A SURVEY OF THE
BOYS' INDUSTRIAL SCHOOL
TOPEKA, KANSAS

A THESIS
SUBMITTED TO THE DEPARTMENT OF
PSYCHOLOGY AND THE GRADUATE COUNCIL OF THE KANSAS STATE
TEACHERS COLLEGE OF EMPORIA IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE

BY
SAMUEL GEORGE HUEBNER
MAY 1937.
Approved for the Major Department

[Signature]

Approved for the Graduate Council

[Signature]
ACKNOWLEDGEMENT

Acknowledgement of indebtedness is made to the following persons who have aided in making this study possible:

To Doctor Brian E. Tomlinson, of the Department of Psychology, and Dean of Men of the Kansas State Teachers College, Emporia, Kansas, who suggested this study and directed the survey.

To Doctor H. E. Schrammel, Director of the Bureau of Educational Measurements, who supervised the grading of the tests and the writing of the thesis.

To Colonel Paul A. Cannady, Superintendent of the Boys' Industrial School, Topeka, Kansas, who co-operated in all phases of the survey.

To A. M. Thoroman, Principal of the School of the Boys' Industrial School, who assisted the writer in conducting the survey.

To Doctor Herbert Shuey, Psychologist of the Boys' Industrial School, who contributed his work for the personality study.

Samuel George Hrubner
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>PART</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART</td>
<td>PAGE</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF CHARTS</td>
<td>ix</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>I. ORIGIN, CONTROL, ORGANIZATION, AND ADMINISTRATION</td>
<td>3</td>
</tr>
<tr>
<td>OF THE BOYS' INDUSTRIAL SCHOOL</td>
<td>3</td>
</tr>
<tr>
<td>Establishment</td>
<td>3</td>
</tr>
<tr>
<td>Control</td>
<td>3</td>
</tr>
<tr>
<td>Organization</td>
<td>4</td>
</tr>
<tr>
<td>Commitments</td>
<td>6</td>
</tr>
<tr>
<td>Physical and psychological examination</td>
<td>6</td>
</tr>
<tr>
<td>Campus</td>
<td>9</td>
</tr>
<tr>
<td>Organization of councils</td>
<td>10</td>
</tr>
<tr>
<td>Daily program</td>
<td>11</td>
</tr>
<tr>
<td>Occupations</td>
<td>12</td>
</tr>
<tr>
<td>School</td>
<td>15</td>
</tr>
<tr>
<td>Outstanding activities</td>
<td>18</td>
</tr>
<tr>
<td>Parole system</td>
<td>20</td>
</tr>
<tr>
<td>II. PERSONAL AND FAMILY SURVEY</td>
<td>24</td>
</tr>
<tr>
<td>Commitment data</td>
<td>24</td>
</tr>
<tr>
<td>Schooling record</td>
<td>30</td>
</tr>
<tr>
<td>Home and family conditions</td>
<td>32</td>
</tr>
<tr>
<td>Offenses</td>
<td>39</td>
</tr>
</tbody>
</table>
### PART III. SURVEY OF INTELLIGENCE, EDUCATIONAL ACHIEVEMENT, AND PERSONALITY

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence study</td>
<td>41</td>
</tr>
<tr>
<td>Educational achievement study</td>
<td>44</td>
</tr>
<tr>
<td>Personality study</td>
<td>51</td>
</tr>
</tbody>
</table>

### PART IV. SUMMARY AND CONCLUSIONS

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>54</td>
</tr>
<tr>
<td>Conclusions</td>
<td>56</td>
</tr>
</tbody>
</table>

### BIBLIOGRAPHY

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
</table>

### APPENDIX

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Summary of the Work Carried on by the Hospital, Physician, and Dentist During the last Biennium</td>
<td>7</td>
</tr>
<tr>
<td>II. The Number of Boys in the Boys' Industrial School and Their Ages to the Nearest Birthday</td>
<td>25</td>
</tr>
<tr>
<td>III. Length of Time the Boys Who Had Not Been Paroled Had Been in the Boys' Industrial School at the Time of the Survey, July 1, 1936</td>
<td>26</td>
</tr>
<tr>
<td>IV. Length of Time the Boys Who Had Been Paroled Had Been in the Boys' Industrial School before Being Paroled and the Total Time They Had Been Under Jurisdiction of the Institution</td>
<td>27</td>
</tr>
<tr>
<td>V. Record of A. W. O. L. from the Boys' Industrial School</td>
<td>29</td>
</tr>
<tr>
<td>VI. Length of Time the Boys Who Had Been A. W. O. L. Had Been in the Boys' Industrial School before Being Absent and the Length of Time before They Were Returned</td>
<td>30</td>
</tr>
<tr>
<td>VII. Number of Boys in Each Grade When Last in School Prior to Commitment to the Boys' Industrial School</td>
<td>31</td>
</tr>
<tr>
<td>VIII. Residence of the Boys in the Boys' Industrial School at the Time of the Survey</td>
<td>32</td>
</tr>
</tbody>
</table>
TABLE

IX. Occupations of the Fathers of the Boys in the Boys' Industrial School 34

X. Summary of Data Relative to Parents of the Boys 35

XI. Number of Persons Living in the Homes of the Boys Prior to Their Commitment to the Boys' Industrial School 36

XII. Denominational Affiliation of the Church Attended by the Boys before Admittance to the Boys' Industrial School 37

XIII. Religious Views of the Boys in the Boys' Industrial School 38

XIV. Offenses for Which the Boys Were Sentenced to the Boys' Industrial School 39

XV. Distribution of Intelligence Quotients of Boys in the Boys' Industrial School 42

XVI. Distribution of the Boys in the Boys' Industrial School According to Intelligence Quotients and Mental Ages 44

XVII. Distribution of the Boys in the Boys' Industrial School According to Scores on English, Reading, Arithmetic, Spelling, Civics, and Geography Tests 46

XVIII. Age-grade Study, Age at Commitment-grade When Last in School 47
TABLE I PAGE

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>XIX. Age-grade Study at the Time of the Survey</td>
<td>48</td>
</tr>
<tr>
<td>XX. Summary of Pupils Over Age, of Normal Age, and Under Age in the Boys' Industrial School</td>
<td>50</td>
</tr>
<tr>
<td>XXI. Comparison of Personality Studies of a Normal Group, of Inmates of the Topeka State Hospital, and of Boys of the Boys' Industrial School</td>
<td>51</td>
</tr>
<tr>
<td>XXII. Constitutional Index of the Boys in the Boys' Industrial School</td>
<td>53</td>
</tr>
<tr>
<td>CHART</td>
<td>PAGE</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>1. Organization of the Boys' Industrial School as Effective July 10, 1936</td>
<td>5</td>
</tr>
</tbody>
</table>
INTRODUCTION

The purpose of this thesis is to present a report of a recent survey of the Boys' Industrial School, Topeka, Kansas.

Part I of this report deals with the origin, control, organization, and administration of the school. The material for this section was secured through a survey of the grounds, interviews with Colonel Paul A. Cannady, the superintendent, Mr. A. M. Thoroman, the principal, Dr. Herbert Shuey, the psychologist, and officers and department heads, and from Biennial Reports of the institution.

Part II has to do with the personal and family data relative to the boys in the school at the time of the survey as shown by the records kept by the secretary.

Part III discusses the intelligence, educational achievements, and personality of the boys. It is based upon the results of a battery of achievement and intelligence tests given to all available boys in June and July, 1936, and from records of the boys as recorded by Doctor Shuey.

The survey which is the basis of this thesis was made under the direction of Dr. Brian E. Tomlinson, of the Department of Psychology, and Dean of Men of the Kansas State Teachers College, Emporia, Kansas. The writer gave a
battery of intelligence and achievement tests to all available boys of the institution. The tests were given during the latter part of June and July, 1936. The Bureau of Educational Measurements of the Kansas State Teachers College of Emporia, Kansas, scored the tests and recorded the results.
PART I

ORIGIN, CONTROL, ORGANIZATION, AND ADMINISTRATION

OF THE BOYS' INDUSTRIAL SCHOOL

I. ESTABLISHMENT

The Boys' Industrial School was established by an act of the Kansas Legislature on March 12, 1879, as the State Reform School. On June 1, 1881, the institution was officially opened with accommodations for 125 boys. Mr. J. G. Eckles was superintendent and Mrs. Eckles was matron.

II. CONTROL

The State Board of Administration has control of the Boys' Industrial School. At the time of the survey the members of the board were Governor Alf M. Landon, Doctor James E. Scott, T. V. Woodward, and Will T. Beck. All officers and employees of the institution are appointed by the state board. The superintendent of the school has active charge of the institution. The superintendent at the time of the survey, Colonel Paul A. Cannady, had served the institution since January 15, 1934, and had an average of sixty employees under his supervision. The employees of the school are responsible to the superintendent.
III. ORGANIZATION

As shown by Chart I the organization of the Boys' Industrial School is divided into seven departments, namely: educational, commissary, agricultural, health, industrial, institutional, and boys'.

Each department is controlled directly by an officer placed in charge and indirectly by the superintendent. The educational department, which will be discussed later, is headed by a principal. The commissary department controlled by a steward has supervision of funds of the Boys' Industrial School. The work of the institutional department is to make a more home-like atmosphere for the boys. Attention is given to manners, clothes, food, and social affairs. The boys' department has the task of coordinating the work of the students. The industrial and agricultural departments supply many necessary items for the institution and at the same time provide opportunities for the student to learn trades. The health department looks after the health of the boys of the school. In addition to the seven departments as shown by Chart I there are a number of employees which are not directly under any department but are necessary for the proper functioning of the school.

ORGANIZATION OF THE BOYS' INDUSTRIAL SCHOOL
AS EFFECTIVE JULY 10, 1936

EDUCATIONAL DEPARTMENT
Principal
Academic Teachers
Music Teacher
Printing Teacher
Manual Training Teacher

AGRICULTURAL DEPARTMENT
Head Farmer
Assistant Farmers
Dairymen
Gardener and Poultrymen

COMMISSARY DEPARTMENT
Steward
Chief Clerk
Stenographer
Cooks
Baker
Laundyman
Shoemaker

INSTITUTIONAL DEPARTMENT
Hostess
Patrons
Seamstress

INDUSTRIAL DEPARTMENT
Chief Engineer
Firemen
Plumber
Electrician
Machinist
Painter
Auto Mechanic
Carpenter

S H E A L T H D E P A R T M E N T
Nurse

BOYS' DEPARTMENT
Director
Advisors
Housemothers
Nightwatchmen
Retail Officers
Truck Drivers
IV. COMMITMENTS

Boys under sixteen years of age are committed to the Boys' Industrial School on charges of being delinquent, incorrigible, or dependent. They are usually sent to the school by the Probate Court. The first commitments were made on June 6, 1881, when two boys were admitted. A total of seventy-three boys were committed the first year and on August 1, 1936, the number of boys admitted had reached 7,080. Of this number 306 were admitted during the last biennium. At the time of the survey there were 203 boys in the school and 112 on parole.

V. PHYSICAL AND PSYCHOLOGICAL EXAMINATION

Physical examination. Each boy upon admission is sent to the entrance ward where he is isolated until completion of the physical examination and until there is no possibility of contaminating others with contagious diseases. He is given a complete physical examination including eyes, ears, nose, throat, and other organs of the body. He is examined for venereal diseases and receives immediate treatment if the test is positive. A hospital is maintained for the benefit of the school.

The dentist examines the student for possible diseased teeth, cavities, and diseased gums. All diseased
teeth are removed, cavities filled, diseased gums treated, and the teeth cleaned. Each boy is supplied with a tooth brush and tooth paste.

Table I shows a brief summary of the work carried on by the hospital, physician, and dentist during the last biennium.

### TABLE I

**SUMMARY OF THE WORK CARRIED ON BY THE HOSPITAL, PHYSICIAN, AND DENTIST DURING THE LAST BIENNium**

<table>
<thead>
<tr>
<th>(1)</th>
<th>Number (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average detained in hospital</td>
<td>11</td>
</tr>
<tr>
<td>Doctor calls</td>
<td>413</td>
</tr>
<tr>
<td>Complete physical examination</td>
<td>382</td>
</tr>
<tr>
<td>Wassermans</td>
<td>299</td>
</tr>
<tr>
<td>Diphtheria inoculations</td>
<td>235</td>
</tr>
<tr>
<td>Typhoid vaccine inoculations</td>
<td>281</td>
</tr>
<tr>
<td>Clinical examination and reexamination of the teeth</td>
<td>862</td>
</tr>
<tr>
<td>Teeth extractions</td>
<td>736</td>
</tr>
<tr>
<td>Teeth fillings</td>
<td>591</td>
</tr>
<tr>
<td>Teeth cleanings</td>
<td>461</td>
</tr>
<tr>
<td>Gum treatments</td>
<td>331</td>
</tr>
</tbody>
</table>

Read table thus: The average number detained in the hospital was 11.
It will be observed that each of the 306 boys admitted was given at least one complete physical examination, that those not inoculated or vaccinated against contagious diseases were treated, that the teeth were examined carefully, and that necessary dental work was done.

By using a preventative method the amount of sickness from diseases and body ailments is held at a minimum. There has been no typhoid fever nor diphtheria in the institution during the last four years. Last spring a case of scarlet fever was reported in one council and immediately the council was isolated and all precautions were taken to stamp out the disease. Medical attention is always available for the boys.

**Psychological examination.** Realizing that a psychologist is an integral part of an institution of this kind a full time psychologist was added to the personnel of the school in November, 1935. Any student failing to make a suitable score on the Otis Self-Administering Intelligence Examination given by the principal, is given either the Herring revision or Stanford revision of the Binet-Simon test by the psychologist. In addition to mental and performance tests, personality tests are also given. This group includes tests in perception, motor response, emotional persistence, and psychomotor response and a study of both
the form and function of the body. While the mental tests are interpreted as intelligence quotients the personality tests are interpreted as secondary functions. The psychologist writes a case history of each boy which is a living picture of the boy and not a dead record of facts. The case history not only gives the outer appearance of the student but the inner as well. Included in the case history are the findings of the psychologist, principal, chaplain, physician, and dentist.

VI. CAMPUS

The campus of the Boys' Industrial School resembles that of a college rather than of a penal institution. At the entrance are two long rows of canna lilies leading to the administration building. Half way down the walk is a fountain with a little boy and girl playing beneath its waters. To the east and west are seen the council quarters and the new school building. Immediately behind the administration building and connected to it by a covered passageway is the chapel building which contains the dining halls for both the officers and boys. The industrial building, commissary, paint shop, laundry, bakery, engine house, water tower, garages, vegetable cellar, machine shed, and granary are placed back of the administration building. Near the edges of the fifteen acre campus are located the poultry
buildings, horse barn, dairy barn, and silos. The swine pens are placed some distance east of the campus. Many trees and flower beds are placed about the grounds to make a beautiful campus.

