12 -year pupils is distributed according to the law of normal distribution. Each 10 units of T-score represent I SD (standard deviation) of distribution of 12 -year-olds. Any pupil or class, for example, whose Ts is 70 has an ability that is 20 T (or 2 SD ) above the mean ability of 12 -year-olds.

Find the pupil's total number of words correct in the first column of Table 2 and read the corresponding Ts. This is the pupil's T score in spelling. Thus, the first pupil in Table 6 spelled 16 words correctly, which, according to Table 2, corresponds to a Ts of 36 . Table 2 and all others apply to any list.

TABLE 2

| Words Correct | Ts | Spelling Age | Gs | Words Correct | Ts | Spelling Age | Gs | Words <br> Correct | Ts | Spelling Age | Gs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | 17 | 84 | 1.0 | 18 | 37 | 116 | 3.5 | 36 | 52 | 156 | 6.8 |
| 1 | 20 | 85 | 1.3 | 19 | 38 | 118 | 3.7 | 37 | 53 | 159 | 7.0 |
| 2 | 22 | 87 | 1.5 | 20 | 39 | 120 | 3.9 | 38 | 54 | 162 | 7.3 |
| 3 | 24 | 89 | 1.7 | 21 | 40 | 122 | 4.T | 39 | 55 | 165 | 7.5 |
| 4 | 25 | 90 | 1.8 | 22 | 40 | 124 | 4.2 | 40 | 56 | 168 | 7.7 |
| 5 | 26 | 92 | 1.9 | 23 | 41 | 126 | 4.3 | 41 | 57 | 171 | 8.0 |
| 6 | 27 | 94 | 2.0 | 24 | 42 | 128 | 4.5 | 42 | 58 | 174 | 8.4 |
| 7 | 28 | 96 | 2.1 | 25 | 43 | 130 | 4.7 | 43 | 60 | 177 | 8.8 |
| 8 | 29 | 98 | 2.2 | 26 | 44 | 132 | 4.9 | 44 | 61 | 180 | 9.3 |
| 9 | 30 | 99 | 2.3 | 27 | 44 | 135 | 5.1 | 45 | 63 | 184 | 9.8 |
| 10 | 3 L | 101 | 2.4 | 28 | 45 | 137 | 5.2 | 46 | 65 | 188 | 10.5 |
| 11 | 32 | 103 | 2.5 | 29 | 46 | 139 | 5.4 | 47 | 67 | 192 | 12.2 |
| 12 | 32 | 104 | 2.6 | 30 | 47 | 142 | 5.6 | 48 | 69 | 1906 | 11.7 |
| 13 | 33 | 106 | 2.7 | 31 | 48 | 144 | 5.8 | 49 | 72 | 200 | 12.5 |
| 14 | 34 | 108 | 2.9 | 32 | 48 | 146 | 6.0 | 50 | 77 | 204 | 13.0 |
| 15 | 35 | 110 | 3.1 | 33 | 49 | 149 | 6.2 |  |  |  |  |
| 16 | 36 | 112 | 3.3 | 34 | 50 | 152 | 6.4 |  |  |  |  |
| 17 | 36 | 114 | 3.4 | 35 | 51 | 154 | 6.6 |  |  |  |  |

Table 3 gives a further interpretation of T scores. It shows the percentage of 12 -year-olds (pupils between 12 and 13 ) whose $T$ scores are exceeded by a T score of $25,30,35$, etc. Thus, a pupil making a T score of 65 exceeds 93 per cent of 12 -year-olds in spelling ability.

TABLE 3

| T score. Percentage of r 2 -year-olds exceeding | 25 | 30 | 3 | 40 | 45 35 | 50 50 | 55 69 | 60 84 | 65 93 | $\begin{aligned} & 70 \\ & 98 \end{aligned}$ | 75 99 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Spelling age. ${ }^{1}$ A score of 26 words correct is the normal score for the age of just in years ( r 32 months). Any pupil, therefore, making a score of 26 is said to have a spelling age of 132 months. In the third column of Table 2 is given the spelling age corresponding to each score.
${ }^{1}$ A spelling age corresponds to a mental age obtained by a test of mental ability. A pupil should have a spelling age equal to his mental age, provided his spelling ability is on a par with his mental ability.

## Page 5

Brightness in spelling. A T score of 50 is the norm for the age of just 12 years, 6 months (average age of pupils whose age last birthday was 12 years). A pupil 12 years, 6 months old who makes a Ts of more than 50 is brighter than normal in spelling. Similarly, a pupil 12 years, 6 months old who makes a Ts less than 50 is duller than normal in spelling. The Ts of a pupil just 12 years, 6 months old is, therefore, a measure of his brightness in spelling. Indeed, we may express the brightness of any pupil in spelling in terms of the Ts he would have made if he were just 12 years, 6 months old.

TABLE 4

| Age <br> Yrs. Mos. | $\begin{gathered} \text { Normal } \\ \text { Ts } \end{gathered}$ | Correc- TION (Add to Ts | $\begin{gathered} \text { Age } \\ \text { Yrs. Mos. } \end{gathered}$ | Normal Ts | Correc-- TION (Add to $\mathrm{T}_{\mathrm{s}}$ ) | $\underset{\text { Yrs. Mos }}{\text { Age }}$ | $\begin{gathered} \text { Normal } \\ \mathrm{Ts} \end{gathered}$ | Correc- <br> TION <br> (Add to Ts) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7-6 | 24 | 26 | 11-0 | 44 | 6 | ${ }^{14-6}$ | 58 | -8 |
| 7-8 | 25 | 25 | 11-2 | 45 | 5 | $14^{-8}$ | 58 | -8 |
| 7-10 | 27 | 23 | 11-4 | 46 | 4 | 14-10 | 59 | -9 |
| 8-0 | 28 | 22 | 11-6 | 46 | 4 | $15-0$ | 60 | -10 |
| 8-2 | 29 | 21 | 11-8 | 47 | 3 | ${ }^{15} 5^{-2}$ | 61 | -11 |
| 8-4 | 31 | 19 | 11-10 | 47 | 3 | ${ }^{15} 5$ | 62 | $-12$ |
| 8-6 | 32 | 18 | 12-0 | 48 | 2 | ${ }^{15} 5$ | 63 | -13 |
| 8-8 | 33 | 17 | 12-2 | 49 | 1 | $15-8$ | 64 | -14 |
| 8-10 | 34 | 16 | 12-4 | 49 | 1 | 15-10 | 65 | $-15$ |
| 9-0 | 34 | 16 | 12-6 | 50 | - | 16-0 | 67 | $-17$ |
| 9-2 | 35 | 15 | $12-8$ | 51 | -I | 16-2 | 69 | -19 |
| 9-4 | 36 | 14 | 12-10 | 51 | - 1 | 16-4 | 70 | -20 |
| 9-6 | 37 | 13 | 13 -0 | 52 | -2 | 16-6 | 72 | -22 |
| 9-8 | 38 | 12 | 13-2 | 52 | -2 | 16-8 | 74 | -24 |
| $9-10$ | 39 | II | $13-4$ | 53 | -3 | 16-10 | 75 | -25 |
| $10-9$ | 39 | 11 | ${ }^{13}$-6 | 54 | -4 | ${ }^{17}$-0 | 77 | -27 |
| 10-2 | 40 | 10 | $13-8$ | 54 | -4 | 17-2 | 78 | -28 |
| $10-4$ | 41 | 9 | 13-10 | 55 | -5 | 17-4 | 80 | -30 |
| 10-6 | 42 | 8 | $14^{-0}$ | 56 | -6 | ${ }_{17} 7-6$ | 8 r | $-31$ |
| 10-8 | 43 | 7 | $14-2$ | 57 | -7 |  |  |  |
| 10-10 | 43 | 7 | 14-4 | 57 | -7 |  |  |  |

Thus, as shown in Table 4, the T score that is just normal for a pupil 12 years, - months old is 48 . Now it is assumed that if the normal child's Ts increases from 48 to 50 between 12 years, 0 months and 12 years, 6 months, the Ts of any other pupil would increase two points from 12 years, o months to 12 years, 6 months. Therefore, if a pupil of 12 years, o months makes a Ts of 51 , it is assumed that at 12 years, 6 months he will make a Ts of $51+2=53$. The twelve-year pupil is said to have a Brightness in Spelling ${ }^{1}$ (Bs) of 53 . He is known to be as bright in spelling, therefore, as a 12 year, 6 months pupil making a Ts of 53 .

To find the Bs of a pupil, find his age in Table 4 and note the correction (amount necessary to add to the Ts that is normal for that age to get ${ }_{50}$ ). If the correction is plus, add it to the Ts of the pupil; if it is minus, subtract it.
${ }^{1}$ Both the symbol and the idea are borrowed from the writing of Otis.

Page 6
Thus, the first pupil in Table 6 is I3 years, 2 months old and made a Ts of 36 . The correction for the age of 13 years, 2 months as shown in Table 4 is $\mathbf{- 2}$. Therefore, this pupil's Bs is $36-2=34$.

The normal Bs for all ages is 50 . Any pupil making a Bs above 50 is brighter than normal in spelling. A pupil making a Bs of 40 is ro T (or I SD) below the mean of his own age group in spelling ability. Table 3 shows also the significance of a Bs. Thus a Bs of 60 indicates that the pupil exceeds in spelling ability 84 per cent of pupils, not 12 years old but of his own age. A Bs of 75 means that a pupil is 25 T (or 2.5 SD ) above the mean spelling ability of pupils of his own age. According to Table 3 , such an individual is shown to be extremely bright in spelling, since he exceeds 99 per cent of pupils of his own age group in spelling ability. In like manner the Bs for a class shows the brightness in spelling of that class as a whole.

Both Ts and Bs are needed. Ts gives a measure of total spelling ability and incidentally shows how much each pupil or class Ts is above or below the mean Ts of 12 -year-olds. A Ts scale is used primarily for the purpose of measuring growth in ability from month to month and year to year.

Of course a 9 -year-old pupil or class might have a Ts much below 50 and still be doing exceptionally satisfactory work. There is needed some score which makes allowance for the fact that a pupil or class is younger or older than 12 years, 6 months. The Bs correction automatically makes just this allowance, and the Bs shows pupil or class ability in comparison with pupils or classes of the same age. A young pupil may have a small Ts and a large Bs, and an old pupil may have a large Ts and a small Bs. A pupil or class Ts grows larger from month to month and year to year, whereas the Bs changes little or not at all.