VII. ORGANIZATION OF COUNCILS

Councils. The basic organization of the school is the council. There are five councils, also known as companies, each of which is managed by a man and his wife who live with the boys but in separate quarters. The advisers have charge of the boys in their respective councils during all of the boys' spare time. Substituting as the father and mother of the boy as long as he is in the council, the advisers are responsible for the physical welfare, health, and comfort of the boy. The councils are known as Booker T. Washington or Company A, Lincoln or Company B, Franklin or Company C, Dewey or Company D, and Edison or Company E.

Council quarters. The five councils have separate quarters although they are located in three buildings. Each council has a large play and reading room. There the boys may play games, such as croquinole, ping pong, dominos, and checkers; or they may read newspapers, books, and magazines. Each council has a radio for the boys. Each boy has an individual bed which is kept in a wholesome condition. Booker T. Washington and Edison Councils sleep in wards with
nine beds to a ward. Franklin Council has two wards with sixteen beds in each and one with twelve beds. Lincoln and Dewey Councils have open dormitories with fifty beds apiece.

Classification of boys. The younger boys are put in Franklin Council. All the negroes are placed in Booker T. Washington Council. The oldest most mature boys are in Lincoln Council while those just younger are put in Dewey Council. The boys of pre-adolescent age are put in Edison Council. A definite attempt is made to group the boys in a homogeneous manner.

VIII. DAILY PROGRAM

No idle moments are found in the daily schedule of the pupil's life. Almost all of the work is done by the boys under supervision of the officers. When the work periods are over supervised entertainment is provided. The dairy and engine house forces do not adhere to the daily schedule which is as follows:

Week Day

Reveille ---------------------------------------- 6:00
Setting up exercises -------------------------- 6:45-6:55
Drill ------------------------------------------------ 7:10
Breakfast ---------------------------------------- 7:15
Detail assignments ---------------------------- 7:45
Recall from assignments ---------------------- 11:50
Dinner ----------------------------------------- 12:15
Play period ----------------------------------- 12:45-1:10
Detail assignments ---------------------------- 1:15
Recall from assignments ---------------------- 5:00
Variations are made in the program from time to time.

In the cooler months chapel is held from 10:30 to 11:30 and a special chapel is held on Sunday afternoons. The programs consist of speakers and entertainers from outside the campus. A change is made in the Sunday evening schedule in the cooler months. A talking picture is substituted for the play period. Nearly all students on the campus are allowed to go and they are very jealous of this time. Some pictures which have been shown are "David Copperfield", "Last Days of Pompey", and several Shirley Temple pictures. A news reel and comedy are shown with each picture.

IX. OCCUPATIONS

A glance at the daily schedule shows that the student in the Industrial School must work over fifty hours a week.
This time is spent in learning a trade. The following trades are taught: carpentering, engineering, shoe repairing, sewing, laundering, farming, barbering, gardening, dairying, poultry raising, hog raising, painting, blacksmithing, cooking, waiting tables, baking, printing, plumbing, office work, electrical work, janitor work, and floral culture.

**Dairying.** One of the most interesting of the occupations carried on by the Boys' Industrial School is dairying. The dairy supplies the school with milk, cream, cheese, and butter. The herd consisted of thirty-five registered and thirty-seven grade Holstein cows. Ranking twelfth in the nation in production for herds of more than thirty cows, the herd has the highest butterfat record of any in Kansas; it is on the Federal Tubercular Free list. The last average yearly production per cow was 14,529 pounds of raw milk and 515 pounds of butter fat.

The cows are milked at 5:00 A.M., 11:15 A.M., and 6:00 P.M. All milking is done by hand; the boys do the milking, weigh the milk, and keep the daily records. They are taught how to care for the cows, prepare rations, and to feed the cows and calves according to production, growth, and general conditions.

**Farming.** The farm work requires more time and work from the boys than any other one occupation. Three hundred
fifty acres of land are under cultivation. Corn is planted in about one hundred fifty acres, alfalfa in seventy-five acres, and sorgo in fifty acres. These crops supply grain, hay, and silage for the horses, cows, and swine. Hay and pasture lands cover over two hundred acres. The farming equipment includes twelve horses and mules, tractors, trucks, ensilage cutter, and other necessary implements.

Gardening. The garden supplies the kitchen with potatoes, lettuce, onions, radishes, peas, beans, cabbage, sweet potatoes, carrots, tomatoes, beets, water melons, cantaloupes, cucumbers, and strawberries. The four acre vineyard supplies the grapes for fruit and jellies. About thirty-five acres are planted to garden crops each year. From twelve to fifteen boys prepare the ground, plant the seeds, cultivate the crops, and gather and deliver the vegetables to the kitchen. A small greenhouse is used to furnish the plants for transplanting and to raise flowers for the school.

Sewing. The well-equipped sewing department is one of the busiest places on the campus. There between 1,500 and 2,000 shirts, pants, pajamas, socks, aprons, and other articles of wearing apparel are repaired each month. A total of 3,309 articles were made in the sewing department in 1935. Articles made by the students are shirts, ties, sheets, pillow slips, aprons, caps, pajamas, and other carp.
The cutting of materials, making button holes, felting, darning, and sewing are done by machines operated by the boys. The new boy begins by cutting buttons off old worn out garments and finishes by operating the machines.

**Other occupations.** The shoe shop repairs and mends the shoes for the boys. The laundry washes all the clothes. All students get their hair cuts from the barber shop. The carpenter shop, plumbing and electrical shop, blacksmith shop, and paint shop repair all odd jobs relating to their work. The bakery bakes the bread and pies for the tables. The kitchen force prepares all the meals under the supervision of a cook. The janitors keep the buildings clean. Heat, water, and ice are supplied by the engine house force. Each department in the institution has its work and each is an integral part of the whole system.

X. **SCHOOL**

**Classification of teachers.** The school employs eight full-time teachers and one half-time teacher including the principal, manual training teacher, print shop teacher, and music teacher. The principal holds a Bachelor of Arts degree from the University of Kansas, and he has done advanced work at the University of Kansas and at the University of Chicago. One teacher has a Master of Science degree from the University of Kansas. Two teachers have first
grade county certificates, one has a second grade county
certificate, and three hold three year renewable certifi-
cates issued by the State Department of Education.

Grades and course of study. The classes range from
the second grade through the tenth grade. The regular
course of study is followed in the grade school. The second,
third, and fourth grades are taught drawing, water color
work, paper cutting, and basketry. The courses offered in
the ninth and tenth grades are General Science, Typing I and
II, Civics, Manual Training I and II, English, Commercial
Arithmetic, and World History.

An opportunity room is provided for the boys who can-
not do second grade work and those who are troublesome in
the regular classes. The morning group consisting of eight-
een last year was divided into two groups. One group did
seventh grade work and the other eighth grade work. The
afternoon group of twenty-three boys was engaged in work
ranging from the second to the sixth grade. The instruction
to these groups is practically all individual.

The teaching day commences at 7:45 A.M. and ends at 5
P.M. with one and one-half hours intermission at noon. The
pupils above the fourth grade go to school only in the morn-
ing or in the afternoon and work on detail the other half of
the day. As shown above the ungraded group is divided into
the morning and afternoon groups.
Library. The library is a beautiful, well-equipped room containing about twenty-five hundred volumes. There are four hundred volumes in the reference library including the fourteenth edition of the Encyclopaedia Britannica and three sets of the World Book.

During the past year four hundred volumes of books for boys have been purchased and one hundred volumes have been donated. Many volumes have been added to the library by the boys of the Boys' Industrial School themselves. The quantity and quality of the reading done by the boys is constantly improving.

In addition to the many books numerous magazines are donated and taken by the school. The following magazines are taken by the Boys' Industrial School: ten copies each of The American Boy, Boys Life, The Open Road for Boys, and St. Nicholas, five copies of Recreation, four copies of The Country Gentleman, three copies each of Popular Mechanics, Popular Science, and The Saturday Evening Post, two copies of The American Magazine, and one copy each of The Literary Digest, The National Geographic, Wee Wisdom, and The Children's Magazine. Current Events, The Scholastic, The Pathfinder, and Our Weekly Reader are taken in quantities sufficient for class room use during the school year. The Junior Red Cross News and The Christian Science Monitor have been received by the school.
Music. As mentioned above the Boys' Industrial School employs a music teacher. The school has a band, glee clubs, quartetts, soloists, a vested choir for chapel services, and instrumentalists. Each class is taught twenty minutes of public school music a day.

Manual training. The manual training shop equipped with a grinder, coping saw, jointer, planer, band saw, lathe, variety saw, morticer, belt sander, and other minor equipment is one of the best in the state.

Printing. The printing department prints all forms used by the Boys' Industrial School except those using a ruling machine. The school magazine, the Jasavac Chronicle, which took its name from the first letter of each word in Victor Hugo's saying "Open a school and you close a prison", is printed monthly and sent to all the parents of the boys in the school. The teacher and eight boys operate this department. The boys work one-half day in winter and all day in the summer months.

XI. OUTSTANDING ACTIVITIES

Sports. Football, basketball, and army ball play an important part in the school activities. In the fall a first and second football team engage in a few games. Intramural basketball games are played between the councils in the early winter months. From this group of more than two hun-
dred boys the varsity and B teams are selected. The varsity
team plays the smaller neighboring high schools. The army
ball team plays the junior teams in Topeka. This contact
with outside teams has given birth to new interests in many
of the boys and has done much to do away with the feeling of
shame and inferiority formerly held by some students.

Swimming. The addition of a regular swimming in-
structor on June 1, 1936, has increased the interest in
swimming. The American Red Cross course of instruction and
tests has been adopted for use. The swimmers are divided
into beginners, swimmers, and life savers. The latter group
receives special instruction in rescue work. Soon after the
instructor took charge 104 boys passed the beginners class
and only fifteen were found unable to swim. A regular swim-
mimg schedule is followed in order that all boys will have
an opportunity to learn to swim. The swimming pool is
treated each night and tested for purity before it is
opened to the swimmers. An antiseptic foot bath and a soap
shower are required of all boys entering the pool.

Band and bugle corps. Of special value to the school
are the band and bugle corps. There are twenty pieces in
the band which plays at school programs and entertains by
request at gatherings in or near Topeka. The bugle corps is
composed of boys from Washington Council. These negro boys
are especially proud of the corps which takes an active part
in the daily program.

**Chapel.** The chapel program is held each Sunday morning from 9:30 to 10:15 in the summer and from 10:30 to 11:30 from September to June. The service is a combination church and Sunday School program. The Women's Christian Temperance Union has been conducting chapel services once a month and a Bible class each week. The following is the regular chapel program:

- The Processional, "Holy, Holy, Holy"
- One Hundredth Psalm and Response
- Prayer followed by the Lord's Prayer
- Apostles Creed
- Gloria
- Special music
- Sunday School lesson
- Announcements
- Address by Chaplain
- Congregational singing
- Doxology
- Benediction
- Recessional

XII. **CAROLE SYSTEM**

**Assignment of credits.** Each boy is given ten credits upon admission to the school; he is given these in order that he may have something to protect. After a complete study of the boy's case is made by the superintendent, principal, secretary, physician, psychiatrist, chaplain, and others, the Classification Committee assigns him a definite number of credits to earn. This committee consists of the superintendent, assistant superintendent, director of boys'
department, principal of the school, and hostess. Age, mental ability, home conditions, physical conditions, community environment, and possible time of leaving the school are factors taken into consideration in assigning credits. The boy has been in school between two and three weeks before his credits are assigned.

Demerits. A boy may earn demerits for misconduct, for instance, if a boy is absent without leave (A. W. C. L.) he loses all his credits. If he is caught smoking in a building he receives one hundred demerits (forty merits equal one credit). If he is caught with matches and tobacco he receives fifty demerits. Some breaches of conduct like quarreling, back talking, sulkiness, fighting, and laziness do not have a definite number of demerits assigned.

Merits. On an average a boy may earn six credits a month, however, if he does extra work or good work he is awarded extra credits. The captain of a company earns one hundred twenty extra merits a month, a first lieutenant one hundred, and a second lieutenant eighty. A boy who cleans the council quarters is given sixty extra merits a month. Extra credit is given to any boy who makes the honor roll and remains on the roll for one month or more. A boy is put on the honor roll if he is a good worker and has good behavior. After being on the honor roll one month he is given two credits, the second month he is given three credits, and
the third and succeeding months he is given four credits. Any officer may take a boy off the honor roll at any time. A boy may also earn extra credits if there have been no escapes in his council or company. The first month each boy receives two credits, the second month three credits, the third month to the seventh month four credits, and from the seventh month on five credits.

Punishment. The boys are usually punished by being given demerits, however, a few cases require stronger punishment. A boy is "put on the gang" for continuous quarreling. Sometimes he is made to stand or walk while the rest play. The technique of handling the boys differs to some extent with the various officers in charge. The use of corporal punishment is held to a minimum and is used only when other methods fail. As stated by Superintendent Cannady "An attitude of doing something with the boy instead of something to or for him" prevails.2

Parole. Shortly before a boy has earned the number of credits assigned to him a parole officer makes an investigation of the boy's home. A report is submitted indicating that the home is a good place for the boy, a bad place for the boy, or neutral. If the home is unsatisfactory a

---
foster home is found for the boy. Agencies co-operating in finding a foster home for the students include the American Legion, Churches, Boy Scouts, Schools, Rotary, and Kiwanis. A boy may be placed in any home where he will be treated satisfactorily and where he is needed. The boy who has been paroled is still under the jurisdiction of the Boys' Industrial School. He may be returned to the school any time if he gets unruly, disobedient, lazy, or causes trouble. However, if the boy adjusts himself to his old or foster home he is discharged and with this act the work of the Boys' Industrial School is ended.
PART II

PERSONAL AND FAMILY SURVEY

At the time of the survey there were 203 students in the Boys' Industrial School. Material relative to the personal and family status of the boys was available.

I. COMMITMENT DATA

Race. The records show that one hundred fifty boys were white, forty-four were negroes, four were Mexicans, three were Indians, one was half negro and half Indian and Italian, and one was Chinese, Mexican, and American. The nationality was recorded in only a few cases.