Grade status in spelling (Gs). The number of words any pupil spells correctly or the Ts of any pupil may be expressed in terms of Grade Status in Spelling (Gs). Thus, in Table 2 the Gs corresponding to a score of 18 is given as 3.5 . This means that a score of 18 is normal for the third grade at the end of the fifth month of instruction. A Gs of 3.7 means spelling ability normal for the third grade after seven months of instruction, etc.

Classification in spelling (Cs). In order to compare the grade status of one pupilor class taking the test at one time of year, with that of another pupil or class taking the test at another time of year, it is necessary to refer their score to some definite time of year. The Gs that a pupil has or will have at the middle of the year (fifth month) is called his Classification in Spelling (Cs). Thus, if September is the first month of the school year, the fifth month will be January, and it is assumed that if a pupil (see first pupil in Table 6) has a Gs of 3.3 in November, he will have a Gs of 3.5 in January (middle of the year). He is said, therefore, to have a Cs of 3.5. Similarly, if a pupil has a Gs of 6.4 in November (see second pupil in Table 6) his Cs (Gs in January) is 6.6. Assuming the pupil's Gs increases o.1 each month, as would be expected, his Cs remains 6.6 throughout the year. The normal Cs for Grade 6 is 6.5 . This pupil, therefore, is always just o.I in Cs, or one month, ahead of the normal ability of the sixth grade. The normal Cs for all sixth-grade pupils is 6.5 as long as they remain in the sixth grade; the norm for all seventh-grade pupils is 7.5 throughout the year, etc.

Table 5 shows the correction to be applied to the Gs of a pupil to find his Cs.

Thus, if a pupil is tested in the first month, add .4 to his Gs to find his Cs; if tested in the second month, add .3; if tested in the sixth month, subtract o.I; etc.
table 5

| Month | 1 |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Cs Correction | +.4 | +.3 | +.2 | +.1 | 5 | 0 | 6 | 0 |

Class standing. To find the Ts, Bs, Gs, and Cs of the class or grade as a whole, find the mean (average) age and mean Ts of the class. From these values find the class Bs, Gs, and Cs in the same manner as would be done in the case of an individual having that age and Ts , as shown in Table 6 . Since the pupils whose scores are given in Table 6 are sixth-grade pupils, their grade norm in Cs is 6.5 . The first pupil's Cs is only 3.5 . This means that his spelling ability is just normal for the third grade. He is, therefore, three full grades below the norm for the sixth grade. The class as a whole is 0.4 Cs or 4 months below normal for sixth grades in general. In this connection it must be remembered that classes differ in age. The mean age of this class is less than the mean age of the ordinary sixth grade, and the class Bs shows that it is practically a normal class for its mean age.
table 6. Hypothetical Scores of Low-Sixth-Grade Pupils Tested in November,
Showing the Corresponding Values of Ts, Bs, Gs, and Cs

| Name | Age | Words Correct | Ts | Bs | Gs | Cs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A . . . . . . . . |  |  |  |  |  |  |
| $\stackrel{\text { B }}{\text { C }}$. . . . . | $12 \quad 6$ | 34 | 36 50 |  | 3.3 6.4 |  |
| $\mathrm{C} \cdot \ldots \cdot . . . . .$. | $10 \quad 7$ | 34 37 | 53 | 50 60 | 6.4 7.0 | 6.6 7.2 |
| $\mathrm{D} \cdot \cdots \cdots \cdots \cdots$ | 114 | 34 | 50 | 54 | 7.0 6.4 | 7.2 6.6 |
| Class . . . . . | 13 12 | 36 | 52 | 48 | 6.8 | 7.0 |
| - . . . . . |  |  | 48.2 | 49.2 | 5.9 | 6.1 |

Accuracy of scale scores. All the words in each list of this spelling scale were selected from Ayres' Spelling Scale and Buckingham's Extension of Ayres' Spelling Scale, in such a way as to make all lists equally difficult, and the words were required in addition to appear among the 5000 most commonly used words as reported in Thorndike's Word Book.

To test this equivalence, List y was applied to 33,299 pupils, List 2 to 10,542 pupils, and List 3 to 13,490 pupils. These pupils were a random sampling from Grades 2 through 9 in the rural and village schools of New York State. Since the three $T$ scales (not necessarily the individual words) proved to be almost exactly identical, we have assumed that all lists are similarly equivalent, since all were constituted in the same way. Also we have combined the data from the three lists so that the final T, B, and C scales are based upon $57,33 \mathrm{I}$ pupils.

## Acknowledgments

For aid in the preparation of these scales we gratefully acknowledge our obligation to Leonard P. Ayres, B. R. Buckingham, and Edward L. Thorndike, whose material we have so freely drawn upon. For applying the tests and scoring the papers we take pleasure in expressing our appreciation to the coöperating teachers and superintendents of the New York State rural and village schools.

## LIST 1

1. run
2. top
3. red
4. book
5. sea
6. play
. lay
. led
. add
7. alike
II. mine
. with
8. easy
9. shut
10. done
11. body
12. anyway
13. omit
14. fifth
15. reason
16. perfect
17. friend
18. getting
19. nearly
20. desire
21. arrange
22. written
23. search
24. popular
25. interest

3I. pleasant
. therefore
33. folks
. celebration
. minute
36. divide
37. necessary
38. height
39. reference
40. career

4I. character
2. separate
committee
annual
principle
immense
judgment
. acquaintance
. discipline
o. lieutenant

The boy can run...........................run
The $t o p$ will spin...........................top
My apple is red........................... .red
I lost my book . . . . . . . . . . . . . . . . . . . . . . book
The sea is rough............................ea
I will play with you. . .......................play
Lay the book down......................... lay
He led the horse to the barn................ed
Add these figures............................add
These books are alike . . . . . . . . . . . . . . . . . . alike
That bicycle is mine........................mine
Mary will go with you . . . . . . . . . . . . . . . . . . with
Our lessons are not easy ....................easy
Please shut the door. ......................shut
Has he done the work? ................... done
The chest is a part of the body . ........... body
I shall go anyway........................anyway
Please omit the next verse ..................omit
This is my fifth trip.........................fifth
Give a reason for being late................reason
This is a perfect day........................perfect
She is my friend............................friend
I am getting tired........................getting
Nearly all of the candy is gone ...........nearly
Nearly all of the candy is gone ..............nearly
I have no desire to go........................arrange
Please arrange a meeting for me .........ar
I have written four letters . . . . . . . . . . . . . . . . written
Search for your book...................... search
He is a popular boy.......................popular
Show some interest in your work.....................erest
She is very pleasant......................
Therefore I cannot go . . . . . . . . . . . . . . . . . . . therefore
My folks have gone away . . . . . . . . . . . . . .folks
There will be a celebration today..........celebration
Wait a minute. . ...........................minute
Divide this number by ten ................ divide
It is necessary for you to study................ecessary
What is your height? ......................ight
He made reference to the lesson.............reference
The future holds a bright career for you. . . . career
He has a good character . . . . . . . . ..........character
Separate these papers..................... separate
The committee is small. . . . . . . . . . . . . . . . . committee
This is the annual meeting. ................annual
The theory is wrong in principle...........principle
The man is carrying an immense load. ..... immense
The teacher's judgment is good. .............judgment
He is an acquaintance of mine.............acquaintance
The army discipline was strict.............discipline
He is a lieutenant in the army............. lieutenant
I. can
2. ten
3. old
4. six
5. ice
6. child
7. his
8. that
far
10. form
ir. glad
12. same
13. night
14. cent
15. within
16. point
17. money
18. picture
19. change 20. number
21. struck
. personal
address
several
known
their perhaps popular against treasure investigate certain really conference business citizen elaborate association evidence secretary character cordially especially disappoint decision parliament recommend endeavor privilege villain

I can go with you. . . . . . . . . . . .................. can
I have ten cents. . . . . . . . . . . . . . . . . . . . . . . . .ten
How old are you? . . . . . . . . . . . . . . . . . . . . . . . . .
I am six years old.......................... .six
He slipped on the ice . . . . . . . . . . . . . . . . . . . .ice
The child is ill. . . . . . . . . . . . . . . . . . . . . . . . . . child
His arm was broken. ............................

How far are you going?.....................far
Form a circle. . ................................ form
I am glad to see you.............................glad
Her name is the same as mine .............same

I haven't a cent . . . . . . . . . . . . . . . . . . . . . . . . . . cent
Keep within the law ..................... within
Point toward the north . . ................ . point
How much money have you? . . . . . . . . . . . money
Whose picture is this? ......................picture
Do not change your position ...............change
Number your papers. ..........................number
He was struck by lightning. . . . . . . . . . . . . . .struck
It is a personal matter. ...................... . personal
Do you know her address?....................address
I have several hats........................... . . several
I have known her a week...................... . . known
Their homes were flooded. . . . . . . . . . . . . . . . their
Perhaps you are right............................erhaps
Golf is a popular game........................popular
He fell against the wall.......................against
The hidden treasure was found . ............. treasure
I will investigate for you...................... investigate
I am certain of the date. ....................certain
Are you really going? ....................... . really
The teachers had a conference.............. conference
His business is important................... business
Mr. Smith is a good citizen . . . . . . . . . . . . . . . .citizen
The decorations were elaborate. ........... elaborate
They formed a large association . .............association
We have plenty of evidence. . . . . . . . . . . . . . . evidence
My secretary is accurate.................. secretary
He has a good character. . . . . . . . . . . . . . . . . .character
He welcomed us cordially....................cordially
I am especially happy today. .............. .especially
I will not disappoint you. .................. . disappoint
The boy made an excellent decision....... . decision
We attended Parliament . . . . . . . . . . . . . . . . . parliament
Can you recommend that book?............. recommend
Endeavor to do your best...................endeavor
It is your privilege to go......................privilege
The burglar was a villain......................villain
I. is
2. now

He is here . is
. little
4. did
5. hat
7. was
8. ran
9. told
10. sold
iI. hope
12. room
13. light
14. stamp
15. push
16. third
17. few
18. wire
19. $\operatorname{tax}$
20. there
21. raise
22. request
23. truly
24. cities
25. sail
26. whose
27. attempt
28. search 29. consider 30. complete 31. piece 32. system
33. national
34. refer
35. absence
36. majority 37. unfortunate
38. session
39. discussion
40. experience
41. proceed
42. practical 43. preliminary
44. receipt
45. possess
46. restaurant
47. parallel
48. physician
49. kerosene
50. pneumonia

Come now.
Come now. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . now
Did you go?................................. . . . . . 1 .