Age. The age of the majority of the group was the normal age for the sophomore, junior, and senior years of high school with the plurality in the junior year. The ages ranged from 10 years and 3 months to 18 years and 6 months with a median age of 15.3.

Table II shows the number and per cent of boys to their nearest age at the time of commitment to the Boys' Industrial School and the number and per cent of each age at the time of the survey.
TABLE II
THE NUMBER OF BOYS IN THE BOYS' INDUSTRIAL SCHOOL
AND THEIR AGES TO THE NEAREST BIRTHDAY

<table>
<thead>
<tr>
<th>Age nearest birthday (1)</th>
<th>At time of commitment</th>
<th>At time of survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number (2)</td>
<td>Per cent (3)</td>
</tr>
<tr>
<td>19</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>18</td>
<td>7</td>
<td>3.4</td>
</tr>
<tr>
<td>17</td>
<td>22</td>
<td>10.8</td>
</tr>
<tr>
<td>16</td>
<td>37</td>
<td>18.2</td>
</tr>
<tr>
<td>15</td>
<td>50</td>
<td>24.6</td>
</tr>
<tr>
<td>14</td>
<td>34</td>
<td>16.7</td>
</tr>
<tr>
<td>13</td>
<td>35</td>
<td>17.2</td>
</tr>
<tr>
<td>12</td>
<td>21</td>
<td>10.4</td>
</tr>
<tr>
<td>11</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>8</td>
<td>3.9</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>205</strong></td>
<td><strong>Median age 14.1</strong></td>
</tr>
</tbody>
</table>

Rend table thus: There were 37 boys who were 16 years old at the time of commitment. Also there was 1 boy who was 19 years old at the time of the survey.

Length of commitment. The group of boys who had not been paroled amounted to 74.3 per cent of the total enrollment. The time these students had been in the Boys' Industrial School ranged from a few days to almost two and one-half years, however, less than 18 per cent were committed
for more than a year and the median length of time as shown by Table III was 6.8 months.

**TABLE III**

LENGTH OF TIME THE BOYS WHO HAD NOT BEEN PAROLED HAD BEEN IN THE BOYS' INDUSTRIAL SCHOOL AT THE TIME OF THE SURVEY, JULY 1, 1936

<table>
<thead>
<tr>
<th>Time in the Boys' Industrial School (1)</th>
<th>Number (2)</th>
<th>Per cent (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 to 30 months</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>22 to 24 months</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>19 to 21 months</td>
<td>5</td>
<td>3.3</td>
</tr>
<tr>
<td>16 to 18 months</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>13 to 15 months</td>
<td>15</td>
<td>9.9</td>
</tr>
<tr>
<td>10 to 12 months</td>
<td>17</td>
<td>11.2</td>
</tr>
<tr>
<td>7 to 9 months</td>
<td>35</td>
<td>23</td>
</tr>
<tr>
<td>4 to 6 months</td>
<td>40</td>
<td>26.3</td>
</tr>
<tr>
<td>0 to 3 months</td>
<td>34</td>
<td>22.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>152</strong></td>
<td><strong>6.8 months</strong></td>
</tr>
</tbody>
</table>

Read table thus: There were 2 boys who had been in the Boys' Industrial School between 28 and 30 months at the time of the survey. Also these 2 boys represented 1.3 per cent of the group.

**Paroles.** Nearly one-fourth of the boys in the Boys' Industrial School at the time of the survey had been paroled. One boy had been paroled three times and twelve boys had been paroled twice. These students had been returned to the institution because they failed to make satisfactory adjust-
ments or because the home no longer needed them. Twenty of the fifty boys paroled had been returned because they violated their paroles.

**TABLE IV**

**LENGTH OF TIME THE BOYS WHO HAD BEEN PAROLED HAD BEEN IN THE BOYS' INDUSTRIAL SCHOOL BEFORE BEING PAROLED AND THE TOTAL TIME THEY HAD BEEN UNDER JURISDICTION OF THE INSTITUTION**

<table>
<thead>
<tr>
<th>Time before being paroled (1)</th>
<th>Number (2)</th>
<th>Time under jurisdiction (3)</th>
<th>Number (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-26 months</td>
<td>1</td>
<td>73-75 months</td>
<td>1</td>
</tr>
<tr>
<td>23-24 months</td>
<td>2</td>
<td>67-72 months</td>
<td>1</td>
</tr>
<tr>
<td>21-22 months</td>
<td>0</td>
<td>61-66 months</td>
<td>1</td>
</tr>
<tr>
<td>19-20 months</td>
<td>1</td>
<td>55-60 months</td>
<td>3</td>
</tr>
<tr>
<td>17-18 months</td>
<td>3</td>
<td>49-54 months</td>
<td>5</td>
</tr>
<tr>
<td>15-16 months</td>
<td>0</td>
<td>43-48 months</td>
<td>7</td>
</tr>
<tr>
<td>13-14 months</td>
<td>13</td>
<td>37-42 months</td>
<td>6</td>
</tr>
<tr>
<td>11-12 months</td>
<td>13</td>
<td>31-36 months</td>
<td>10</td>
</tr>
<tr>
<td>9-10 months</td>
<td>12</td>
<td>25-30 months</td>
<td>6</td>
</tr>
<tr>
<td>7-8 months</td>
<td>4</td>
<td>19-24 months</td>
<td>6</td>
</tr>
<tr>
<td>5-6 months</td>
<td>1</td>
<td>13-18 months</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7-12 months</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>50</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>11.7</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>
In Table IV is shown the length of time these boys had been in the Boys' Industrial School before being paroled and the total length of time they had been under jurisdiction of the institution at the time of the survey. The median length of time spent in the Boys' Industrial School before being paroled is seen to be 11.7 months, while the total median time under jurisdiction was 36 months. The latter median accounts for the difference between the median age at the time of commitment and at the time of the survey, which was 1.2 years, and the median length of time the students who had not been paroled had been in the school, which was 6.8 months. The total number in Tables III and IV is 202 as the records did not give the parole date for one boy.

A. W. O. L. Table V shows that over four-fifths of the boys in the Boys' Industrial School at the time of the survey had not been absent from the institution. Although the per cent of absences was more than four times as high as the number of escapes from the Girls' Industrial School at Beloit, Kansas, it is not harmful to the institution. An attempt to place responsibility where none has been placed before will show the need for many minor adjustments. The boys are given much freedom under supervision. One-fourth of the boys who had been A. W. O. L. were absent after earn-

---

ing their credits and being returned from parole.

TABLE V

RECORD OF A. W. O. L. FROM THE BOYS' INDUSTRIAL SCHOOL

<table>
<thead>
<tr>
<th>Times A. W. O. L. (1)</th>
<th>Number (2)</th>
<th>Per cent (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>167</td>
<td>82.3</td>
</tr>
<tr>
<td>1</td>
<td>21</td>
<td>10.3</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>5.4</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>203</td>
<td></td>
</tr>
</tbody>
</table>

Read table thus: The number of boys in the Boys' Industrial School who had not been absent without leave was 167. Also this number represented 82.3 per cent of the entire school population.

In Table VI is shown the length of time the boys who had been A. W. O. L. had been committed to the Boys' Industrial School before being absent and the length of time before they were returned to the institution. The median commitment time before being absent, which was 3 months, was reduced almost a month when the nine boys who had been paroled were considered as entering the institution after being returned from parole. Four of these nine boys were returned for parole violation and five were returned for replacement. Almost 45 per cent of those who were A. W. O. L. were returned the same day that they were absent without leave. The median length
of time those who had been A. W. C. L. were at large was
only 1.3 days.

TABLE VI

LENGTH OF TIME THE BOYS WHO HAD BEEN A. W. C. L. HAD BEEN
IN THE BOYS' INDUSTRIAL SCHOOL BEFORE BEING ABSENT
AND THE LENGTH OF TIME BEFORE THEY WERE RETURNED

<table>
<thead>
<tr>
<th>Time in school before first A. W. C. L.</th>
<th>Number (2)</th>
<th>Time before being returned</th>
<th>Number (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 10 days</td>
<td>4</td>
<td>0 days</td>
<td>16</td>
</tr>
<tr>
<td>11 to 20 days</td>
<td>2</td>
<td>1 day</td>
<td>6</td>
</tr>
<tr>
<td>21 to 29 days</td>
<td>4</td>
<td>2 days</td>
<td>6</td>
</tr>
<tr>
<td>1 to 2 months</td>
<td>8</td>
<td>3 days</td>
<td>1</td>
</tr>
<tr>
<td>3 to 4 months</td>
<td>4</td>
<td>11 days</td>
<td>1</td>
</tr>
<tr>
<td>5 to 10 months</td>
<td>5</td>
<td>23 days</td>
<td>2</td>
</tr>
<tr>
<td>11 to 20 months</td>
<td>2</td>
<td>39 days</td>
<td>1</td>
</tr>
<tr>
<td>21 to 30 months</td>
<td>1</td>
<td>296 days</td>
<td>1</td>
</tr>
<tr>
<td>31 to 40 months</td>
<td>5</td>
<td>not given</td>
<td>2</td>
</tr>
<tr>
<td>41 to 50 months</td>
<td>1</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

Total 36  
Median 3 months  
36 days

Read table thus: There were 4 boys who had been absent without leave after being in the Boys' Industrial School between 1 to 10 days. Also 16 boys were returned the same day that they were absent.

II. SCHOOLING RECORD

The number and per cent of students that were in each grade when they last attended school prior to commitment to
the Boys' Industrial School is shown in Table VII.

**TABLE VII**

NUMBER OF BOYS IN EACH GRADE WHEN LAST IN SCHOOL PRIOR TO COMMITMENT TO THE BOYS' INDUSTRIAL SCHOOL

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
<td>3.4</td>
</tr>
<tr>
<td>9</td>
<td>19</td>
<td>9.4</td>
</tr>
<tr>
<td>8</td>
<td>31</td>
<td>15.3</td>
</tr>
<tr>
<td>7</td>
<td>33</td>
<td>16.3</td>
</tr>
<tr>
<td>6</td>
<td>21</td>
<td>10.3</td>
</tr>
<tr>
<td>5</td>
<td>28</td>
<td>13.8</td>
</tr>
<tr>
<td>4</td>
<td>19</td>
<td>9.4</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>2.9</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>2.9</td>
</tr>
<tr>
<td>Unclassified</td>
<td>32</td>
<td>15.8</td>
</tr>
<tr>
<td>Total</td>
<td>203</td>
<td>7.2</td>
</tr>
</tbody>
</table>

Read table thus: There was 1 boy or 0.5 per cent of the entire group who was in grade 11 when he was last in school before his commitment to the Boys' Industrial School.

As shown the grades of 15.8 per cent of the boys were not given on the commitment records. The grades ranged from grade two to grade eleven with the median at 7.2. Two boys were unable to read or write.
III. HOME AND FAMILY CONDITIONS

Residence: Table VIII shows the residence of the boys in the institution at the time of the survey.

<table>
<thead>
<tr>
<th>Number of cases (1)</th>
<th>Towns with each number (2)</th>
<th>Towns (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>1 Kansas City</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>1 Wichita</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>2 Atchinson, Topeka</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1 Dodge City</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>3 Emporia, Garden City, transient</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>8 Coffeyville, Hutchinson, Iola, Leavenworth, Manhattan, Newton, Pittsburg, Russell</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>4 Arkansas City, Columbus, Lawrence, Wellington</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>7 Chanute, Fredonia, Junction City, Morgantown, Nickerson, Parsons, not stated</td>
<td></td>
</tr>
</tbody>
</table>

203 61 Total

Read table thus: There were 44 boys committed from 1 town, namely, Kansas City.

It will be observed that five boys were transient
cases and two were listed as not stated. Also, that a large majority of those committed to the Boys' Industrial School came from the larger cities of Kansas. Less than 15 per cent came from cities of fewer than 2,500 population. The number committed from any given city may change from one biennium to the next but the tendency for Kansas City, Topeka, and Wichita to lead in numbers is constant. This is shown by the fact that of the 7,080 boys committed to the institution at the time of the survey 824 resided in Ryan-dotte County, 545 in Shawnee County, and 460 in Sedgwick County. About 8 per cent of the boys have been committed from 50 per cent of the counties of Kansas, while 50 per cent of the boys have been committed from 10 per cent of the counties.

Father's business. The commitment papers showed forty-one fathers dead and eighteen unknown; however, if their occupations were shown they are listed in Table IX. That sixty-four mothers and thirty-seven stepfathers were working to support their families was also shown by the records. A total of fifty-nine fathers, mothers, and stepfathers were working on relief; or, in other words, one-fourth of the families were dependent upon relief work for their livelihood. The entrance statements showed one hundred forty families listed as poor in regard to their pecuniary circumstances, fourteen as very poor, eighteen as
fair, two as good, and one above average. The occupations of most of the boys' fathers were those which do not give very high financial returns or social security. A summary of data relative to the occupations of the fathers is shown in Table IX.

TABLE IX

<table>
<thead>
<tr>
<th>Occupation (1)</th>
<th>Number (2)</th>
<th>Per cent (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer</td>
<td>26</td>
<td>17.8</td>
</tr>
<tr>
<td>Relief worker</td>
<td>24</td>
<td>16.4</td>
</tr>
<tr>
<td>Carpenter, Farmer, Mechanic, Railroad, Truck driver, Unemployed (five each)</td>
<td>30</td>
<td>20.6</td>
</tr>
<tr>
<td>Janitor</td>
<td>4</td>
<td>2.7</td>
</tr>
<tr>
<td>Barber, Miller (three each)</td>
<td>6</td>
<td>4.1</td>
</tr>
<tr>
<td>Boilermaker, on Charity, Factory worker, Grocer, in Jail, Machinist helper, Miner, Odd jobs, Packing house worker, Plumber, Quarryman, Well driller, Woodcutter (two each)</td>
<td>26</td>
<td>17.8</td>
</tr>
<tr>
<td>Auto company worker, Blacksmith, Brick yard worker, Chauffer, Creamery worker, Dish washer, Electrician, Farm hand, Gambling house operator, Ice and coal company worker, Ice plant worker, Laundryman, Mail messenger, Mason, Mill foreman, Minister, Navy, Plasterer, Powder firer, Printer, Restaurant owner, Road maintainer, Roofer, Saw mill worker, Second hand dealer, Steam shovel operator, Stock yard worker, Tailor, Teamster, Umbrella repairer (one each)</td>
<td>30</td>
<td>20.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>146</strong></td>
<td></td>
</tr>
</tbody>
</table>

Read table thus: There were 26 boys whose fathers were laborers. These 26 boys represent 17.8 per cent of those listed.
Family data. Many of the boys in the Boys' Industrial School came from homes disrupted by death, desertion, and divorce. Data relative to the parents of the boys is shown in Table X.

TABLE X

SUMMARY OF DATA RELATIVE TO PARENTS OF THE BOYS

<table>
<thead>
<tr>
<th>(1)</th>
<th>Number (2)</th>
<th>Per cent (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys with both parents living</td>
<td>124</td>
<td>61.1</td>
</tr>
<tr>
<td>Boys with both parents living and living together</td>
<td>80</td>
<td>39.4</td>
</tr>
<tr>
<td>Boys with both parents living and separated</td>
<td>44</td>
<td>21.7</td>
</tr>
<tr>
<td>Boys with both parents dead</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Boys with father dead</td>
<td>41</td>
<td>20.2</td>
</tr>
<tr>
<td>Boys with father unknown</td>
<td>17</td>
<td>8.4</td>
</tr>
<tr>
<td>Boys with mother dead</td>
<td>26</td>
<td>12.8</td>
</tr>
<tr>
<td>Boys with mother unknown</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Boys having a stepfather</td>
<td>55</td>
<td>27.1</td>
</tr>
<tr>
<td>Boys having a stepmother</td>
<td>15</td>
<td>7.4</td>
</tr>
</tbody>
</table>

Read table thus: There were 124 boys or 61.1 per cent of the entire group who had both parents living at the time they were committed to the Boys' Industrial School.

It will be noted that there is considerable overlapping among the items in Table X and that the number does not total 203 nor the per cent 100. Broken homes seem to estab-
lish themselves as a large contributing factor in juvenile
delinquency. Table X shows that 61.1 per cent of the boys
had both parents living when they were admitted to the Boys'
Industrial School, but that only 39.4 per cent were living
together. In other words, slightly less than two-thirds of
the boys came from homes that were not "normal" homes.

Table XI shows the number of persons living in the
homes of the boys at the time of their commitment. The
range was from 2 to 14 persons with the median at 5.8.

TABLE XI
NUMBER OF PERSONS LIVING IN THE HOMES OF THE BOYS PRIOR
TO THEIR COMMITMENT TO THE BOYS' INDUSTRIAL SCHOOL

<table>
<thead>
<tr>
<th>Number in the home (1)</th>
<th>Number of homes (2)</th>
<th>Per cent (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>11-12</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>9-10</td>
<td>11</td>
<td>5.5</td>
</tr>
<tr>
<td>7-8</td>
<td>46</td>
<td>22.6</td>
</tr>
<tr>
<td>5-6</td>
<td>49</td>
<td>24.1</td>
</tr>
<tr>
<td>3-4</td>
<td>64</td>
<td>31.5</td>
</tr>
<tr>
<td>1-2</td>
<td>8</td>
<td>3.9</td>
</tr>
<tr>
<td>Unknown</td>
<td>18</td>
<td>9.9</td>
</tr>
<tr>
<td>Total</td>
<td>205</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>5.8</td>
<td></td>
</tr>
</tbody>
</table>

Read table thus: There were 3 boys who shared a
home with 13 to 14 others. Also these 3 boys represented
1.5 per cent of the total number.
Religious affiliations and views. In Table XII is shown the denominational affiliation or the church attended by the boys before admittance to the Boys' Industrial School.

**TABLE XII**

DENOMINATIONAL AFFILIATION OR THE CHURCH ATTENDED BY THE BOYS BEFORE ADMITTANCE TO THE BOYS' INDUSTRIAL SCHOOL

<table>
<thead>
<tr>
<th>Denomination</th>
<th>Number (2)</th>
<th>Per cent (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baptist</td>
<td>34</td>
<td>16.7</td>
</tr>
<tr>
<td>Methodist</td>
<td>33</td>
<td>16.3</td>
</tr>
<tr>
<td>Christian</td>
<td>20</td>
<td>9.9</td>
</tr>
<tr>
<td>Catholic</td>
<td>17</td>
<td>8.4</td>
</tr>
<tr>
<td>Protestant</td>
<td>15</td>
<td>7.4</td>
</tr>
<tr>
<td>Church of God, Salvation Army (seven each)</td>
<td>14</td>
<td>6.9</td>
</tr>
<tr>
<td>Holiness, Lutheran, Nazarine (four each)</td>
<td>12</td>
<td>5.9</td>
</tr>
<tr>
<td>Advent</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Church of Christ, Pentacostal, United Brethren (two each)</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Assembly of God, Calvary, Episcopal, Holy Church, Mount Zion, Presbyterian (one each)</td>
<td>7</td>
<td>3.4</td>
</tr>
<tr>
<td>Not listed</td>
<td>42</td>
<td>20.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>203</strong></td>
<td></td>
</tr>
</tbody>
</table>

Read table thus: There were 34 boys or 16.7 per cent of the students who expressed a membership in or attended the Baptist Church.

The above data represented in many cases the church membership of the parents, and, though in some instances no
mention was made of the student's affiliation, the writer assumed that the son attended the same church as the parents.

A summary of religious views held by the boys is shown in Table XIII.

### TABLE XIII

**RELIGIOUS VIEWS OF THE BOYS IN THE BOYS' INDUSTRIAL SCHOOL**

<table>
<thead>
<tr>
<th>Questions (1)</th>
<th>Answers (2)</th>
<th>Number (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you attend church regularly?</td>
<td>Yes</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Sometimes, Fairly so (six each)</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Only occasionally, Not very (two each)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Most of time, Seldom, Once in a while, Nearly always (one each)</td>
<td>4</td>
</tr>
<tr>
<td>Did you attend Sunday School?</td>
<td>Yes</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Not lately, Not very often, Once in a while, Only occasionally, Seldom, Some (one each)</td>
<td>6</td>
</tr>
<tr>
<td>Do you believe in God?</td>
<td>Yes</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Don't know</td>
<td>4</td>
</tr>
<tr>
<td>Do you believe He is interested in you?</td>
<td>Yes</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Don't know</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>I guess He is, I'm not sure, Don't think so, Not sure (one each)</td>
<td>4</td>
</tr>
<tr>
<td>Do you believe He will help you?</td>
<td>Yes</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td>No, Guess so (two each)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Don't know</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Don't think so, He may, Hope so, If I do right, I do if I pray, I do if I help myself, Not sure, Sometimes (one each)</td>
<td>8</td>
</tr>
</tbody>
</table>

Read table thus: There were 44 boys who answered "yes" to the question "Did you attend church regularly?"
The above data were compiled from the entrance statements made by the boys upon admission to the institution. It will be observed that a majority of the boys answered the questions in the affirmative, but it is doubtful if many of them have had any serious religious experience.

IV. OFFENSES

Table XIV lists the offenses for which the boys were sentenced to the Boys' Industrial School.

### TABLE XIV

<table>
<thead>
<tr>
<th>Offenses for which the boys were sentenced to the Boys' Industrial School</th>
<th>Times listed (2)</th>
<th>Per cent (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stealing</td>
<td>127</td>
<td>62.6</td>
</tr>
<tr>
<td>Delinquent</td>
<td>30</td>
<td>14.8</td>
</tr>
<tr>
<td>Incorrigible</td>
<td>29</td>
<td>14.3</td>
</tr>
<tr>
<td>Theft</td>
<td>28</td>
<td>13.8</td>
</tr>
<tr>
<td>Truancy</td>
<td>14</td>
<td>6.9</td>
</tr>
<tr>
<td>Running away</td>
<td>8</td>
<td>3.9</td>
</tr>
<tr>
<td>Burglary, Immoral conduct, Rape (four each)</td>
<td>12</td>
<td>5.9</td>
</tr>
<tr>
<td>Forgery, Lying, Petty larceny (two each)</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Assault, Disobeys, Embezzlement, Placement, Robbery (one each)</td>
<td>5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Read table thus: The word stealing appeared 127 times in the list of offenses for which the boys were committed to the Boys' Industrial School. Also stealing was listed on 62.6 per cent of the commitment papers.
It will be observed that stealing was listed on 127 commitment papers, or on 62.6 per cent. If stealing, theft, burglary, petty larceny, embezzlement, and robbery were all considered as stealing then stealing would appear on 80.3 per cent of the commitment papers or would represent 62.9 per cent of all offenses listed. Theft in nearly every case meant stealing a bicycle or an automobile. Delinquency and incorrigibility were used in about one-third of the papers, but if the exact offenses could be determined they were recorded in the above table.

Less than one in every thirteen boys in the Boys' Industrial School were sent there for committing their first offense. Those who had been in trouble once before represented 11.8 per cent of the total group, while 78.8 per cent of the boys had been in trouble at least twice before they were committed to the Boys' Industrial School. The most offenses recorded against any one boy were nineteen store robberies.
PART III

SURVEY OF INTELLIGENCE, EDUCATIONAL ACHIEVEMENT, AND PERSONALITY

I. INTELLIGENCE STUDY

As was stated in the introduction, a battery of tests was given to all available boys of the Boys' Industrial School during June and July, 1936. Included in these tests was the Schrammel-Brannan revision of the Army Group Examination Alpha. From this test mental ages, intelligence quotients, and percentile ranks were computed. The mental age of a person is the age of a normal person having his mental ability. The intelligence quotient, or I Q, is the ratio between the mental age and the chronological age. If the mental and chronological ages are the same the ratio is one and the I Q is 100. A person whose score equals or exceeds the score of 75 per cent of the persons of his age in intelligence has a percentile rank of 75. One whose score exceeds 50 per cent of the scores has a percentile rank of 50, etc. A normal person has a percentile rank of 50. Only eighty-nine boys taking the Army Alpha test made suitable scores to permit interpretation by the norms as several of them made no attempt to solve the problems nor to answer the questions.

Table XV shows the results of the Army Alpha test and
the intelligence quotients as listed on the records of the school. The records of the school, as stated before, were based upon the Otis Self-Administering Intelligence Examination or the Herring revision or the Stanford revision of the Binet-Simon test.

TABLE XV

DISTRIBUTION OF INTELLIGENCE QUOTIENTS OF BOYS IN THE BOYS' INDUSTRIAL SCHOOL

<table>
<thead>
<tr>
<th>I.Q. range</th>
<th>From school record</th>
<th>From Army Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per cent</td>
</tr>
<tr>
<td>110-119</td>
<td>9</td>
<td>4.3</td>
</tr>
<tr>
<td>100-109</td>
<td>22</td>
<td>10.4</td>
</tr>
<tr>
<td>90-99</td>
<td>40</td>
<td>19</td>
</tr>
<tr>
<td>80-89</td>
<td>35</td>
<td>16.6</td>
</tr>
<tr>
<td>70-79</td>
<td>58</td>
<td>27.5</td>
</tr>
<tr>
<td>60-69</td>
<td>32</td>
<td>15.1</td>
</tr>
<tr>
<td>50-59</td>
<td>14</td>
<td>6.6</td>
</tr>
<tr>
<td>40-49</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>89</td>
</tr>
</tbody>
</table>

Read table thus: There were 9 boys, or 4.3 per cent of the group, whose I.Q.'s were between 110 and 119.

The intelligence quotients ranged from 46 to 119 on the school records and from 59 to 107 on the Army Alpha test. The Q1 (25th percentile) for the school records was 71 and
for the Army Alpha 68.9. The $Q_3$ (75th percentile) was 94.6 and 87, respectively. That is, 50 per cent of the boys had $I Q$'s between 71 and 94.6 according to the school records or between 68.9 and 87 according to the Army Alpha test. In a study of one thousand unselected children Terman\textsuperscript{4} found that the middle 50 per cent ranged between 92 and 108.

It will be observed from the above table that nearly two-thirds of the boys, as shown by the school records, were below normal or average intelligence according to Terman's classification\textsuperscript{5} and that over three-fourths, as shown by the Army Alpha test, were below normal intelligence. Also that 211 boys were reported on the school records. This increase of eight boys over the 203 in the institution at the time of the survey represented the new admissions during the time this part of the survey was being completed.

The median mental age of the 89 boys who took the Army Alpha test was 11.4 years as compared to a median chronological age for this group of 15.4 years. The median chronological age as shown in Table II was 14.1 years at the time of commitment and 15.3 years at the time of the survey. This relationship of the mental ages and the intelligence quotients is shown in Table XVI.

\textsuperscript{4}Lewis M. Terman, Measurement of Intelligence, pp. 66-77.

\textsuperscript{5}Ibid., p. 79.
TABLE XVI

DISTRIBUTION OF THE BOYS IN THE BOYS' INDUSTRIAL SCHOOL ACCORDING TO INTELLIGENCE QUOTIENTS AND MENTAL AGES

<table>
<thead>
<tr>
<th>Mental age</th>
<th>I Q range</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>100-109 (2)</td>
<td>90-99 (3)</td>
<td>80-89 (4)</td>
<td>70-79 (5)</td>
<td>60-69 (6)</td>
<td>50-59 (7)</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>3</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>14</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>8</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>12</td>
<td>14</td>
<td>26</td>
<td>23</td>
<td>3</td>
</tr>
</tbody>
</table>

Median mental age 11.4
Median I Q 75.2

Read table thus: There was 1 boy whose mental age was 17 and whose I Q was between 100 and 109.

II. EDUCATIONAL ACHIEVEMENT STUDY

It was attempted to measure the achievement of the boys in English, reading, arithmetic, spelling, civics, and geography for the educational survey. For this study the following tests issued by the Bureau of Educational Measurements, Emporia, Kansas, were used:
Davis-Schrammell Elementary English Test, Form E, Grades IV-VIII

Emporia Silent Reading Test, Form A, Grades III-VIII

Kansas Arithmetic Test, Form A, Grades III-V and Grades VI-VIII

Davis-Schrammell Spelling Test, Form A, Grades I-IX

Mordy-Schrammell Elementary Civics Test, Form A, Grades VII-IX

Geography, Every Pupil Scholarship Test, April, 1936, Grades IV-VII

The author gave the above tests to the boys of the Boys' Industrial School in groups ranging from fifteen to twenty-five pupils. Although the students were relieved of detail duty during the periods required for the examinations many of them were sulky and failed to do their best. The weather was extremely hot during the two months when the tests were given.

In measuring the achievement the boys made on the above tests norms set up by the Bureau of Educational Measurements from a nation wide testing program were used. The boys were divided into four groups; namely, those who made scores equal to or above the $Q_3$, those ranging lower than the $Q_3$ and equal to or above the median, those scoring below the median and equal to or above the $Q_1$, and those scoring below the $Q_1$. Any boy making a score equal to or higher than the score for the $Q_3$ for his grade was listed in the first named group. The boy who made a score equal to or
above the score for the median for his grade and below the score for the $c_3$ was put in the second group, etc. Table XVII shows the results of these tests.