Little children play. . . . . . . . . . . . . . . . . . . . . . . .ittle
Did you go?...

She was here yesterday. . . . . . . . . . . . . . . . . . . was
Bob ran ......................................... . . . .
She told a story . . . . . . . . . . . . . . . . . . . . . . . told
He sold his top........ . . . . . . . . . . . . . . . . . . . sold
I hope to go away . . . . . . . . . . . . . . . . . . . . . . .hope
This is your room . . . . . . . . . . . . . . . . . . . . . . . .room
The light hurts my eyes. . . . . . . . . . . . . . . . . . . . . l .
Stamp the letter........................... . . stamp
Push the door open............................ . . push
The third problem is easy . . . . . . . . . . . . . . . third
I have read few books.........................ew
The basket is made of wire . . . . . . . . . . . . . . . wire
People tax themselves...................... . . . tax
There goes the postman. .................... . there
Raise the window . . . . . . . . . . . . . . . . . . . . . . . raise
Your request will be granted.... . . . . . . . . . request
The money is truly yours. . . . . . . . . . . . . . . . . . truly
Many people live in cities . . . . . . . . . . . . . . . . . cities
Boats sail on water............................ sail
Whose apple is this?. . . . . . . . . . . . . . . . . . . . . whose
Attempt to spell correctly................... . attempt
Search carefully for your book. . . . . . . . . . . search
I will consider your request. . . . . . . . . . . . . . . .consider
John's work is complete. ...................... complete
Would you like a piece of cake?............ piece
The city has a water system . . . . . . . . . . . . . . system
Our national flag is beautiful..................national
To whom do you refer? . . . . . . . . . . . . . . . . . . . refer
Can you explain your absence?..............absence
We will do what the majority wish......... . majority
It was an unfortunate accident. . . . . . . . . . . . unfortunate
The next session will be important......... .session
We had an interesting discussion . .......... discussion
What experience have you had?............. experience
Proceed with the explanation.................proceed
This is a practical example ................. . practical
This is a preliminary report................. . . preliminary
Keep the receipt. .
What talent do you possess?. ................ possess
Who owns this restaurant?................... . restaurant
Parallel lines never meet. . . . . . . . . . . . . . . . . parallel
He is a good physician . . . . . . . . . . . . . . . . . . . physician
Kerosene is an oil that burns..................... . . .
Heavy colds cause pneumonia.................pneumonia
I. she
2. $\operatorname{man}$
3. good
4. this
5. over
6. say
7. belong
8. stand
. sick
10. foot
II. sister
12. inside
13. mail
14. two
15. began
16. watch
17. happen
18. sight
19. bridge
20. front
. elect
2. refuse pleasure vacation
25. repair
26. surprise
27. select
28. weigh
29. publication
30. adopt

3I. century
32. assist
33. summon
34. invitation
35. automobile
36. colonies
37. foreign
38. arrangement
39. campaign
40. imagine 41. extreme 42. organization 43. immediate 44. employees
45. accommodate
46. superintendent
47. allege
48. stationery
49. vaguely
50. sovereign

| Is she at home? |  |
| :---: | :---: |
| That man is good | man |
| Be a good boy.............. | good |
| This book is mine | this |
| The ball is over the fence.... | .over |
| You must say your prayers. | say |
| Does this pen belong to you?. | belong |
| Please stand up | stand |
| The doctor is sick | sick |
| I hurt my foot | foot |
| My sister is here | sister |
| Come inside the tent | inside |
| Please mail my letter. | mail |
| I have two apples. | two |
| I began work last week | began |
| Watch that man. | watch |
| It does not happen ofte | happen |
| I lost sight of the bird | sight |
| The bridge is large | bridge |
| The front of the car is smashed | front |
| I hope they elect my choice. . | elect |
| I refuse to go. | refuse |
| It was a great pleasure | pleasure |
| I had two months' vacation. | vacation |
| I must repair my wheel | repair |
| It will be a surprise. | surprise |
| Please select your gifts | select |
| How much do you weigh? | weigh |
| It was a good publication. | publication |
| He will adopt the child. | adopt |
| That happened a century ago | century |
| Will you assist me? | assist |
| Please summon help. | summon |
| I accept the invitation | invitation |
| I have a new automobile | automobile |
| The colonies will govern them | colonies |
| She is of foreign birth | foreign |
| I like the arrangement. | .arrangement |
| The campaign started today. | . campaign |
| Can you imagine such a thing? | .imagine |
| His tastes are extreme | .extreme |
| It is a large organization | .organization |
| I had an immediate reply | .immediate |
| The employees had a raise in p | .employees |
| I will gladly accommodate you. | accommodate |
| He is the superintendent. | .superintendent |
| I allege he is not guilty | .allege |
| He gave me a box of stationer | .stationery |
| His impression was vaguely rem | .vaguely |
| The sovereign prince is ill. | .sovereign |

I. is
2. now
you
all
5. must
6. come
door
yard
got
o. blow
II. cast
blue
3. eye
14. they
15. able
16. dash
7. begun
8. stood
19. offer
20. rule

1. aboard
2. district
3. navy
4. beautiful
5. trouble
6. period
7. connection
8. wear
9. machine
10. secure
11. total
12. difference
13. official
14. accept
15. various
16. assure
17. expense
18. testimony
19. coarse
20. independent
21. athletic
22. bicycle 43. convenient
23. exquisite
24. orchestra
25. thoroughly
26. cemetery
27. tortoise
28. appropriate
29. proficiency

The apple is red. . . . . . . . . . . . . . . . . . . . . . . . is
Now is the time for play.................. now
You must be quiet. . . . . ..................... you
All the boys are here. . . . . . . . . . . . . . . . . . . . all
You must recite today. . . . . . . . . . . . . . . . . . .must
Come with me................................. . . come
Close the door . . . . . . . . . . . . . . . . . . . . . . . . . door
This stick is a yard long.................. yard
I got a new hat yesterday . . . . . . . . . . . . . . . got
Blow out the light.......................... . blow
Cast aside your worries.....................cast
Her eyes are blue............................. . blue
My eye hurts. ..............................eye
They will be waiting. .....................they
He is able to be out......................... . able
He made a dash for the door.............. dash
Have you begun your work?.............. begun
He stood erect . . . . . . . . . . . . . . . . . . . . . . . . . stood
I made them a good offer....................offer
What rule did you use?..................... .rule
He is now aboard the ship................. aboard
It happened in your district . . . . . . . . . . . . . district
I want to join the navy . . . . . . . . . . . . . . . . . . navy
What a beautiful tree!. ..................... . beautiful
Keep out of trouble....................... . trouble
Every period is filled..................... . . period
There is no connection here ...............connection
Wear your new uniforms....................wear
The machine is broken. .................... . . . machine
The fastenings are secure . . . . . . . . . . . . . . . secure
What is the total score?................... . . . total
There is little difference. . . . . . . . . . . . . . . . . difference
He is the best official we have....................fficial
I will accept your offer. . . . . . . . . . . . . . . . . . accept
I have various kinds of candy . . . . . . . . . . . . .various
I will assure him of his safety. . . . . . . . . . . . assure
You have been an expense to me. . . . . . . . . . expense
His testimony could not be shaken........ testimony
This material is coarse . . . . . . . . . . . . . . . . . . . coarse
He is independent. . . . . . . . . . . . . . . . . . . . . . . .independent athletic
I have a new bicycle ....................... bicycle
It will be convenient for me................ . . convenient
The trimmings are exquisite................exquisite
The orchestra played several times.......... orchestra
I am thoroughly displeased. ................ thoroughly
Let's go to the cemetery . . . . . . . . . . . . . . . . . cemetery
The tortoise lives on land . . . . . . . . . . . . . . . . . tortoise
Congress will appropriate large sums ........ appropriate
His proficiency was remarkable. . . . . . . . . . . . proficiency

1. it
2. the
3. will
4. your
5. make
6. hand
7. yes
8. bring
9. north
10. block
11. card
12. post
13. glass
14. would
15. gone
16. fell
17. collect
18. fix
19. suffer
20. carry
21. jail
22. restrain
23. fourth
24. flight
25. entrance
26. addition
27. firm
28. entertain
29. toward
30. honor
31. mention
32. examination
33. victim
34. impossible
35. decide
36. relief
37. responsible
38. principal
39. columns
40. individual

4I. sincerely
42. calendar
43. artificial
44. familiar
45. perceived
46. surgeon
47. enthusiasm
48. extraordinary
49. immediately
50. lieutenant
It is time to go ..... it
The snow is falling ..... the
Will you go with me? ..... will
$Y$ our paper is soiled ..... your
Make up your mind now ..... make
Give me your hand ..... hand
Yes, I will go ..... yes
Bring me another book ..... bring
I expect to go up north ..... north
We live on the same block. ..... block
Did you leave your card? ..... card
The post has fallen ..... post
Do not break that glass. ..... glass
Would you like some cake? ..... would
They have been gone an hour. ..... gone
He fell and hurt himself. ..... fell
Please collecl the papers. ..... collect
The men will fix the chair .....  fix
She did not suffer any ..... suffer
Carry this package for me ..... carry
He is in jail. ..... jail
He could not restrain his anger. . ..... restrainThe birds' flight was rapid........................ .light
The entrance is closed.flight
The addition is correct ..... additionThe firm is bankrupt.firm
I will entertain your mother.
entertain
We went toward the north ..... toward
Have you no honor? honorThe examination was difficult. .............examination
He is a victim of circumstances............. . victimIt is impossible to hear..................... impossible
Decide for yourself..
My relief was sincere. ..... decide
Who is responsible for this? ..... responsible
principalHow many columns have you?Who is this individual? ...................... . . individual
He spoke sincerely..individualThose flowers are artificial.......................artificialThose sounds are familiar. .................familiarI perceived the answer....................... . . perceived
He is a great surgeon.
This enthusiasm is wonderful ...............enthusiasmI left immediately after you.....................immediately

1. and

You and I will go. and
2. last I went the last time. . . . . . . . . . . . . . . . . . . . . last
3. we

We are tired we
4. out

Come out of the dark. out
5. make
6. ring
7. low
8. tell
9. white
10. spring
II. south
12. town
13. party
14. any
15. suit
16. fight
17. file
18. born
19. built
20. chain
21. shed
22. royal
23. population
24. travel
25. importance
26. employ
27. region
28. salary
29. success
30. promise

3I. arrive
32. particular
33. estimate
34. concern
35. entitle
36. occupy
37. beginning
38. apparent
39. desirable
40. innocent
41. appreciate
42. disease
43. associates
44. finances
45. recommended
46. precipice
47. physician
48. mortgage
49. dispensary
50. guarantee

Make him come in........................make
Ring the bell. ....................................
The ceilings are low....................... low
Tell the truth.............................tell
Her teeth are very white. ....................white
The cat will spring at you................spring
The birds have gone south ................. south
What town is this?......................town
We had a fine party.......................party
Have you any money?.....................any
Is that suit new?.................................
Wild animals $f$ fight . ........................fight
File these letters. .............................file
You were born in 1910...................... born
He buill a canoe........................... built
Make a daisy chain......................chain
The horse is in the shed ..................shed
The royal palace was destroyed. ............royal
What is the population of Boston? .........population
I shall travel a great deal .................travel
The work is of great imporlance. ............importance
We employ two girls.....................employ
What region are you in? ..................egion
What is your salary?......................salary
Her success is wonderful...................success
Promise to keep quiet.......................promise
When does the train arrive? .................arrive
I am not particular.......................particular
Can you estimate the amount? ............estimate
He is a member of our concern ..............concern
It will entitle you to a prize................entitle
Do not occupy all the space................occupy
This is the beginning of a new chapter. . . . .beginning

Are you innocent of this deed?............innocent
I appreciate your kindness..................appreciate
This disease is incurable......................disease
They are business associates...............associates
The finances were well handled.............finances
You are well recommended ..................recommended
She fell over the precipice. ................precipice
He is my physician .......................physician
The mortgage is due tomorrow . . . . ..........mortgage
There is a new dispensary in our town..... dispensary
I will guarantee his work.
I. go1. go
2. up
3. my
4. time
5. street
6. live7. soft
8. five
9. spent10. river
11. deep
12. stay
13. upon14. could 15. track 16. buy 17. provide 18. goes 19. center 20. death 21. retire 22. objection 23. proper 24. rapid 25. carried 26. property 27. convict 28. visitor 29. drown 30. wreck 31. supply 32. affair 33. accident 34. associate 35. political 36. probably 37. application 38. ascending 39. extremely 40. leisure 41. emergency 42. foreigners 43. development 44. intelligent 45. seized 46. orchestra 47. syllables 48. mortgage 49. persistence 50. incessant
You may go home ..... go
Put $u p$ the window ..... up
My head aches ..... my
What time is it? ..... time
What street is this? ..... street
Where do you live? ..... live
The ice cream is soft ..... soft
I have five cents. ..... five
I spent all my money ..... spent
This river is small ..... river
The river is deep ..... deep
Stay in the house ..... stay
The Indians were upon them ..... upon
Could you mend the toy? ..... could
The track is six miles long ..... track
Please buy me some candy. ..... buy
I will provide for the future. ..... provide
He goes away today ..... goes
Point to the center of the circle ..... center
His death was very sad ..... death
It is time to retire. ..... retire
Have you any objection? ..... objection
Is this the proper heading? ..... proper
His work was rapid. ..... rapid
I carried the banner. ..... carried
The property is mine. ..... property
The convict has escaped. ..... convict
We have a visior. ..... visitor
Do not drown the kittens. ..... drown
There was a sad wreck today. ..... wreck
The supply is exhausted ..... supply
It was a gala affair ..... affair
It was an accident. ..... accident
I will not associate with them. ..... associate
There is a political meeting tonight. ..... political
Probably we shall be late. ..... probably
You must file your application. ..... application
I was ascending the stairs. ..... ascending
are extromely thankful to you ..... extremely
We spent our leisure time fishing. ..... leisure
I reached for the emergency brake. . emergency
mergency

oreignersThey are all foreigners . . . . . . . . . . . . . . . . . . . . oreignersShe is an intelligent child.................. . . intelligent
The man seized the falling childintelligent
seized
The orchestr play will ..... orchestraPronounce the syllables distinctly.......... syllables
The mortgage is due. mortgage
Her persistence was amazing ..... persistence
The talking was incessant.

The talking was incessant.

$\qquad$

$\qquad$

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$n$

y

$\qquad$

[^5]5 The development was perfect. ................ invelopment
She is an intelligent child...............ingent The orchestra played well.................. orchestra

Page 16
(Sample)
MORRISON-McCALL SPELLING SCALE CLASS RECORD

School
Grade
Teacher
Examiner
Name
$\qquad$


ECTIONs: This booklet contains four short tests which will give you a chance to show what you ow and how well you think. You are to mark your answers to all the questions in this booklet the column of dotted answer spaces at the right-hand side of each page. The questions are lowed by five choices, only one of which is the right answer.
.ook at the first sample question below. It is correctly marked. Study it carefully to see for jrself just how you are to mark your answers.

Choose the word which has the same meaning, or most nearly the same meaning, as the word lark type at the beginning of the line.
dog
A afraid
B song
C animal
D large
Efy
low look at the next two samples. Choose the right answer and then make a heavy black pencil $\mathbf{k}$ in the dotted answer space that has the same lefter as the answer you picked.
In the group of choices lettered $\mathbf{F}$ to $\mathbf{K}$, find the word that will make the best, the truest, and most sensible complete sentence.

The sun always rises in the $\longrightarrow$.
F east
G wind
H night
J rain
K water

Zhoose the right answer to this problem and mark the answer space.
A boy bought a pencil for 10 cents and some paper for 10 cents. How much did he spend?

$$
\text { L } 5 \text { cents M } 10 \text { cents } \quad \text { N } 15 \text { cents } \quad \text { P } 20 \text { cents } \quad \text { none of these }
$$

you wish to change an answer, erase your mark completely, and then make another mark in ight answer space.
0 may find some of the questions very easy and some of them rather hard. Try to answer , question, but do not spend too much time on those that you find very hard. Do those that :an, and then, if you still have time left, go back and do those that you skipped. You are not cted to be able to answer all the questions correctly. Always do your very best. the beginning of each short test there are directions that tell you what to do. Wait until you old to begin before turning the page.

One word has been left out of each sentence on these two pages. Choose the word that will make the best, the truest, and the most sensible complete sentence. Look at sample sentence 0 .
0. Hot weather comes in the $\longrightarrow$.
A fall
B night
C summer
D winter
E snow

The best answer is summer. The letter before summer is $\mathbf{C}$, so you should make a heavy black pencil mark in the $\mathbf{C}$ answer space for sentence $\mathbf{0}$.

Now look at sentence 00 .
00.


H Cats
J Hens
K Dogs
.
$\begin{array}{llll}\mathbf{F} & \mathbf{G} & \mathbf{H} & \mathbf{J} \\ \vdots & \vdots & \vdots & \vdots \\ \vdots & & \vdots & \end{array}$
The best answer is Dogs, so you should make a heavy black pencil mark in the K answer space for sentence 00.

Do all the sentences on these two pages in the same way. Try every sentence.

1. Boys will become $\qquad$
A infants
B little
C intelligent
D stupid
E men
$\begin{array}{cccc}\mathbf{A} & \mathbf{B} & \mathbf{C} & \mathbf{D} \\ \vdots & \vdots & \vdots & \vdots \\ \vdots & \vdots & \vdots & \vdots\end{array}$
2. We see $\longrightarrow$ only at night.

F children $\quad \mathbf{G}$ plants
H stars
J houses
K trees
$\begin{array}{llll}\mathbf{F} & \mathbf{G} & \mathbf{H} & \mathbf{J} \\ \vdots & : & \# & \#\end{array}$
3. Fred was six years old. There were six $\quad$ on his birthday cake.
L candles
M boys
N girls
P parties
Q children
$\begin{array}{llll}\mathbf{L} & \mathbf{M} & \mathbf{N} & \mathbf{P} \\ \vdots & \vdots & \vdots\end{array}$
4. Not every cloud gives
$\mathbf{R}$ weather $\mathbf{S}$ shade
T sky
$\mathbf{U}$ climate
V rain

5. Coal is $\longrightarrow$ snow is white.
A blue
B white
C red
D green
E black
6. In the spring the buds form on the branches of the
F trees
$G$ rivers
H bugs
J leaves
$K$ animals
$\begin{array}{cccc}\mathbf{F} & \mathbf{G} & \mathbf{H} & \mathbf{J} \\ \vdots & \vdots & \vdots & \vdots \\ \vdots & \vdots & \vdots & \vdots\end{array}$
7. The must bend when the wind blows upon it.
L ground
M house
N path
$\mathbf{P}$ grass
Q sky
$\begin{array}{cccc}\mathbf{L} & \mathbf{M} & \mathbf{N} & \mathbf{P} \\ \vdots & \vdots & \vdots & \vdots \\ \vdots & \vdots & \vdots & \vdots\end{array}$
8. There is an old —— "An apple a day keeps the doctor away."
R talk
S saying
$T$ reader
U book
$V \operatorname{man}$
9. Nothing out of its place is good and nothing in its place is
A there
B bad
C right
D shelved
E simple
10. The ragged may prove a good horse.
F puppy
G child
H calf
J lamb
K colt
11. I know of no way of judging the $\longrightarrow$ but by the past.
L former
M future
N priority
$\mathbf{P}$ morn
Q decline
12. Caterpillars spin $\longrightarrow$ for themselves in the fall.
$\mathbf{R}$ webs
$\mathbf{S}$ around
T moths
U cocoons
V butterflies
13. How far the little —— throws its beams!
A candle
B cake
C sky
D puppy
E night
14. When a dove begins to associate with crows, its feathers remain $\qquad$ but its heart grows black.
F black
G white
H dirty
J spread
K good
5. Good company on a journey makes the
$\begin{array}{ll} \\ \mathbf{N} \text { joy } & \text { seem shorter. } \\ \mathbf{P} \text { work }\end{array}$
Q care
L feast
M way
6. How the roses flush up in the cheeks!
$\mathbf{R}$ white
S pretty
T small
U yellow
$V$ red
7. The important thing is not so much that every child should be taught, as that every child should be given the wish to
A learn
B play
C hope
D reject
E teach
B. The person who $\qquad$ another must make good the damages.
F reforms
G improves
H instructs
J injures
K delights
3. It must be : I've done it from my youth.
L right
M wrong
N factual

P rude
Q kind

| $\mathbf{L}$ | $\mathbf{M}$ | $\mathbf{N}$ | $\mathbf{P}$ | $\mathbf{O}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\vdots$ | $\vdots$ | $\vdots$ | $\vdots$ | $\vdots$ |
| $\vdots$ | $\vdots$ | $\vdots$ | $\vdots$ | $\vdots$ |

). Cause and effect, means and ends, seed and $\longrightarrow$ cannot be severed.
$\mathbf{R}$ caution
$\mathbf{S}$ thought
T fruit
$\mathbf{U}$ science
V philosophy
. No matter how harsh advice may be, it $\longrightarrow$ no one.
A injures
B helps
C pays
D delights
E respects
. The only stable state is the one in which all men are before the law.