**TABLE XVII**

**DISTRIBUTION OF THE BOYS IN THE BOYS' INDUSTRIAL SCHOOL ACCORDING TO SCORES ON ENGLISH, READING, ARITHMETIC, SPELLING, CIVICS, AND GEOGRAPHY TESTS**

<table>
<thead>
<tr>
<th>Tests</th>
<th>English (2)</th>
<th>Reading (3)</th>
<th>Arithmetic (4)</th>
<th>Spelling (5)</th>
<th>Civics (6)</th>
<th>Geography (7)</th>
<th>Total (8)</th>
<th>Percent (9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal to or above $c_3$</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>1.5</td>
</tr>
<tr>
<td>Below $c_3$ and above median</td>
<td>2</td>
<td>7</td>
<td>0</td>
<td>10</td>
<td>4</td>
<td>2</td>
<td>25</td>
<td>4.2</td>
</tr>
<tr>
<td>Below median and above $c_1$</td>
<td>13</td>
<td>9</td>
<td>5</td>
<td>17</td>
<td>4</td>
<td>6</td>
<td>54</td>
<td>9.2</td>
</tr>
<tr>
<td>Below $c_1$</td>
<td>96</td>
<td>90</td>
<td>107</td>
<td>90</td>
<td>53</td>
<td>65</td>
<td>501</td>
<td>85.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>111</strong></td>
<td><strong>112</strong></td>
<td><strong>112</strong></td>
<td><strong>120</strong></td>
<td><strong>61</strong></td>
<td><strong>73</strong></td>
<td><strong>589</strong></td>
<td></td>
</tr>
</tbody>
</table>

Read table thus: There were 9 boys or 1.5 per cent of the group whose scores were equal to or above the $c_3$.

The above table shows that only 5.7 per cent of those taking the tests made scores equal to or above the median for the nation-wide test as a whole. Also that 85.1 per cent of the group made a score lower than the score for the $c_1$.

Tables XVIII and XIX show the results of an age-grade
study. In Table XVIII is shown the relationship between the ages of the boys and the grades they were in at the time of commitment to the Boys' Industrial School.

**TABLE XVIII**

**AGE- GRADE STUDY, AGE AT COMMITMENT- GRADE WHEN LAST IN SCHOOL**

<table>
<thead>
<tr>
<th>Age</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
<th>VIII</th>
<th>IX</th>
<th>X</th>
<th>XI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
<td>(8)</td>
<td>(9)</td>
<td>(10)</td>
<td>(11)</td>
<td>(12)</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>8</td>
<td>14</td>
<td>14</td>
<td>2</td>
<td>1</td>
<td></td>
<td>52</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>6</td>
<td>21</td>
<td>30</td>
<td>22</td>
<td>32</td>
<td>31</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>175</td>
</tr>
<tr>
<td>Normal</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>4</td>
<td>7</td>
<td>13</td>
<td>13</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>63</td>
</tr>
<tr>
<td>Retarded</td>
<td>5</td>
<td>6</td>
<td>16</td>
<td>26</td>
<td>15</td>
<td>18</td>
<td>16</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>102</td>
</tr>
</tbody>
</table>

**Read table thus:** There was 1 boy who was 8 years old and in the second grade when he attended school last prior to his commitment.

*Per cent
Table XIX shows the relationship between the ages of the boys and the grades they were in at the time of the survey.

### TABLE XIX

**AGE-GRADE STUDY AT THE TIME OF THE SURVEY**

<table>
<thead>
<tr>
<th>Age</th>
<th>Grade</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Normal</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Retarded</td>
<td>2</td>
<td>11</td>
</tr>
</tbody>
</table>

**PCN:** 0 3.3 17.9 13 31.3 31.8 42.9 100 50 26.3
**PCR:** 100 91.7 82.1 87 68.7 63.2 57.1 0 0 72.9
**PCA:** 0 0 0 0 0 0 0 0 50 0.8

Read table thus: There was 1 boy who was 10 years old and in the fourth grade at the time of the survey.

In Tables XVIII and XIX it was assumed that a person with a chronological age of eight years is normally in the
second or third grade and that he advances one grade a year. The numbers contained between the heavy lines represent those whose grade standings were normal for their ages. Those to the left of the heavy lines were older than the normal age for their grade and those to the right were younger than the normal age for their grade. Each step to the left or right of the heavy lines indicates one year variation from normal age.

It will be observed from the above tables that ten boys were advanced in school for their ages at the time of commitment to the Boys' Industrial School, but that only one boy was accelerated at the time of the survey. A careful check of the boys' names reveals that seven of the ten listed as accelerated in Table XVIII do not appear in Table XIX. Of the three boys listed one had been in the school two years and was in the same grade, another had advanced one grade in two years, and the other had been in the institution only one month. The latter boy was recorded as accelerated in both tables.

The per cent of boys listed as normal is 36 in Table XVIII and 26.3 in Table XIX. The per cent with normal intelligence as listed in Table XV was 33.7 according to school records and as 20.2 according to the Army Alpha test. With two-thirds to three-fourths of the boys below normal intelligence it is not surprising to find that more than
one-half the pupils were retarded.

The amount of acceleration, of normalcy, and of retardation is summarized in Table XX. The median retardation was 1.6 years at the time of commitment to the institution and 1.98 years at the time of the survey. However, the median mental age as shown by Table XVI is 3.9 years lower than the median chronological age as shown in Table II.

**TABLE XX**

**SUMMARY OF PUPILS OVER AGE, OF NORMAL AGE, AND UNDER AGE IN THE BOYS' INDUSTRIAL SCHOOL**

<table>
<thead>
<tr>
<th></th>
<th>At the time of commitment</th>
<th>At the time of the survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number (2)</td>
<td>Per cent (3)</td>
</tr>
<tr>
<td>3 years under age</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>2 years under age</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>1 year under age</td>
<td>8</td>
<td>4.5</td>
</tr>
<tr>
<td>Normal</td>
<td>63</td>
<td>36</td>
</tr>
<tr>
<td>1 year over age</td>
<td>41</td>
<td>23.4</td>
</tr>
<tr>
<td>2 years over age</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>3 years over age</td>
<td>9</td>
<td>5.1</td>
</tr>
<tr>
<td>4 years over age</td>
<td>11</td>
<td>6.3</td>
</tr>
<tr>
<td>5 years over age</td>
<td>5</td>
<td>2.9</td>
</tr>
<tr>
<td>6 years over age</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>7 years over age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>1.6 years over age</td>
<td></td>
</tr>
</tbody>
</table>

Read table thus: There was 1 boy or 0.6 per cent of the group who was 3 years under age for his school grade when he was last in school before his commitment.
III. PERSONALITY STUDY

The personality study is based upon tests given by Doctor Herbert Shuey, psychologist for the Boys' Industrial School, in perception, motor response, emotional persistence, body build, and psychomotor response. The above tests were given by Doctor Shuey to an unselected group of 185, to 201 patients from the Topeka State Hospital, Topeka, Kansas, and to 99 boys from the Boys' Industrial School. The results of these tests are shown in Table XXI.

**TABLE XXI**

COMPARISON OF PERSONALITY STUDIES OF A NORMAL GROUP, OF INMATES OF THE TOPEKA STATE HOSPITAL, AND OF BOYS OF THE BOYS' INDUSTRIAL SCHOOL

<table>
<thead>
<tr>
<th>(1)</th>
<th>Unselected group of 185 (2)</th>
<th>201 patients from Hospital (3)</th>
<th>99 boys from Boys' School (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary type</td>
<td>30 per cent</td>
<td>5 per cent</td>
<td>2 per cent</td>
</tr>
<tr>
<td>Mixed type</td>
<td>58 per cent</td>
<td>88 per cent</td>
<td>94 per cent</td>
</tr>
<tr>
<td>Secondary type</td>
<td>12 per cent</td>
<td>7 per cent</td>
<td>4 per cent</td>
</tr>
</tbody>
</table>

Read table thus: There were 30 per cent of the unselected group whose personalities were listed as of the primary type.

According to Doctor Shuey*, the cases of the primary type

---

*Data obtained from Doctor Shuey by interview.
type have a full body build, with lateral lines predominating, a full face, and stubby fingers. They have a flowing of emotion, that is, they go easily from one extreme to the other. They are extroverted socially. They are objective, practical, have close contact with reality, and make good adjustments to their environment.

The cases of the secondary type have a slender build, with vertical lines predominating, an oval or long face, and slender fingers. They are emotionally jerky, that is, they have a tendency for outbursts of emotions. They store up emotions for an outburst. They are introverted socially. They are subjective, idealistic, out of contact with reality, daydream excessively, and have difficulty in adjusting themselves to their environment socially, sexually, and physically.

The cases of the mixed type are divided into two types, the mixed primary and the mixed secondary. The cases of the mixed primary type are full of energy which may or may not be directed. They have feelings of self-sufficiency or persecutions. Either they can not get along or they think they are as good as anybody. The cases of the mixed secondary type are unstable emotionally, physically, and sexually.

From the above table it will be observed that the boys from the Boys' Industrial School have personalities
more similar to the personalities of the inmates of the
Topeka State Hospital than to the normal group.

The body build or constitutional index of one hundred
boys of the Boys' Industrial School is shown in Table XXII.
A person with a full body build will tend toward a constituti-
onal index of zero. A person with a thin body build will
tend toward a constitutional index of one hundred.

TABLE XXII

CONSTITUTIONAL INDEX OF THE BOYS IN
THE BOYS' INDUSTRIAL SCHOOL

<table>
<thead>
<tr>
<th>Constitutional index</th>
<th>Number (2)</th>
<th>Per cent (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-50</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>31-40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>21-30</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>11-20</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>1-10</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Total 100
Median 32

Read table thus: There were 14 boys who had a
constitutional index between 41 and 50.

It will be observed that the boys tend toward the
full body type. The median score was 32 and the range was
from 6 to 50.
PART IV

SUMMARY AND CONCLUSIONS

I. SUMMARY

In summarizing the study the following should be borne in mind:

1. Origin, Control, Organization, and Administration of the Boys' Industrial School
   1. Only boys under sixteen years of age are committed to the Boys' Industrial School
   2. Each boy was given a complete physical examination and a psychological examination upon admission to the Boys' Industrial School
   3. The boys were divided into homogeneous groups
   4. A daily schedule kept the boys busy at work or play so that no idle moments were afforded them
   5. Any of over twenty trades were available for the boys to learn
   6. A school enabled the boys to continue their education to the junior year in high school
   7. The assignment of credits to be earned by each boy was made only after a careful study of the boy
   8. The responsibility for earning a parole was
placed upon each boy

II. Personal and Family Survey

1. Nearly one-fourth of the boys committed to the
   Boys' Industrial School were negroes
2. A large majority of the boys committed to the
   institution were committed for the first time
3. The median length of time the boys were in the
   Boys' Industrial School was 6.8 months
4. Less than one-fifth of the boys were absent
   without leave
5. Nearly one-half of the boys were committed
   from five of the most populous counties
6. The occupations of the boys' fathers were those
   which do not give very high financial returns
7. The majority of boys came from homes that were
   not "normal" homes
8. Stealing was given as the offense for committing
   most of the boys to the Boys' Industrial
   School

III. Survey of Intelligence, Educational Achievement, and
   Personality

1. The mental ability of over two-thirds of the
   boys was below normal or average intelligence
2. Over ninety per cent of the boys were below the
   average for the nation-wide testing contest
in the subjects in which they were tested

3. The grade retardation, although great, was not as much as the mental retardation

4. The personalities of the boys tended to correspond closely with those of the inmates of the Topeka State Hospital, Topeka, Kansas

II. CONCLUSIONS

From the findings of this survey it is the opinion of the writer that the Boys' Industrial School is meeting a need in the field of juvenile delinquency. Boys who come from broken homes, homes stricken with poverty and located in bad neighborhoods; boys who have been encouraged in truancy and who are retarded in school; boys who early in life have come in conflict with the law; these boys need more than a drab cell and a guard to intimidate them into obedience. They need supervision, direction, guidance, protection, opportunities, and above all else a place where they may acquire wholesome attitudes and grow in character. In the opinion of the writer the Boys' Industrial School is filling this need in an admirable way. While some of the boys continue to run afoul of the law, it throws no less credit upon the institution.

The work done by the educational department is commendable. The individual instruction in the two opportun-


ity groups shows an insight into the needs of the boys. However, it seems advisable that this individual instruction should be extended to include a larger number of boys as about two-thirds of the enrollment have less than normal mental ability. The magazines and books furnished by the library are excellent material for the boys to read. The steady increase in the number of volumes and articles read shows that the boys enjoy reading light, clean, and wholesome material. The training given the pupils in music will be appreciated by them in later years. The athletic program which schedules games with outside teams does much to destroy the feelings of inferiority felt by many of the boys of the Boys' Industrial School. This contact should be continued and broadened if possible.

The Boys' Industrial School is not the proper place to send the mentally deficient boys. The per capita cost per year of $556.52 in 1933 and $532.39 in 1934 is placing a premium on these boys which is too far in excess of the good that they can get from the institution in one year. It would seem advisable that the state of Kansas give these boys assistance before they become delinquent and incorrigible, or that the state assist them after parole in order to reap the full benefit of the training given in the Boys' Industrial School, Topeka, Kansas, 1934. p. 37.
Industrial School.

The responsibility for earning a parole is placed squarely upon the boys, as it should be. However, boys who earn paroles should not be returned to the institution without just cause. The proper placing of the boys is as important as the training they receive in the institution. A more intense and comprehensive study of the homes to which the boys are to be placed cannot be too strongly recommended.

The foregoing suggestions are in no way intended as destructive criticisms of the administration of the Boys' Industrial School, but they are intended as suggestions for further improvement of the worthy work carried on by the superintendent and his staff.
BIBLIOGRAPHY


SCHRAMMEL-BRANNAN REVISION

Army Group Examination Alpha

By

H. E. Schrammel, Ph. D., Director, Bureau of Educational Measurements

and

Christine V. Brannan, M. S., M. A.

Published and Distributed by Bureau of Educational Measurements

Kansas State Teachers College, Emporia

Form A

Name .......................................................... Date ...........................................

Date of birth ........................................... Age last birthday .................

Month Day Year

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

Sex .............. Occupation ..................................................