## F just

G right
$\mathbf{H}$ equal
J guiltless
K natural $\begin{array}{ccccc}\mathbf{F} & \mathbf{G} & \mathbf{H} & \mathbf{J} & \mathbf{K} \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ \vdots & \vdots & \vdots & \vdots & \vdots\end{array}$

It is $\quad$ to be generous with other people's property.
L desirable
M necessary
N good
$\mathbf{P}$ important
Q easy
$\begin{array}{ccccc}\mathbf{L} & \mathbf{M} & \mathbf{N} & \mathbf{P} & \mathbf{Q} \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ \vdots & \vdots & \vdots & \vdots & \vdots\end{array}$
Reason is founded on the of our senses.
$\mathbf{R}$ love $\quad \mathbf{S}$ confusions $\quad \mathbf{T}$ abuse
$\mathbf{U}$ evidences
V brutality

Think long when you may $\quad$ only once.
A abstain
B live
C die
D decide
E eat


Look at sample question 0 .
0. rose daisy violet
A red
B garden
C sweet
D grow
E lily

The words in dark type in question 0 are the names of flowers. On the next line only lily is the name of a flower. The letter before lily is $\mathbf{E}$, so you should make a heavy black pencil mark in the $\mathbf{E}$ answer space for question 0 .

Now look at question 00. Think in what way the words in dark type go together. Then find the word on the line below that belongs with them.
00. go run walk move
F think
G dream
H march
J sing
K seem

The right answer is march. You should make a heavy black pencil mark in the H answer space for question 00.

Do all the questions on these two pages in the same way. Try every question.

| 1. horse cow | lamb |  |  |  | A | B | C |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A farm | B forest | C canary | D pig | E beast | $:$ | $:$ | $:$ | $:$ |

2. Ed Dick Pete
F Benjamin
G Ted
H Harold
J Melvin
K Arthur
3. dish cup glass
$\begin{array}{cc}\text { L fork } & \text { M food } \\ & \\ \text { Can carrot } & \text { spinach } \\ \mathbf{R} \text { orange } & S \text { pea }\end{array}$
T seed
$\mathbf{U}$ vegetable
V lunch
4. Sarah Clara Joan
A Ben
B Freddy
C Louise
D Sam
E Ronald
5. violet rose poppy

F cherry
G apple
H garden
J tulip
K hemlock
$\begin{array}{lllll}\mathbf{F} & \mathbf{G} & \mathbf{H} & \mathbf{J} \\ \# & \# & \# & \#\end{array}$
7. pencil chalk crayon
$\mathbf{L}$ paper $\quad \mathbf{M}$ letter
$\mathbf{N}$ easel
P pen
Q paint
$\begin{array}{cccc}\mathbf{L} & \mathbf{M} & \mathbf{N} & \mathbf{P} \\ \vdots & \vdots & \vdots & \vdots \\ \vdots & \vdots & \vdots & \vdots\end{array}$
8. hand chin eye toe
$\mathbf{R}$ glove
S shoe
Their
$\mathbf{U}$ touch
V forehead
$\begin{array}{cccc}\mathbf{R} & \mathbf{S} & \mathbf{T} & \mathbf{U} \\ \vdots & \vdots & \vdots & \vdots \\ \vdots & \vdots & \vdots & \vdots\end{array}$
9. pot kettle broiler skillet
A sink
B stove
C tumbler
D tray
E pan
$\begin{array}{cccc}\mathbf{A} & \mathbf{B} & \mathbf{C} & \mathbf{D} \\ \vdots & \vdots & \vdots & \vdots \\ \vdots & \vdots & \vdots & \vdots\end{array}$
10. corn rye wheat barley
$F$ rice $\quad G$ carrots
H cucumber
J bean
K tomato
$\begin{array}{cccc}\mathbf{F} & \mathbf{G} & \mathbf{H} & \mathbf{J} \\ \vdots & \vdots & \vdots & \vdots \\ \vdots & \vdots & \vdots & \vdots\end{array}$

| 1. bird kite | airplane | butterfly |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{L}$ insect | $\mathbf{M}$ bat | $\mathbf{N}$ animal | $\mathbf{P}$ ship | Q train |






volunteer neophyte inexperienced beginner
A contract
B amateur
C unimportant
D common
E profession





Jupiter Juno Minerva Venus
A Diana
B Thor
C Odin
D Balder
E Satyr
$\begin{array}{ccccc}\text { A } & \mathbf{B} & \mathbf{C} & \mathbf{D} & \text { E } \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ \vdots & \vdots & \vdots & \vdots & \vdots\end{array}$

Look at sample problem 0.
0. If candy costs a cent a piece, how much will nine pieces cost?
A 1\&
B 7¢
C 8¢
D 9¢
E none of these

The right answer is $9 ¢$. The letter before it is $\mathbf{D}$, so you should make a heavy black pencil mark in the $\mathbf{D}$ answer space for problem 0 .

Now look at problem 00.
00. Mrs. Jones bought a pound of potatoes for $10 \&$ and a pound of spinach for $15 \%$. How much did she spend?
F $5 \phi$
G $10 ¢$
H $15 \phi$
J 20¢
K none of these

The right answer is 25 \& . The answers at $\mathbf{F}, \mathbf{G}, \mathbf{H}$, and J are wrong. You should make a heavy black pencil mark in the $K$ answer space because "none of these" is the best answer for problem 00.

Do all the problems on these two pages in the same way. Try every problem.

1. Jim bought a candy bar for 5 cents and a piece of gum for 2 cents. How much did he pay for both?
A $3 \phi$
B 7¢
C $10 ¢$
D $52 \phi$
E none of these
2. Helen bought a pad for 5 cents, some candy for 12 cents, and a pen for 6 cents. How much did she spend altogether?

F 21\& G $22 \phi \quad$ H $23 \phi \quad$ J $33 \phi \quad$ K none of these
3. A pad costs 5 cents. How much will 4 pads cost?
L 9¢
M 16 ¢
N $18 \&$
P $25 \phi$
Q none of these
4. John bought some peanuts for 10 cents. He gave the man 25 cents. How much change should he get back?
R 35 ¢
S 25 ¢
T 20¢
U $15 \phi$
V none of these
5. Dick wants to buy some $5 \phi$ pencils. How many can he buy for 25 cents?
A 5
B 20
C 25
D 30
E none of these
$\begin{array}{llll}\text { A } & \mathbf{B} & \text { C } & \mathbf{D} \\ \vdots & \vdots & \vdots & \vdots \\ \vdots & \vdots & \vdots & \vdots\end{array}$
6. Jane had 36 cookies. She gave away 21 of them. How many did she have left?
F 14
G 15
H 17
J 57
K none of these
7. A classroom has 5 rows of seats with 7 seats in each row. How many children can be seated in the room?
L 2
M 12
N 35
P 57
Q none of these
8. Mary bought a comic book for 10 cents, some gum for 5 cents and a candy bar for 5 cents. How many cents did she spend in all?
R 15 \&
S 20\&
T $25 \phi$
U 50 ¢
V none of these
9. There are 20 children in a class. Each gives the teacher 10 cents for milk. How much does the teacher get in all?
A 10¢
B 30¢
C $\$ 1.00$
D $\$ 2.00$
E none of these
0. It takes Mary 20 minutes to walk to school. Sue can walk to school in half the time it takes Mary. How many minutes does it take Sue to walk to school?
$\begin{array}{lllll}\text { F } 10 & \text { G } 20 & \text { H } 30 & \text { J } 40 & \text { K none of these }\end{array}$

1. A hostess needs enough ice cream to serve 30 persons. How many quarts should she order if one quart will serve 6 persons?
$\begin{array}{lllll}\text { L } 6 & \text { M } 24 & \text { N } 36 & \text { P } 180 & \text { Q none of these }\end{array}$
2. Every time Mr. Dwyer draws a check, his bank charges him $5 \&$. How much does the bank charge him during one month for 23 checks?
$\begin{array}{lllll}\mathbf{R} & \$ .25 & \mathbf{S} & \$ .28 & \mathbf{T} \\ \$ 1.05 & \mathrm{U} & \$ 1.15 & \mathrm{~V} \\ \text { none of these }\end{array}$
. There are 321 children in a school. One day 104 went on a trip. How many children were left in school?
A 425
B 227
C 217
D 207
E none of these

Mr. Ronald told Peggy that he would give her $\$ 1200$ to pay for her first year at college. If he gave her $\$ 480$ to start with and the rest in eight monthly payments, how much was she to receive each month?

F $\$ 80 \quad$ G $\$ 90 \quad$ H $\$ 133 \frac{1}{3} \quad$ J $\$ 720 \quad$ K none of these

Sam gets $20 \%$ of the price for each magazine subscription that he sells. He wants to earn $\$ 50$ during the summer. What is the value of the subscriptions he will have to sell?
L $\$ 10$
M $\$ 40 \quad \mathbf{N} \$ 50$
P $\$ 200$
Q none of these
$\begin{array}{ccccc}\mathbf{L} & \mathbf{M} & \mathbf{N} & \mathbf{P} & \mathbf{O} \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ \vdots & \vdots & \vdots & \vdots & \vdots\end{array}$

For the questions on this page, you are to choose the word which has the same meaning, or most nearly the same meaning, as the word in dark type at the beginning of the line. Look at sample question 0 .
0. loud
A quick
B noisy
C hard
D heavy
E weak

The best answer is noisy. The lefter before noisy is B, so you should make a heavy black pencil mark in the $\mathbf{B}$ answer space for question $\mathbf{0}$.

Do all the questions on this page in the same way. Try every question.

TEST 1 $\qquad$
2
3 $\qquad$
total $\qquad$

## INTELLIGENCE TESTS

CONSUMABLE EDITION

Ctions: This booklet contains three short tests which will give you a chance to show what you iw and how well you think. You are to mark your answers to all the questions in this booklet he column of dotted answer spaces at the right-hand side of each page. The questions are owed by four or five choices, only one of which is the right answer.
ook at the first sample question below. It is correctly marked. Study it carefully to see for rself just how you are to mark your answers.

The first three drawings in the row below are alike in a certain way. Find the drawing at the it that goes with the first three.


C answer space has been marked because the only black square at the right is at $\mathbf{C}$. ow look at the next sample. Choose the right answer and then make a heavy black pencil s in the dotted answer space that has the same letter as the answer you picked.
he first four numbers in the row below are in a certain order. In the group of choices lettered K , find the number that should come next.
$123 \quad 4 \rightarrow$
F 5
G 6
H 7
J 8
K 9
number that should come next after 122344 is 5 . Make a heavy black pencil mark in : answer space for sample question 2. You will be given more chances for practice before nning each of the tests that follow.
you wish to change an answer, erase your mark completely, and then make another mark in ight answer space.
$u$ may find some of the questions very easy and some of them rather hard. Try to answer , question, but do not spend too much time on those that you find very hard. Do those that an, and then, if you still have time left, go back and do those that you skipped. You are not sted to be able to answer all the questions correctly. Always do your very best.
the beginning of each short test there are directions that tell you what to do. Wait until you old to begin before furning the page.

[^6]

Look at sample question 0 . The first three drawings in the row are alike in a certain way. Find the drawing at the right that goes with the first three.
0.




C
D
cerrain way. Find the drawing ar the righ

The first three drawings are alike in that erch has four sides and no lines inside it. The drawing at the right that goes with them is at D. It has four sides and no lines inside it. Make a heavy black pencil mark in the $\mathbf{D}$ answer space for question 0.

Now look at question 00. Find the drawing at the right that goes with the first three.
00.


The first three drawings are alike in that they have three sides and are getting wider. At the right, the only one that is still wider is at H. Make a heavy black pencil mark in the $\mathbf{H}$ answer space for question 00.

Do the others below and on the next two pages in the same way. Try every row.
3.

20. $\quad \begin{array}{lllll}0 & 0 & 0 & 0_{0} \\ 0 & 0 & 0 & O_{0}\end{array}$

21.

23.

24.

25.


Stop! Wait until you are told to go ahead to Test 2.


Look at sample question 0 . The numbers at the left are in a certain order. Find the number at the right that should come next.
0. 1
$345 \rightarrow$
A 5
B 6
C 7
D 8
E 9

The number that should come next after $\begin{array}{lllllll}1 & 2 & 3 & 4 & 5 & \text { is } & 6 \text {. Make a heavy }\end{array}$ black pencil mark in the $\mathbf{B}$ answer space for question 0 .
Now look at question 00. Find the number at the right that should come next.
00. 5
$4 \quad 4 \quad 3 \rightarrow$
F 1
G 2
H 3
J 4
K 5

The next number should be 3 , so you should make a heavy black pencil mark in the $\mathbf{H}$ answer space for question 00.


Look at sample question 0 . The first two drawings go together in a certain way. Find the drawing at the right that goes with the third drawing in the same way that the second goes with the first.
O.

$\begin{array}{llll}\text { A } & \mathbf{B} & \mathbf{C} & \mathbf{D} \\ \vdots & \vdots & \vdots & \\ \vdots & \vdots & \vdots & \end{array}$
The right answer is the shoe at $\mathbf{C}$, because the shoe at $\mathbf{C}$ goes with the foot just as the glove goes with the hand. Make a heavy black pencil mark in the $\mathbf{C}$ answer space for question 0 .

Now look at question 00. Find the drawing at the right that goes with the third drawing as the second goes with the first.
00.


The right answer is $\mathbf{K}$, because the little circle at $\mathbf{K}$ goes with the little square just as the big circle goes with the big square. Make a heavy black pencil mark in the K answer space for question 00.

Do the others below and on the next two pages in the same way. Try every row.
2.


T
U


A
B


D
E



$\rightarrow$


C


B


R


A

$\rightarrow$


C


G
H


M

$\qquad$ $z$

20．$) \rightarrow|: 〉 \rightarrow\rangle^{R}$

22.

$\cdots$ 口－ロ：ロ－叩

$P$

$\begin{array}{llll}\mathbf{L} & \mathbf{M} & \mathbf{N} & \mathbf{P} \\ \vdots & \vdots & \vdots & \vdots\end{array}$
24.


25． $\mathrm{OO} \rightarrow \mathrm{O}: \mathrm{OO}_{\mathrm{O}}^{\mathrm{O}} \rightarrow \mathrm{O}$
$\stackrel{\circ}{\circ}$

 Co $\begin{array}{llll}\mathbf{R} & \mathbf{S} & \mathbf{T} & \mathbf{U} \\ \vdots & \vdots & \vdots & \vdots\end{array}$

 $\stackrel{H}{\circ}$
 $\vdash^{k} 0$ ni 1 ${ }^{27 .} \Delta \rightarrow \square: \square \rightarrow \square^{2}$


 $\begin{array}{llll}\mathbf{L} & \mathbf{M} & \mathbf{N} & \mathbf{P} \\ \vdots & \vdots & \vdots & :\end{array}$
28.




29．
30.
$\triangle \rightarrow D: V \rightarrow>\dot{\sim}$

 $\stackrel{K}{\square}$ $\begin{array}{llll}\mathbf{F} & \mathbf{G} & \mathbf{H} & \mathbf{J} \\ : & : & : & \vdots\end{array}$

## APPENDIX B

Materials Used in the
Individualized Program

## Three Ways of Adding -ing

Sort these words into the correct pattern.

| read, reading | let, letting |
| :--- | :--- |
| choose, choosing | break, breaking |
| drop, dropping | swim, swimning |
| think, thinking | brag, bragging |
| marry, marrying | drive, driving |
| dream, dreaming | arrive, arriving |
| (1) |  |

(3)
speak, speaking change, changing run, running
happen, happening bite, biting hit, hitting
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

What statements can you make about these patterns?
1.
2.
3. $\qquad$
LIST A

| after | by | P1sh | her | ma11 |
| :---: | :---: | :---: | :---: | :---: |
| a11 | cake | for | here | make |
| am | can | found | h112 | nan |
| an | cat | from | him | many |
| and | chais | fun | his | me |
| any | come | gave | home | meat |
| are | cow | get | house | $\operatorname{man}$ |
| as | cut | girl | how | mi.1k |
| at | daddy | give | I | more |
| ate | day | go | 18 | mother |
| away | dear | goes | in | much |
| baby | did | going | 1s | must |
| ball | dinner | good | it | Hy |
| be | dog | got | just | name |
| bed | doll | grade | keep | no |
| been | done | grass | kept | not |
| big | down | green | kitten | now |
| black | dress | gun | know | of |
| blue | eat | had | letter | on: |
| boat | fall | happy | 11ke | one |
| book | father | has | $11 t 61 e$ | other |
| boy | red | hat | long | our |
| bring | Peed | have | 100k | out |
| brother | fell | he | Love | ovar |
| but | find | hen | made | pig |

LISI A (page 2)

| play | say | sun | top | when |
| :--- | :--- | :--- | :--- | :--- |
| pretty | school | take | toy | where |
| put | see | tell | train | white |
| rain | she | that | tree | who |
| ran | show | the | two | will |
| rat | sing | them | up | wish |
| read | sister | then | us | with |
| red | sit | there | very | work |
| ride | sled | they | want | would |
| rode | sleep | thing | was | yes |
| room | snow | this | water | you |
| run | so | those | we | your |
| said | some | time | went |  |
| set | soon | to | were |  |
| saw | story | today | what |  |

LIST B

| about | aimest | spple | barn | ball |
| :--- | :--- | :--- | :--- | :--- |
| across | alone | ask | basket | best |
| afraid | along | sunt | bear | bettor |
| afternoon | also | back | because | bird |
| again | always | bad | before | birthiay |
| ago | another | bank | begin | bite |
| air | anything | bark | bahind | both |

LIST B (page 2)

| box | color | fair | garden | I'䀾 |
| :---: | :---: | :---: | :---: | :---: |
| bsread | coula | far | glad | inside |
| break | cross | Samm | grandfather | into |
| bsight | dance | fast | grandmother | isn't |
| brought | dark | fat | gray | it's |
| brown | die | foel | great | I've |
| buy | dish | foet | ground | Jung |
| cal1 | do | falt | grov | kil2 |
| candy | does | fat | hais | kind |
| can't | doesntt | fight | hand. | kite |
| car | don't | fine | hard | knem |
| cara | door | fire | hay | Iake |
| carples | drank | Pirst | head | large |
| carry | draw | five | hear | 1ast |
| catch | drink | flag | neld | late |
| chicken | drunk | flew | help | laugh |
| children | dxy | P200\% | nidden | Laave |
| ctetas | duck | flower | hide | Ieft |
| dity | each | food | high | 1 leg |
| class | early | foot | hit | let |
| clay | 989 | forgot | hold | light |
| clean | end | four | hope | line |
| c1030 | ever | full | horse | 11ve |
| coal | evary | Punny | hurt | Iose |
| cost | eye | fux | 1ee | lost |
| cold | face | game | I'11 | lot |