Grade in school, or highest grade reached in school ........................................

GENERAL DIRECTIONS: This is a test to see how well you can answer various types of questions. There are eight parts to the test. Each part begins with easy questions and becomes more difficult toward the end. You are not expected to answer all of the items correctly, but do the best you can.

You will have exactly 40 minutes for the whole test. Read the directions for each part as you come to it, and answer the items as directed. The examiner will give you a signal at the end of each five-minute period; and if you have not already done so, you should then go to the next part. You may go to the next part, however, as quickly as you care to and return later to any unfinished or omitted items. Each item answered correctly counts one point. If you are not sure an answer is correct, you may guess without being penalized.

Do you all understand? Do not ask questions after the test begins.


Copyright, by Kansas State Teachers College, Emporia, Kansas, 1906.

<table>
<thead>
<tr>
<th>Test</th>
<th>Possible Score</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td></td>
</tr>
</tbody>
</table>
PART I

DIRECTIONS: On the line at the left of each test item write the correct answer for that item. Note the examples, which have been correctly marked.

Examples: ....3.... 1. In figure 1, what is the number in the first circle?
   ... 1C.... 2. In figure 1, write the number and the letter which are in the fourth circle.

1. Write the number which, in figure 1, is in the fifth circle and the letter which is in the second circle.
2. Write the sum of the numbers which, in figure 1, are in the second and in the fourth circles.
3. Write the difference between the numbers in the second circle and in the first circle, and also write the letter which is in the fifth circle.
4. In figure 2, what number is in the triangle, but not in the square?
5. What is the sum of the number which is in the triangle but not in the square, and the number which is in the square but not in the triangle?
6. In figure 3, what number is in the triangle, but not in the circle or square?
7. In figure 3, what number is in the square and circle, but not in the triangle?
8. In figure 3, what is the difference between the number which is in the circle but not in the triangle or square, and the number which is in the triangle and square but not in the circle?
9. Print the last letter of the word which is the opposite of wet.
10. If 5 is more than 3, write the number 4, unless 4 is more than 6, in which case, write the number 5.
11. Print the letter which appears in each of the following words: triangle, number, brain, country, sound.
12. Print the letter which appears in only one of the following words: song, square, triangle, oblique, gentle.
13. In figure 4, what number is in the triangle and circle but not in the square?
14. What number is in the same pair of geometrical figures as the number 4?
15. How many spaces are there that are in two and only two geometrical figures?
16. In a foreign language, lani dola means big trees; and reti dola means big women. Print the first letter of the foreign word for women.

Score for Part I.
PART II

DIRECTIONS: For each question in this part select the best one of the three answers, and write its number in the parenthesis at the left.

Example: (2) Stoves are used because: 1. they look well. 2. they furnish heat. 3. they are black.

In the sample, answer No. 2 is the best; therefore, 2 is written in the parenthesis.

( ) 1. The main reason that stone is used for building purposes is that: 1. it makes a good appearance. 2. it is strong and lasting. 3. it is heavy.

( ) 2. If one is held up and robbed in a strange city, he should: 1. apply to the police for help. 2. ask the first man he meets for money to get home. 3. borrow some money at a bank.

( ) 3. Cotton fibre is much used for making cloth because: 1. it grows all over the South. 2. it can be spun and woven. 3. it is a vegetable product.

( ) 4. A grocer should own an automobile because: 1. it is useful in his business. 2. it uses rubber tires. 3. it saves railroad fare.

( ) 5. It is wiser to put some money aside and not spend it all, so that one may: 1. prepare for old age and sickness. 2. collect all the different kinds of money. 3. gamble when he wishes.

( ) 6. All traffic going one way keeps to the same side of the street because: 1. most people are right-handed. 2. the traffic policeman insists on it. 3. it avoids confusion and collisions.

( ) 7. The cause of echoes is: 1. the reflection of sound waves. 2. the presence of electricity in the air. 3. the presence of moisture in the air.

( ) 8. A man should be judged by what he does rather than by what he says because: 1. what a man does shows what he really is. 2. it is wrong to tell a lie. 3. a deaf man cannot hear what is said.

( ) 9. If one does not get a letter from home, which he knows was written, it may be because: 1. it was lost in the mails. 2. he forgets to tell his people to write. 3. the postal service has been discontinued.

( ) 10. Warships are painted gray because gray paint: 1. is cheaper than other colors. 2. is more durable than other colors. 3. makes the ships harder to see.

( ) 11. The feathers on a bird’s wing help him to fly because they: 1. make a wide, light surface. 2. keep the air off his body. 3. keep the wings from cooling off too fast.

( ) 12. A country should have many railroads, because railroads: 1. decrease the price of food materials. 2. make it easy to travel and carry goods. 3. are good for the steel business.

( ) 13. A married man should have his life insured because: 1. death may come at any time. 2. insurance companies are usually honest. 3. his family will not then suffer if he dies.

( ) 14. Inventors patent their inventions because: 1. a patent gives inventors control of their inventions. 2. securing patents creates a greater demand. 3. it is the custom to get patients.

( ) 15. Wheat is better food than corn because: 1. it is more nutritious. 2. it is more expensive. 3. it can be ground finer.

( ) 16. Electrical engineers are highly paid because: 1. their ability is much in demand. 2. they have a college education. 3. they work long hours.

( ) 17. Winter is colder than summer because: 1. the sun shines obliquely in winter. 2. January is a cold month. 3. there is much snow in winter.

( ) 18. It is impossible to see stars at noon because: 1. they have moved around to the other side of the earth. 2. they are so much fainter than the sun. 3. they are hidden behind the sky.

( ) 19. Some men who could afford to own a house live in a rented one because: 1. they do not have to pay taxes. 2. they do not have to buy a rented house. 3. they can make more by investing the money the house would cost.

( ) 20. Glass insulators are used to fasten telegraph wires because: 1. the glass keeps the pole from being burned. 2. the glass keeps the current from escaping. 3. the glass is cheap and attractive.

Score for Part II.
PART III

DIRECTIONS: If the two words of a pair mean the same, or nearly the same, place a plus (+) in the parenthesis. If they mean the opposite, or nearly the opposite, place a minus (−) in the parenthesis.

Examples: (−) 1. good—bad  
(+) 2. little—small

( ) 1. cold—hot  
( ) 2. minus—plus  
( ) 3. day—night  
( ) 4. cry—laugh  
( ) 5. similar—different  
( ) 6. class—group  
( ) 7. shy—timid  
( ) 8. defective—normal  
( ) 9. accept—take  
( ) 10. complex—simple  
( ) 11. credit—debit  
( ) 12. flat—level  
( ) 13. concave—convex  
( ) 14. lax—strict  
( ) 15. toward—from  
( ) 16. careless—anxious  
( ) 17. accumulate—dissipate  
( ) 18. dissension—harmony  
( ) 19. superfluous—essential  
( ) 20. cheerful—melancholy  
( ) 21. concede—deny  
( ) 22. furtive—sly  
( ) 23. commend—approve  
( ) 24. censure—praise  
( ) 25. adversary—colleague  
( ) 26. tease—plague  
( ) 27. decadence—decline  
( ) 28. indict—arraign  
( ) 29. knave—villain  
( ) 30. impecunious—opulent  
( ) 31. champion—advocate  
( ) 32. plenary—complete  
( ) 33. benign—genial  
( ) 34. avarice—cupidity  
( ) 35. wax—wane  
( ) 36. perfunctory—meticulous  
( ) 37. recant—disavow  
( ) 38. lugubrious—maudlin  
( ) 39. aggrandize—belittle  
( ) 40. agglomerate—scatter

PART IV

DIRECTIONS: The words A EATS COW GRASS, in that order, are mixed up and do not make a sentence; but they would be a sentence if put in the right order: A COW EATS GRASS. This statement is true.

The words HORSES FEATHERS HAVE ALL would make a sentence if put in the order ALL HORSES HAVE FEATHERS, but this statement is false.

Look at each of the mixed-up sentences below, and think what it would say if the words were put in the right order. Then if what the sentence would say is true, place a plus (+) in the parenthesis; if what it would say is false, place a minus (−) in the parenthesis.

Examples: (+) 1. a eats cow grass  
(−) 2. horses feathers have all

( ) 1. lions strong are  
( ) 2. leg flies one have only  
( ) 3. months warmest are summer the  
( ) 4. known elephant animal the is smallest the  
( ) 5. leaves the trees in lose their fall  
( ) 6. sides every has four triangle  
( ) 7. seldom forever good lasts luck  
( ) 8. many toes fingers as men as have  
( ) 9. happiness source of always a crime is  
( ) 10. money marry always for men  
( ) 11. flag the English same the as is the American  
( ) 12. usually judge can one actions man his by a  
( ) 13. are clothes all made cotton of  
( ) 14. see are with to eyes  
( ) 15. water and made are butter from cheese  
( ) 16. size now of guns use are great in  
( ) 17. battleships on seldom sails used are  
( ) 18. a ocean cross minutes few can boat the in a  
( ) 19. inflict men pain needless cruel sometimes  
( ) 20. as sheets are napkins used never  
( ) 21. employ debaters irony never  
( ) 22. always sleeplessness clear causes a conscience  
( ) 23. external deceptive never appearances are  
( ) 24. forget trifling friends grievances never

Score for Part III.

Score for Part IV.
**PART V**

**DIRECTIONS:** Look at each row of numbers below, and on the lines write the two numbers that should come next.

**Examples:**

<table>
<thead>
<tr>
<th></th>
<th>2</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>12</td>
<td>15</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>8</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>3</td>
<td>7</td>
<td>11</td>
<td>15</td>
<td>19</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>9</td>
<td>9</td>
<td>7</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>16</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>27</td>
<td>27</td>
<td>23</td>
<td>23</td>
<td>19</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>15</td>
<td>16</td>
<td>14</td>
<td>17</td>
<td>13</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>8</td>
<td>9</td>
<td>12</td>
<td>13</td>
<td>16</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>16</td>
<td>12</td>
<td>15</td>
<td>11</td>
<td>14</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>12</td>
<td>14</td>
<td>13</td>
<td>15</td>
<td>14</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>29</td>
<td>28</td>
<td>26</td>
<td>23</td>
<td>19</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>81</td>
<td>27</td>
<td>9</td>
<td>3</td>
<td>1</td>
<td>1½</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>21</td>
<td>18</td>
<td>16</td>
<td>13</td>
<td>11</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td>12</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>20</td>
<td>17</td>
<td>15</td>
<td>14</td>
<td>11</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>4</td>
<td>8</td>
<td>10</td>
<td>20</td>
<td>22</td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>16</td>
<td>25</td>
<td>36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Score for Part V* .................
PART VI

DIRECTIONS: In each item of this part, the first two words are related to each other in some way. See what the relation is between the first two words; then select the numbered word which is related in the same way to the third word, and write its number in the parenthesis.

Examples: (2) 1. sky—blue: grass—
   1. sweet. 2. stink. 3. odor. 4. nose.
   (3) 2. fish—swims: man—
   1. key. 2. floor. 3. room. 4. door.
   (2) 3. day—night::white—
   1. red. 2. black. 3. clear. 4. pure.

( ) 1. dog—bark::cat—
   1. chair. 2. mew. 3. fire. 4. house
   ( ) 2. father—son::mother—
   1. aunt. 2. nephew. 3. daughter
   4. sister.
( ) 3. dog—puppy::cat—
   1. kitten. 2. dog. 3. tiger. 4. horse.
( ) 4. angels—heaven::men—
   1. earth. 2. women. 3. boys.
   4. Paradise.
( ) 5. heehaw—donkey::bow-wow—
   1. hen. 2. cat. 3. speech. 4. dog.
( ) 6. boy—man::lamb—
   1. sheep. 2. dog. 3. shepherd.
   4. wool.
( ) 7. legs—frog::wings—
   1. eat. 2. swim. 3. bird. 4. nest.
( ) 8. white—black::good—
   1. time. 2. clothes. 3. mother. 4. bad.
( ) 9. add—subtract::multiply—
   1. add. 2. divide. 3. arithmetic. 4. increase.
( ) 10. go—come::sell—
   1. leave. 2. buy. 3. money.
   4. papers.
( ) 11. sweet—sugar::sour—
   1. sweet. 2. bread. 3. man.
   4. vinegar.
( ) 12. peninsula—land::bay—
   1. boats. 2. pay. 3. ocean.
   4. Massachusetts.
( ) 13. December—Christmas::November—
   1. month. 2. Thanksgiving. 3. December. 4. early.
( ) 14. establish—begin::abolish—
   1. slavery. 2. wrong. 3. abolition.
   4. end.
( ) 15. light—dark::noise—
   1. report. 2. ring. 3. silence.
   4. sound.
( ) 16. man—arm::tree—
   1. shrub. 2. limb. 3. flower. 4. bark.
( ) 17. winter—summer::cold—
   1. freeze. 2. warm. 3. wet.
( ) 18. bird—song::man—
   1. speech. 2. woman. 3. boy.
   4. work.
( ) 19. hospital—patient::prison—
   1. cell. 2. criminal. 3. bar. 4. jail.
( ) 20. abundant—scarce::cheap—
   1. buy. 2. costly. 3. bargain.
   4. nasty.

( ) 21. chew—teeth::smell—
   1. sweet. 2. stink. 3. odor. 4. nose.
   ( ) 22. order—confusion::peace—
   1. part. 2. treaty. 3. war. 4. enemy.
( ) 23. eye—head::window—
   1. key. 2. floor. 3. room. 4. door.
( ) 24. floor—ceiling::ground—
   1. earth. 2. sky. 3. hill. 4. grass.
( ) 25. hunter—gun::fisherman—
   1. fish. 2. net. 3. bold. 4. wet.
( ) 26. revolver—man::sting—
   1. gun. 2. hurt. 3. bee. 4. hand.
( ) 27. pan—tin::table—
   1. chair. 2. wood. 3. legs. 4. dishes.
( ) 28. diamond—rare::iron—
   1. common. 2. silver. 3. ore.
   4. steel.
( ) 29. devil—angel::bad—
   1. mean. 2. disobedient. 3. defamed. 4. good.
( ) 30. food—man::fuel—
   1. engine. 2. burn. 3. coal.
   4. wood.
( ) 31. winter—season::January—
   1. February. 2. day. 3. month.
( ) 32. historian—facts::novelist—
   1. fiction. 2. Dickens. 3. writer.
   4. book.
( ) 33. tears—laughter::sorrow—
   1. joy. 2. distress. 3. funeral.
   4. sad.
( ) 34. quarrel—enemy::agree—
   1. friend. 2. disagree. 3. agreeable.
   4. foe.
( ) 35. imitate—invet::copy—
   1. write. 2. pencil. 3. originate.
   4. draw.
( ) 36. hour—day::day—
   1. night. 2. week. 3. hour.
   4. moon.
( ) 37. tolerate—pain::welcome—
   1. pleasure. 2. unwelcome.
   3. friends. 4. give.
( ) 38. engineer—chauffeur::locomotive—
   1. iron. 2. stack. 3. engine. 4. auto.
( ) 39. draw—picture::make—
   1. destroy. 2. table. 3. break.
   4. hard.
( ) 40. advice—command::persuasion—
   1. help. 2. aid. 3. urging.
   4. compulsion.