LIST B (page 3)

| Iunch | nut | ponies | ahoot | sura |
| :---: | :---: | :---: | :---: | :---: |
| neet | o'clock | pony | shot | swint |
| net | off | poor | sick | suring |
| mice | often | pu11 | side | table |
| might | on | rabbit | s.tx | teacher |
| mine | 0.a | rest | skate | ten |
| Mss | once | right | smel2 | than |
| money | only | ring | soap | thank |
| noon | Or | x1ver | sold | thet's |
| morring | orange | road | something | theis |
| most | outside | robin | song | there's |
| mouse | om | ro. 11 | spel1 | these |
| mouth | pasint | rope | spend | think |
| move | peir | round | stand | third |
| Tr. | paper | same | star | three |
| 相s. | park | sand | start | through |
| near | part | sang | stooa | throw |
| need | parties | seat | stick | t10 |
| nest | party | second | st1.11 | ¢121 |
| never | pass | seed | step | told |
| new | pen | sell 1 | store | tonight |
| next | pencil | send | street | tooth |
| nice | piok | sent | studies | town |
| ni.ght | pie | set | study | trick |
| nine | place | seven | summer | tries |
| nothing | please | shoe | supper | ter.p |

LIST 8 (page 4)

| try | wait | wear | winter | yard |
| :--- | :--- | :--- | :--- | :--- |
| time | walk | week | won't | year |
| under | wara | weli | word | yellow |
| upen | wash | while | write | yesterday |
| use | watch | why | written | yet |
| visit | wey | window | wrote |  |


| HST C |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| able | army | bottle | camp | cleas |
| absont | August | bottofil | careful | c14mb |
| aet | autum | bought | careless | cloth |
| ahoud | beach | branch | carried | cloudy |
| a.1xplane | best | bsave | carrying | clown |
| s.12ve | boautitus | braakfast | case | club |
| anong | become | breath | cattle | coast |
| tutmal | beas | broken | center | corfee |
| ansvar | begrun | broons | chain | comb |
| anybody | belt | brush | chance | company |
| aryone | betwaen | build | change | corner |
| any way | bigger | building | cheese | cotton |
| anywhere | blame | busy | choose | couldn't |
| Aprit | blew | button | Christmas | cotuntry |
| apson | boaxt | calf | chureh | cousin |
| anithmetic | body | came | ctrens | covers |

LIST C (page 2)

| craml | easy | fixed | golden | hotal |
| :---: | :---: | :---: | :---: | :---: |
| erop | atther | Plood | gone | hour |
| eutting | eleven | follow | good-by | hundred |
| danger | engine | fond | grain | hungry |
| dare | enorgh | football | grom | hunt |
| daughter | enter | forest | guard | hurry |
| Deeamber | evarybody | forgive | guess | inch |
| deep | everyone | forgot | half | Indians |
| disn't | everything | form | handkerchier | instead |
| dig | excuse | Porty | handle | Invite |
| divot | fact | Pought | happon | iron |
| asrey | fail | Pourth | hardiy | 1tself |
| doctor | Pam11y | Pree | hate | Januavy |
| dozen | farmer | Preaze | haven't | Job |
| DT. | Sarther | Priday | healthy | $30.11 y$ |
| draged | fastan | Priend | heard | Jutce |
| dream | Pear | front | haart | July |
| dreve | feather | frost | heat | June |
| driving | Pebruary | gas | heavy | kindness |
| dropping | siftaon | gather | hollo | knee |
| drovo | fifty | gentle | harsalf | knlfe |
| drum | P1113 | geography | higher | tenock |
| eam | finish | gatting | honast | lace |
| earth | Innished | g1ven | honey | laid |
| aast | Ift | giving | horn | 1amb |

LIST C (page 3)

| larger | match | obey | plus | railroad |
| :---: | :---: | :---: | :---: | :---: |
| Iater | matter | ocean | pocket | rainy |
| laughed | May | October | poem | raise |
| 1aw | maybe | office | point | rang |
| lay | mend. | opened | porch | rather |
| lazy | merry | order | potato | reach |
| lead | middle | ought | potatoes | ready |
| learn | mind | oven | pound. | reason |
| Ieather | Monday | paid | pray | report |
| less | monkey | pain | present | ribbon |
| lesson | month | parents | price | riding |
| 11st | mountain | passed | print | rise |
| Iisten | nail | past | prize | rubber |
| living | nearly | people | program | rule |
| load | nest | person | proud | running |
| Iord | needed | piano | prove | safe |
| Ioud | news | picnic | pump | sail |
| lovely | nobody | picture | pure | sale |
| Iuck | noise | piece | quart | sal.t |
| Iucky | none | pillow | queen | Saturday |
| maid | north | pipe | question | save |
| making | note | plain | quick | says |
| March | November | plan | quit | scare |
| market | number | plant | race | sea |
| master | nurse | plenty | radio | seems |

## LIST C (page 4)



LIST D

| account | ashes | bodies | cortain | creep |
| :---: | :---: | :---: | :---: | :---: |
| ache | attend | borrow | changing | crowd |
| acre | automobile | bound | charge | cruel |
| address | avful | brain | cheap | daily |
| against | avfuliy | branches | check | dangerous |
| agree | avhile | breathe | cheer | darling |
| aim | bacon | bridge | chest | deal |
| alaym | banana | built | chter | dearest |
| allow | barrel | bundle | chimney | death |
| all right | basement | burst | chose | delay |
| alroady | battle | bushel | chosen | deliver |
| although | bay | business | clain | dentist |
| America | beast | butcher | clerk | digeing |
| American | beggar | buying | elothes | dining |
| amount | begged | cabbage | clothing | distance |
| amuse | belleve | cabin | coach | ditteh |
| angry | beneath | calm | collar | divide |
| answered | borry | camel | common | division |
| apart | besides | canal | correct | dodge |
| appear | Bible | canoe | cottage | double |
| area | bid | capture | cough | dries |
| aren't | biggest | carpet | county | drill |
| armies | birth | cash | couple | driven |
| arrest | blanket | cast | course | drom |
| ashamed | bloom | cellar | crazy | drowned |

LIST D (page 2)

| drug | file | greatest | hurried | lettuce |
| :--- | :--- | :--- | :--- | :--- |
| during | film | grief | husband | level |
| eager | flash | grocery | important | library |
| eighty | flight | group | improve | limb |
| elect | following | guide | indeed | linen |
| electric | force | guilty | inform | lonesome |
| elephant | forehead | habit | insect | loose |
| else | fort | hadn't | inspact | lower |
| enclose | forth | Halloween | intend | lurber |
| English | forward | harm | interested | machine |
| enjoy | fourteen | harvest | interesting | manage |
| errand | frame | hasn't | invited | manner |
| escape | fright | haul | island | marble |
| example | frighten | health | jail | marine |
| except | frozen | heaven | join | married |
| exchange | furnace | helpful | jolly | marry |
| exercise | furniture | hero | kindly | mate |
| expect | frozen | highest | knit | meant |
| explain | gain | hire | knot | medicine |
| explore | gallon | history | lack | member |
| extend | garage | hollow | ladies | mighty |
| factory | golf | homesick | language | minute |
| fever | good night | hose | lately | moment |
| fierce | gown | hospital | learned | motor |
| figure | grave | however | lemon | muddy |
|  |  |  |  |  |

LIST D (page 3)

| myself | outelt | poue | ranch | safety |
| :---: | :---: | :---: | :---: | :---: |
| nation | Ose | power | range | sailor |
| nature | own | praise | raceive | saving |
| navy | arner | preach | received | scold |
| neighbor | packege | president | recess | score |
| nei.ther | palace | pross | recite | scout |
| nophes | parade | pride | record | scrateh |
| not | parlor | prison | recover | scream |
| navspaper | partly | prisoner | refuse | screen |
| nicely | passenger | problem | remain | scrub |
| niece | pasture | product | remark | secret |
| nineteen | paying | promise | remember | selfish |
| ninety | perfect | proof | remembered | sentence |
| ninth | perhaps | protect | remove | serve |
| nor | pitch | public | rent | settle |
| notice | pitcher | pumpikin | sopeat | seventh |
| odd | pity | punish | respect | several |
| offer | plane | pupil | result | share |
| opprcer | planned | purple | return | shopping |
| onion | pleasure | purse | rifle | shoulder |
| opening | post | quarrel. | roar | shout |
| orchard | police | quarter | roast | shower |
| ordered | policeman | queer | rough | shown |
| organ | polite | quiet | rush | sign |
| ourselves | postal | railway | saddle | sillent |



## LIST E

| aboard | article | blood | cerotalniy | coaplete |
| :---: | :---: | :---: | :---: | :---: |
| absence | artist | blossora | chalk | concert |
| accept | athletic | bond | chapter | condition |
| accident | athlatics | bonfire | charming | conduet |
| action | attack | bonnet | chast | conquer |
| active | attempt | border | chocolate | consider |
| addressed | attention | born | chotee | contain |
| adopt | auditorium | boundary | Christian | contest |
| advance | author | bowl. | citizen | contimue |
| adventure | avenue | breast | climate | contract |
| advice | avarage | breeze | closely ${ }^{\text {c }}$ | control |
| afford | baggage | brief | cloud | coples |
| afterward | balance | brook | coarse | countries |
| agent | bal2oon | Drusse | cocoa | courage |
| agreed | baxgain | buxy | co.l1eet | coust |
| as.rport | bath | calendar | colluetion | creelc |
| allowed | ba the | gamexa | college | cropt |
| anxious | bacame | capltal | colony | aren |
| anyhow | bogan | carefully | column | cried |
| apply | bexrios | carpenter | aomfortabla | erspple |
| appoint | bayond | carriage | command | crown |
| arise | bicycle | cave | commence | cruab |
| around | biscuit | celebrate | companion | cure |
| arpow | bleeding | central | compare | curious |
| art | bless | century | complain | curpent |

LIST 2 (page 2)

| cuatom | discaee | anomios | Pestile | genswa $12 y$ |
| :---: | :---: | :---: | :---: | :---: |
| duluy | 4.13glay | eneny | filald | senticnen |
| Cumege | 41stant | entertain | Ptra22y | glant |
| deot | distaict | entzue | finger | 8200 my |
| deotied | disturb | antranco | 2ilea | governor |
| decosate | dollazs | anvelope | folks | grant |
| cerrant | doubt: | erasax | froollsh | cravy |
| defond | draser | aventing | foremoon | granse |
| de31ght | drawn | avant | Forever | greatiy |
| delightrut | cried | azactly | rorgotten | \%ッ\% |
| dalivery | dxilt | ¢xantration | Posmer | griave |
| depend | due | excelrent | Sostuns | growl |
| deposit | dutias | axctua | Pouruation | growth |
| dascribe | dying | axtel 61 nes | AYsedorn | gusst |
| Cosert | 0n321en | oseltit | frolght | hanmegr |
| casorve | eas2iest | axperise | Triendzy | harbos |
| desteg | ansles | 10iluro | tues | meaciacha |
| destre | ousily | Faint | dully | hasiotht |
| destioy | paatexu | casthrus | tund | hater |
| atamona | oductition | ¢als\% | Tunneal | hestutte |
| dictionary | atrort | Pamots | furnelsh | hoping |
| difforence | 0fghth | francy |  | 3orwis2e |
| asesicuit | 0luetson | frashion | Eamment | Fuge |
| divectuton | empty | Pavor | gascline | muatn |
| aisappointed | erscouzage | Pexmy | generral | humas |

## LIST \& (page 3)

| hymen | 11berty | mistake | omitted | possible |
| :---: | :---: | :---: | :---: | :---: |
| 1dea | lightning | model | opposite | possibly |
| iliness | 1ikely | modern | outline | postage |
| imagine | 1oas | motion | overalis | post office |
| import | Zoan | mule | oyster |  |
| important | Jocate | nusutcal | palm | prayer |
| impossible | Ionely | napkin | paragraph | prefer |
| increase | loss | narrow | pareel | propare |
| industry | lovingly | national | path | preventr |
| Insormation | Iying | natural. | patience | principal |
| intantion | magazine | naughty | pavement | private |
| 1tem | manager | necessary | peace | produce |
| justice | manufacture | necktie | pearl | progress |
| kean | map | noglact | peppar | promote |
| kettle | material | Negro | perfture | prompt |
| kさtchon | mayor | nei.ghborhood | period | proper |
| knowledge | mention | northern | pemaission | property |
| 2momi | merchant | noticed | pigeon | provide |
| lantern | message | notion | platform | puppose |
| Ietter | metal | oatmeal | pledged | putting |
| Lavn | method | objest | poetry | puzale |
| Jaacer | raidnight | oblige | poison | quite |
| League | mileage | obtain | p00. | radish |
| led | militon | occupy | population | rapidiy |
| letting | minister | offered | position | rate |

LIST E (page 4)

| receipt | scarce | slipped | suggest | umpire |
| :---: | :---: | :---: | :---: | :---: |
| receiving | scene | slippery | supplies | unusual |
| recent | scenery | smooth | support | vacant |
| reduce | screw | social | surface | vain |
| regret | search | soda | system | victory |
| regular | secretary | someone | tax | violin |
| relation | section | sorrow | telegram | volume |
| relative | sense | source | telegraph | wasn't |
| relief | separate | southern | tomperature | veary |
| remainder | service | special | temis | weave |
| remind | settlement | speech | terrible | wheel |
| repair | seventeen | spite | theater | would |
| replied | severely | splendid | therefore | mound |
| request | shadow | spoil | thirsty | wrapped |
| require | shole | squeeze | thorough | zone |
| reserve | shelter | standard | thrown |  |
| reward | shipment | steer | thunder |  |
| risk | shipped | stomach | title |  |
| rock | shock | strength | total |  |
| route | shore | strict | trailer |  |
| sàlary | sidewalk | student | treasure |  |
| sandwich | signed | studied | trial |  |
| satisfied | sincerely | style | trimmed. |  |
| satisfy | sliding | succeed | troop |  |
| savage | slight | success | type |  |

LIST $F$

| ability | ankle | blizzard | chemistry |
| :--- | :--- | :--- | :--- |
| abolish | apply | border | chipmunk |
| abundant | approach | bore | choir |
| acadeny | argument | borrom | civilization |
| adept | article | bough | civilize |
| accompany | assure | bridle | claws |
| accomplish | astonish | buckle | coconut |
| accurate | aviation | buffalo | collect |
| ache | aviator | bullet | collision |
| action | awful | bundle | colonel |
| active | backward | burglar | column |
| activity | bacon | burro | combination |
| actual | baggage | cadet | combine |
| admit | balance | calm | conical |
| advance | ballot | camera | command |
| advise | banjo | canal | comment |
| affect | banquet | cancel | commit |
| afterward | bass | canoe | companion |
| alsle | battery | canyon | compare |
| alfalfa | belief | carbon | compel |
| alto | beneath | career | compose |
| anphibian | benerit | cargo | composition |
| anchor | betray | carpenter | concern |
| ancient | beyond | catalogue | coneert |
| angle | biography | chapter | conclude |


| conclusion | courage | desert | distinction |
| :---: | :---: | :---: | :---: |
| concrete | crazy | deserve | district |
| condense | criminal | design | domestic |
| condition | cripple | desire | domino |
| confer | cultivate | dessert | doubt |
| congratulate | curious | destroy | dreadful |
| connection | custom | destruction | dreary |
| conquer | customer | determine | due |
| consent | dainty | diagram | dying |
| consider | debate | digest | echo |
| consist | decent | digestion | erfect |
| constant | declaration | dinosaur | electrical |
| construction | declare | disappear | embargo |
| consume | defeat | disaster | empire |
| content | defense | discount | employ |
| continue | delicate | discover | enclose |
| contract | deliver | discuss | endurance |
| convention | demand | discussion | enforce |
| conversation | democracy | disgust | engage |
| convince | dentist | dismal | engineer |
| cooperation | deposit | dismiss | enjoyable |
| copyright | depression | disposition | entise |
| costume | descent | dispute | entrance |
| cottage | describe | distant | envy |
| council | description | distinet | arase |

LIST F (page 3)

| errand | foggy | hobo | innocent |
| :---: | :---: | :---: | :---: |
| establish | foreign | horizon | inquire |
| estate | fortunate | horrible | inquiry |
| estimate | foundation | human | instance |
| evil | freedom | humorous | instruction |
| example | freight | husband | insurance |
| excellent | furnace | iceberg | intention |
| except | furnish | ideal | interfere |
| exchange | future | identify | internal |
| exclaim | gentlemen | 1aol | interrupt |
| expedition | geyser | ignorant | interview |
| expel | giraffe | illness | invade |
| experience | gloomy | imagination | Invalid |
| explain | glorious | immediate | invention |
| express | governor | immigration | inventor |
| expression | graceful | impatient | investigate |
| extend | graduate | importance | 1ssue |
| extrome | grateful | impossible | jealous |
| faithful | greedy | impression | judge |
| familar | guest | incident | justice |
| farewell | guide | incorrect | justify |
| fashion | gutter | increase | kindergarten |
| favorable | handsome | influence | kingdom |
| ferry | hearty | information | knight |
| fever | herewith | inhabit | knit |

LIST F (page 4)

| knob | mercy | operate | permanent |
| :--- | :--- | :--- | :--- |
| knowledge | microscope | operation | personality |
| lantern | midnight | opinion | photograph |
| lawyer | minister | opportunity | physical |
| legal | mirror | ordinary | pier |
| levy | modify | organization | pilot |
| limit | mosquito | organize | planet |
| liquid | motto | original | plateau |
| local | mountainous | orphan | platform |
| location | movement | othervise | platinum |
| lodge | murder | paddle | poison |
| macaroni | mystery | padlock | policy |
| major | native | pageant | popular |
| majority | natural | pajamas | porcupine |
| malaria | nervous | palm | portion |
| manager | noble | pantry | position |
| mansion | notify | paragraph | positive |
| mantle | numerous | particular | practical |
| margin | oblige | partner | prefer |
| mayor | obtain | patrol | presence |
| meanwhile | occupation | payment | primary |
| medium | occupy | peaceful | private |
| mental | occur | peculiar | problem |
| mention | official | pension | proceed |
| merchant | omit | period | produce |
|  |  |  |  |

LIST F (page 5)

| professor | reins | scheme | soul |
| :---: | :---: | :---: | :---: |
| progress | relative | scramble | source |
| property | release | seratch | SOW |
| publish | religion | secret | species |
| puddle | remark | seldom | spinach |
| pueblo | remedy | senate | spirit |
| punish | remit | senator | stalk |
| puppet | repeat | sergeant | steady |
| purchase | repel | series | stenographer |
| purpose | represent | serious | stingy |
| pyramid | require | servant | stranger |
| quality | resent | service | streetcar |
| quantity | reserve | severe | struggle |
| quote | resign | shipment | student |
| realize | respectful | sigh | stumble |
| rebel | respond | silence | submit |
| receipt | result | similar | subscription |
| recent | retire | single | substance |
| recipe | reveal | situation | substitute |
| recognition | romantic | skeleton | subway |
| recognize | salary | smuggle | successful |
| recover | salesman | society | suffer |
| refer | salmon | solo | suggest |
| refuse | saucer | solution | suitable |
| regret | scatter | soprano | support |

## LIST F (page 6)

| surface | traitor | volcano |
| :--- | :--- | :--- |
| sword | transfer | volunteer |
| system | transmit | waist |
| tackle | treasure | warehouse |
| tariff | treaty | weapon |
| tavern | triangle | weary |
| taxicab | tropic | witness |
| telegram | tunnel | wreath |
| telescope | umpire | wreck |
| tennis | unfortunate | wrestle |
| terrific | unimportant | yield |
| testify | unite | yolk |
| theory | unnecessary | youth |
| thermometer | unusual |  |
| thorough | unwrap |  |
| throughout | upset |  |
| tickle | valuable |  |
| timid | vanish |  |
| toboggan | variety |  |
| tomato | varnish |  |
| tongue | vein |  |
| total | velvet |  |
| torgh | veto |  |
| tourist | victory | visible |
| trarfic |  |  |


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[^3]:    *not significant

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[^5]:    $\qquad$

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