............. Score for Part VI.
PART VII

DIRECTIONS: In each of the sentences below you have four choices for the last word. Choose the one which makes the truest sentence, and write the number of that word in the parenthesis.

Example: (2) People hear with the:
1. eyes. 2. ears. 3. nose. 4. mouth.

The correct answer is ears; therefore, 2 is written in the parenthesis.

( ) 1. Alfalfa is a kind of:
1. hay. 2. corn. 3. fruit. 4. rice.

( ) 2. The most prominent industry of Detroit is:
1. automobiles. 2. brewing. 3. flour. 4. packing.

( ) 3. The Percheron is a kind of:
1. goat. 2. horse. 3. cow. 4. sheep.

( ) 4. Diamonds are obtained from:
1. mines. 2. reefs. 3. elephants. 4. oysters.

( ) 5. "Habeas corpus" is a term used in:
1. medicine. 2. law. 3. theology. 4. pedagogy.

( ) 6. The mimeograph is a kind of:
1. typewriter. 2. copying machine. 3. phonograph. 4. pencil.

( ) 7. The clarionet is used in:
1. music. 2. stenography. 3. bookbinding. 4. lithography.

( ) 8. Denim is a:
1. dance. 2. food. 3. fabric. 4. drink.

( ) 9. Air and gasoline are mixed in the:
1. accelerator. 2. carburetor. 3. transmission. 4. differential.

( ) 10. Marie Curie was a:
1. singer. 2. writer. 3. actress. 4. scientist.

( ) 11. The Wyandotte is a kind of:
1. horse. 2. fowl. 3. cattle. 4. granite.

( ) 12. Pinochle is played with:
1. rackets. 2. cards. 3. pins. 4. dice.

( ) 13. The penguin is a:
1. bird. 2. fish. 3. reptile. 4. insect.

( ) 14. Newton was most famous in:
1. science. 2. politics. 3. literature. 4. war.

( ) 15. An aspen is a:
1. machine. 2. fabric. 3. tree. 4. drink.

( ) 16. Calcutta is a city in:

( ) 17. The saber is a kind of:
1. musket. 2. sword. 3. cannon. 4. pistol.

( ) 18. Artichoke is a kind of:
1. hay. 2. corn. 3. vegetable. 4. fodder.

( ) 19. The clavicle is in the:
1. shoulder. 2. head. 3. abdomen. 4. neck.

( ) 20. John Wesley was most famous in:
1. literature. 2. science. 3. war. 4. religion.

( ) 21. Emeralds are usually:
1. red. 2. green. 3. blue. 4. yellow.

( ) 22. The Battle of Lexington was fought in:
1. 1620. 2. 1775. 3. 1812. 4. 1864.

( ) 23. Darwin was most famous in:
1. literature. 2. science. 3. war. 4. politics.

( ) 24. The rutabaga is a:
1. lizard. 2. vegetable. 3. fish. 4. snake.

( ) 25. Bile is made in:
1. spleen. 2. kidneys. 3. stomach. 4. liver.

( ) 26. Chard is a:
1. fish. 2. lizard. 3. vegetable. 4. snake.

( ) 27. An irregular four-sided figure is called a:
1. medicine. 2. triangle. 3. trapezium. 4. pentagon.

( ) 28. Becky Sharp appears in:
1. Vanity Fair. 2. Romola. 3. The Christmas Carol. 4. Henry IV.

( ) 29. The United States Naval Academy is at:

( ) 30. Rio de Janeiro is a city of:

( ) 31. The number of a Korean's legs is:
1. eight. 2. two. 3. six. 4. four.

( ) 32. The ohm is used in measuring:
1. rainfall. 2. wind power. 3. electricity. 4. water power.

( ) 33. Slice is a term used in:
1. bowling. 2. golf. 3. tennis. 4. football.

( ) 34. Cerise is a:
1. color. 2. drink. 3. fabric. 4. food.

( ) 35. Yale University is at:

( ) 36. The author of "The Scarlet Letter" is:

( ) 37. Rosa Bonheur is famous as a:
1. poet. 2. painter. 3. sculptor. 4. composer.

( ) 38. A tedder is used in:
1. farming. 2. fishing. 3. hunting. 4. athletics.

( ) 39. Falstaff appears in:
1. Romola. 2. Vanity Fair. 3. Oliver Twist. 4. Henry IV.

( ) 40. Napoleon defeated the Austrians at:

Score for Part VII.
PART VIII

DIRECTIONS: Write the answer for each problem on the line at the left. The samples have been correctly marked. You may do your figuring on the side of the page.

Examples:

15. 1. How many are 5 men and 10 men?

12. 2. If a man walks 4 miles an hour for 3 hours, how far does he walk?

1. How many are 50 tents and 8 tents?

2. If one saves $5 a month for 7 months, how much will he save?

3. A truck drove forward 8 miles and backed 2 miles. How far was it then from its first position?

4. Mike had 12 cigars. He bought 3 more, and then smoked 6. How many cigars did he have left?

5. How many hours will it take a truck to go 48 miles at the rate of 4 miles an hour?

6. If 64 men are divided into teams of 8, how many teams will there be?

7. How many pencils can be bought for 30 cents at the rate of 2 for 5 cents?

8. A dealer bought some mules for $1000. He sold them for $1200, making $20 on each mule. How many mules were there?

9. A regiment marched 40 miles in five days. The first day they marched 9 miles, the second day 6 miles, the third 10 miles, and the fourth 11 miles. How many miles did they march the last day?

10. If 341 squads of men are to dig 6,138 yards of trench, how many yards must be dug by each squad?

11. A submarine goes 10 miles an hour under water and 20 miles an hour on the surface. How long will it take to cross a 100-mile channel if it has to go one-fifth of the way under water?

12. If it takes 8 men 2 days to dig a 160-foot drain, how many men are needed to dig it in half a day?

13. A rectangular bin holds 600 cubic feet of lime. If the bin is 10 feet wide and 5 feet deep, how long is it?

14. If 4 1/2 tons of clover cost $36, what will 2 1/2 tons cost?

15. If one buys 2 packages of tobacco at 8 cents each and a pipe for 65 cents, how much change should he get from a two-dollar bill?

16. A commission house which had already supplied 1897 barrels of apples to a cantonment delivered the remainder of its stock to 23 mess halls. Of this remainder each mess hall received 47 barrels. What was the total number of barrels supplied?

17. A ship has provisions to last her crew of 500 men 6 months. How long would it last 1200 men?

18. If an airplane goes 250 yards in 10 seconds, how many feet does it go in a fifth of a second?

19. A recruit spent one-eighth of his spare change for post cards and four times as much for a box of letter paper. He then had 30 cents left. How much money did he have at first?

20. A certain division contains 2000 artillery, 15,000 infantry, and 1000 cavalry. If each branch is expanded proportionately until there are in all 19,800 men, how many will be added to the artillery?

Score for Part VIII.
PART I

DIRECTIONS: Read the following sentences carefully. If a statement is true, place a plus (+) in the parenthesis before the statement, as in example A below. If the statement is false, make a minus (−) in the parenthesis before it, as in example B. Make the + and the − small and clear.

Examples: (+) A. Apples are good to eat.
(−) B. Potatoes grow on trees.

1. If a law is to be successfully enforced, it must be endorsed by public opinion.
2. The family exists chiefly for the sake of its children.
3. One of the values of education is to prepare persons to earn a living.
4. All known peoples have some kind of religion.
5. Practically all states provide a tax with which to support their churches.
6. The standard of living of a family depends to a large degree upon its income.
7. The character of a neighborhood is determined largely by the people who live in it.
8. Laws should be either enforced or repealed.
9. The police power of the state is vested in the state courts.
10. The state government should not be concerned with the enforcement of national laws and should not co-operate in their enforcement.
11. Insane persons and feebleminded persons should be taken care of in the same manner.
12. Laws are the basis of order.
13. Common law is written law passed by a legislative body.
14. Any citizen of the United States may introduce a bill in either house of Congress and may debate before Congress if he so desires.
15. All bills introduced into Congress are discussed by Congress as a whole.
16. Each Congress has only one regular session.
17. Congress meets twice each year.
18. The members of Congress newly elected in November now meet in the January immediately following their election.
19. The Constitution states that the president shall not serve more than two terms.
20. A president may not be arrested while he is in office.
21. The president is elected by a direct vote of the people of the United States.
22. The mayor-council form of city government is the best form.
23. A person acquitted of a crime cannot be tried again for the same offense.
24. United States judges of federal courts are appointed for four-year terms.
25. All cases between states must be tried in federal courts.
26. All felonies must be tried by jury if demanded.
27. A subpoena is a summons to appear in court as a witness.
28. An injunction is a court order.
29. Newspapers should publish the public with facts upon which to base a sound opinion.
30. A sales tax uses the amount consumed as a basis for determining a man's ability to pay taxes.
31. A man's ability to pay taxes should be determined to a large degree by his income.
32. If the electoral college does not elect a president, it becomes the duty of the Senate to do so.
33. The supreme law of the land is the Constitution, laws made by Congress, and treaties.
34. The president of the United States may adjourn Congress at any time he so desires.
35. The president of the United States may declare war.
36. Free public education is regulated by the various individual states within their own bounds.
37. The power to issue paper money is in the hands of the various states.
38. Most states have the same general form of state government.
39. Washington, D.C., is one of the best-planned cities in the world.
40. One of the chief problems of a community is providing worth while activities for the leisure time of its members.
41. All bills for raising revenue must originate in the Senate.
42. Congress has the sole power to make laws for the District of Columbia.
43. The president has the sole power to call out the army and navy.
44. An American woman living in this country who marries an alien and continues to live here loses her citizenship.
45. It has been definitely proved that capital punishment lessens the crime rate of those states in which it is used.
46. Political bosses favor the direct primary as a method of nominating candidates for office.
47. Civil cases are seldom concerned with private disputes.

Copyright, 1935, Kansas State Teachers College, Emporia, Kansas
PART II

DIRECTIONS: Place the number of the part which makes the best answer to the statement in the parenthesis before the statement.

( 3 ) Biology is a: 1. habit. 2. education. 3. science.

In this sample, "science" is the correct answer. The number of the word "science" is 3. The figure 3 has been placed in the parenthesis.

( ) 48. Congress meets on: 1. the first Monday in November. 2. the second Monday in January. 3. the first Monday in December. 4. January 3.

( ) 49. The recall provides that: 1. the people may propose laws. 2. the Constitution may be changed. 3. the governor of a state may be impeached. 4. the people may recall an officer.

( ) 50. The chief cause of the growth of large cities is: 1. climate. 2. schools. 3. a break in transportation. 4. mountains.

( ) 51. The age of a United States representative must be at least: (1) 25 years. (2) 35 years. (3) 30 years. (4) 50 years.

( ) 52. A United States representative must have been a citizen: 1. for 7 years. 2. for 9 years. 3. all his life. 4. for 10 years.

( ) 53. The number of senators in Congress is: (1) 125. (2) 40. (3) 96. (4) 240.

( ) 54. If the president keeps a bill for ten days without signing it and Congress adjourns in the meantime, the process is called: 1. filibustering. 2. pocket veto. 3. log-rolling. 4. gerrymandering.

( ) 55. General election day occurs on: 1. November 11. 2. the first Monday in December. 3. the first Tuesday after the first Monday in November. 4. November 3.

( ) 56. The president may be impeached by: 1. state legislatures. 2. national conventions. 3. state conventions. 4. the national House of Representatives.

( ) 57. The highest court in the land is the: 1. Circuit Court of Appeals. 2. Court of Claims. 3. Court of Admiralty. 4. Supreme Court.

( ) 58. The chief source of income for the local government is: 1. a tax on property. 2. a special tax on institutions. 3. an inheritance tax. 4. gifts and escheats.

( ) 59. The simplest unit of organized society is the: 1. church. 2. school. 3. family. 4. community.

( ) 60. American common law originated: 1. in Germany. 2. in England. 3. in Holland. 4. among the Indians.

( ) 61. The practice of going to Congress and using influence to attempt to pass or defeat a bill is called: 1. "playing politics." 2. lobbying. 3. gerrymandering. 4. filibustering.

( ) 62. A jury which is called for the purpose of investigating evidence is called a: 1. grand jury. 2. petit jury. 3. trial jury. 4. criminal jury.

( ) 63. The United States Constitution may be changed: 1. by popular vote. 2. by acts of Congress and the president. 3. by state legislatures alone. 4. by a proposal of two-thirds of Congress and ratification by three-fourths of the state legislatures.

( ) 64. The police power of the state is vested in the: 1. governor. 2. state police. 3. legislature. 4. Supreme Court.

( ) 65. The twentieth amendment to the Constitution contains: 1. the income tax. 2. the time of meet-
PART I

DIRECTIONS: If the sentence is correct, place a plus (+) in the parenthesis at the left. If the sentence is incorrect, place a minus (—) in the parenthesis. Write nothing but the plus or minus. Note carefully the examples, which are correctly marked.

Examples:

A. Punctuation

(—) 1. Are you going to school.

(+) 2. The bell rang, but the children did not hear it.

B. Capitalization

(+) 1. Here comes James.

(—) 2. Jack has a dog.

C. Sentence Recognition

(+) 1. Mary and John are building a playhouse.

(—) 2. Sitting by the stream.

A. Punctuation

( ) 1. Mr. James D. Smith is our neighbor.

( ) 2. I don't see how that works.

( ) 3. We had sandwiches cookies and chocolate for lunch.

( ) 4. That store sells children's shoes.

( ) 5. Betty, bring me the paper.

( ) 6. No I cannot come today.

( ) 7. "I hope you will like the book," said Miss Jones.

( ) 8. Last summer we visited in Los Angeles California.

( ) 9. Have you read Treasure Island?

( ) 10. The children played quietly, for they did not wish to disturb their mother.

( ) 11. After it stopped raining, we went out walking.

( ) 12. Margaret, a friend of mine, is the leader.


( ) 14. The postman, I believe, has already gone.

( ) 15. After the others had gone, we looked for the lost coin, but we could not find it.

B. Capitalization

( ) 21. The American Indian has an interesting history.

( ) 22. On Friday our class is going to have a picnic.

( ) 23. The history class gave a memorial day program.

( ) 24. "Blessings on thee, little man, Barefoot boy, with cheeks of tan!"

( ) 25. John lives on Van Buren Street.

( ) 26. "To A Mouse" is a poem written in Scotch Dialect.

( ) 27. Mary asked, "would you like to go skating?"

( ) 28. Uncle Bob lived in the west for many years.

( ) 29. The sailors told Columbus that God had deserted them.

( ) 30. We have a long English lesson, but our history assignment is short.

C. Sentence Recognition

( ) 31. Help!

( ) 32. Listening, we heard an owl hoot.

( ) 33. Children climbing trees and calling to each other.

( ) 34. Come here.

( ) 35. What beautiful flowers those are!

( ) 36. Have just received your letter.

( ) 37. Out into the ocean sailed the ship.

( ) 38. Wishing you the best of success.

( ) 39. The captain's worried look, as he watched the approaching storm.

( ) 40. In the meadows, where the buttercups grow.
PART II. Language Usage

DIRECTIONS: Note carefully this example.
( 2 ) Apples [1. am. 2. are. 3. is. 4. be] good to eat.

The correct sentence is—Apples are good to eat. A "2" has been placed in the parenthesis before the sentence, to show that number 2 of the four forms in the brackets makes the sentence correct. In the parenthesis before each sentence write the number of the one form of those in the brackets which makes the sentence correct. Write nothing but the number.

( ) 41. Jerry [1. see. 2. seen. 3. saw] a pig in the road.
( ) 42. [1. Is. 2. Are] there more pears in the basket?
( ) 43. [1. There. 2. Their. 3. They're] house is on fire.
( ) 44. The teacher, as well as the pupils, [1. was. 2. were] glad we won the prize.
( ) 45. Mother sent us [1. to. 2. two. 3. too] the store.
( ) 46. I have [1. to. 2. two. 3. too] many books to carry.
( ) 47. Will you carry [1. to. 2. two. 3. too] of them?
( ) 48. It [1. don't. 2. doesn't. 3. dont. 4. do not] make any difference which you choose.
( ) 49. I [1. haven't. 2. haven't got. 3. ain't got. 4. haven't got] a notebook.
( ) 50. Do you [1. no. 2. know. 3. now] that man over there?
( ) 51. [1. Its. 2. It's] a pleasant, sunny day.
( ) 52. [1. Who's. 2. Whoes. 3. Whose. 4. Whos] hat is that?
( ) 53. The children ate [1. like. 2. like as if. 3. as if] they were hungry.
( ) 54. Harry divided the cake [1. among. 2. between] the five boys.
( ) 55. Your hat is different [1. than. 2. from. 3. to] hers.
( ) 56. John played the game [1. well. 2. good].
( ) 57. It is [1. most. 2. almost. 3. all most] nine o'clock.
( ) 58. Uncle Joe gave the box to Harry and [1. I. 2. myself. 3. me].
( ) 59. All of the boys brought [1. their. 2. his] skates.
( ) 60. When the bell rang, everybody put away [1. his. 2. their] books.
( ) 61. Ted [1. swimm]ed. 2. swum. 3. swam] to shore.

( ) 62. It has [1. began. 2. begun. 3. begun] to snow.
( ) 63. The teacher asked us to [1. go quietly. 2. quietly go].
( ) 64. [1. Who. 2. Whom] shall we ask?
( ) 65. For captain they elected me, who [1. is. 2. are. 3. am] the largest.
( ) 66. Give the package to [1. whoever. 2. whomever] calls for it.
( ) 67. Of the two boys, John is the [1. taller. 2. tallest. 3. more tall. 4. most tall].
( ) 68. We saw [1. an. 2. a] ostrich in the park.
( ) 69. It was a thrilling [1. tail. 2. tale] that we read last night.
( ) 70. That is the [1. beautiful. 2. most beautiful] sunset I have ever seen.
( ) 71. [1. May. 2. Can] I go swimming?
( ) 72. The wind [1. blow. 2. blowed. 3. blew] our playhouse down.
( ) 73. My uncle [1. come. 2. came. 3. has come] last night.
( ) 74. That picture is [1. very. 2. awfully. 3. sure. 4. real] pretty.
( ) 75. I like [1. that. 2. those. 3. these. 4. them] kind of books.
( ) 76. [1. Let. 2. Leave] go of that rope!
( ) 77. Jack has [1. raised. 2. rised. 3. rose. 4. risen] to give the lady his chair.
( ) 78. We do not [1. here. 2. hear] from him very often.
( ) 79. I [1. kinda. 2. kind of. 3. sort of. 4. rather] admire her skill.
( ) 80. You [1. ought. 2. had ought] to study harder.
( ) 81. [1. Lie. 2. Lay] the paper on the table.
( ) 82. How long have you [1. lay. 2. laid. 3. layed. 4. lain] there?
( ) 83. The Indians have a [1. funny. 2. queer] kind of funeral service for their dead.
( ) 84. Jane has [1. set. 2. sit. 3. sat] in that chair more than an hour.
( ) 85. While we were taking the test, a dog came [1. in. 2. into] the room.
( ) 86. The package came while I was [1. at. 2. to] school.
( ) 87. Rover jumped [1. off of. 2. off. 3. from off of] the porch.
( ) 88. I [1. can. 2. can't. 3. cannot. 4. cant] hardly see.
( ) 89. [1. Set. 2. Sit] the dish on the table.
( ) 90. I have already [1. sit. 2. set. 3. sat] it there.
DAVIS-SCHRAMMEL SPELLING TEST

FORM A
Grades I-IX

By Vera Davis and H. E. Schrammel
Bureau of Educational Measurements, Teachers College
Emporia, Kansas

Name .............................................. Age .............................................. Grade ..............................................

School .............................................. Teacher ..............................................

Town .............................................. State .............................................. Date ..............................................

DIRECTIONS TO THE TEACHER

Each pupil should be provided with a well-sharpened pencil and a regular spelling blank having spaces for 20 words. This spelling test contains the words for all grades, 1 to IX, inclusive. The pupils of each grade are to spell twenty, and only twenty, words. The words which the pupils are to spell are printed in CAPITAL LETTERS in the following sentences. The words for each grade are included in the sentences as follows:

Grade I, 1 to 20, inclusive
Grade II, 13 to 32, inclusive
Grade III, 25 to 44, inclusive
Grade IV, 37 to 56, inclusive
Grade V, 49 to 68, inclusive
Grade VI, 61 to 80, inclusive
Grade VII, 83 to 100, inclusive
Grade VIII, 103 to 120, inclusive
Grade IX, 123 to 140, inclusive

It will facilitate the giving of the test if the pupils of each grade will number the lines of their blanks in advance as follows: grade I, 1 to 20; grade II, 13 to 32; grade III, 25 to 44; grade IV, 37 to 56; grade V, 49 to 68; grade VI, 61 to 80; grade VII, 83 to 100; grade VIII, 103 to 120; and grade IX, 123 to 140.

If the pupils from more than one grade, one to nine, are present, begin with sentence No. 1 with grade I; and when sentence No. 13 is reached, have pupils of grade II also begin. Likewise have the third grade begin when No. 25 is reached; the fourth grade, when No. 37 is reached; the fifth, when No. 45 is reached; the sixth, when No. 53 is reached; the seventh, when No. 61 is reached; the eighth, when No. 69 is reached; and the ninth, when No. 77 is reached. In this manner the test may be administered to all grades at the same time.

Procedure: If you are giving the test to a first grade class, say to the pupils, “I am going to read you a number of sentences. After each sentence, I will pronounce one of the words used in the sentence. You are to write this word on your spelling blank. The first sentence is “The doll is IN the cradle.” Write the word, ‘in.’” When you are sure that all understand what is to be done and have written the first word, proceed with the other sentences in the same manner. The word to be spelled may be repeated twice if necessary. For the other grades the procedure is the same except that the sample sentence will vary with the grade to be tested.

If the pupils of other grades are present when the test is given to the first grade, tell them to listen to the directions so that they may know what to do when they are to begin. Before reading sentence No. 13, tell the second grade to begin with this one. For the other grades follow a similar procedure.

The pupil’s score is five times the number of words, of the 20 for his grade, which he spells correctly. Example: 16 words correct. 16 x 5 = 80.

The words for this test were chosen from the Bucking­ham Extension of the Ayres Spelling Scale, and all but the last ten words were selected from those comprising the one thousand most frequently used words. The words were so selected that the standard score, or norm, computed from the difficulty value of the words on the original scale, is 72 for each grade.

First grade begin here.

1. The doll is IN the cradle.
2. NOW we may play.
3. Who is that MAN?
4. Harry jumped out of BED.
5. Sue is eating AN apple.
6. I am NOT going.
7. Will you come with US?
8. It happened just a year AGO.
9. Cousin Jane will BE here to­morrow.
10. I have read ALL those stories.
11. Give it to HIM.
12. Do you LIKE this book?

Second grade begin here.

13. Shall we MAKE a boat?
14. Show me your right HAND.
15. LET us go fishing.
16. The water is COLD.
17. THEN we can play.
18. The postman left a letter AS he passed.
19. IF you wish, you may open the box.
20. The BABY laughed and played.

First grade stop here.

21. There is only one THING left to do.
22. Bring it here OR give it Helen.
23. Uncle Bob TOLD us a story.
24. ADD these numbers.

Third grade begin here.

25. OUR class will have a party soon.
26. We learned to PRINT in the first grade.
27. What is your NAME?
28. Will you go WITH me?
29. We will START early.
30. Once UPON a time there lived a good fairy.
31. Jack COULD jump higher than that.
32. Allen taken a music lesson every WEEK.

Copyright, 1935, Kansas State Teachers College, Emporia, Kansas
Second grade stop here.
33. What idea does the poem EXPRESS?
34. Did you see ANYTHING interesting?
35. We sat on the RIGHT side.
36. Yes, INDEED, that is pretty.

Fourth grade begin here.
37. What you say is very TRUE.
38. The HEART is located on the left side.
39. Does your dog FOLLOW you to school?
40. Tom waited WHILE we did our shopping.
41. That belongs to someone ELSE.
42. I found it AMONG these papers.
43. Christmas comes in DECEMBER.
44. What is your REASON for being late?

Fifth grade begin here.
45. Father will RETIRE from business soon.
46. What is your OBJECTION to the plan?
47. What is a PROPER noun?
48. He wrote the FIGURE “1” on the blackboard.
49. How many are there in your FAMILY?
50. Man is called a RUMAN being.
51. It is now ten O’CLOCK.
52. We have learned many interesting things SINCE school began.

Sixth grade begin here.
53. WHOM do you see?
54. The entire class is PRESENT today.
55. I shall eagerly AWAIT a reply.
56. I remember her distinctly, ALTHOUGH it has been many years since I saw her.

Fourth grade stop here.
57. How much do you WEIGH?
58. The school magazine is almost ready for PUBLICATION.
59. Jim suggested that we ADOPT a new program for our club.
60. Please PREPARE these problems for tomorrow.

Seventh grade begin here.
61. Your work shows a great deal of IMPROVEMENT.
62. What is your OPINION?
63. Our team is CERTAIN to win.
64. We have had a PLEASANT afternoon.

Fifth grade stop here.
65. The ACCIDENT occurred late yesterday.
66. We like to ASSOCIATE with persons our own age.
67. Which POLITICAL party do you prefer?
68. I shall wait one MINUTE longer.

Eighth grade begin here.
69. The people in the American COLONIES had to undergo many hardships.
70. Our history class has been studying FOREIGN relations.
71. The DIFFICULTY lay in finding the owner.
72. A MAJORITY of the group voted against the motion.

Sixth grade stop here.
73. The DISCUSSION concerned student government.
74. Anna could not find any REFERENCE to the book.
75. The “lame duck” SESSION of Congress has been abolished.
76. Jane Addams has had an interesting CAREER.

Ninth grade begin here.
77. The speaker talked SINCERELY of his views.
78. That fashion is very EXTREME.
79. Everyone is CORDIALLY invited.
80. Please SEPARATE the cards according to color.

Seventh grade stop here.
81. The clerk gave me a RECEIPT for the payment.
82. This is only a PRELIMINARY report.
83. That one is ESPECIALLY beautiful.
84. The COMMITTEE will meet to-morrow.
85. Has Miss Smith given her DECISION?
86. What would you like for DESSERT?
87. Would you like to be a MILLIONAIRE?
88. I should like to POSSESS a book like that.

Eighth grade stop here.
89. To ALLEGGE that all criminals are feebleminded is incorrect.
90. We passed a CEMETERY on our way home.
91. One can buy hats at a MILLINERY.
92. I have a good cake RECIPE.
93. The school principal has charge of all problems of DISCIPLINE.
94. Please come IMMEDIATELY.
95. He has so many pets that his yard looks like a MANGERIE.
96. That girl has a great deal of PERSISTENCE.

Ninth grade stop here.
EVERY PUPIL SCHOLARSHIP TEST
April 8, 1936
Bureau of Educational Measurements
Kansas State Teachers College, Emporia

GEOGRAPHY
Grades IV-VII

By Forrest Frease, Emporia, Kansas

Name ........................................... Age ........................................... Grade ...........................................
School ........................................... Teacher ...........................................
Town ........................................... State ........................................... Date ...........................................

PART I

DIRECTIONS: Read the following sentences carefully. If a statement is true, place a plus (+) in the parenthesis before the statement, as in example A below. If the statement is false, make a minus (−) in the parenthesis before it, as in example B. Make the + and the − small and clear.

Examples: (+) A. Apples are good to eat.
(−) B. Potatoes grow on trees.

1. Meat is the principal food of the Eskimos because of the scarcity of plant life in cold regions.
2. Most Eskimos live in igloos the year around.
3. Icebergs sometimes interfere with ocean travel in the North Atlantic.
4. Distances north and south of the equator are measured by degrees of latitude.
5. The longitude on maps is counted east and west of the meridian passing through New York City.
6. Alaska is valuable to the United States because of its abundant supply of minerals and fur-bearing animals.
7. Grazing is one of the chief industries of Greenland.
8. When soil has plenty of plant food in it, it is said to be fertile.
9. Winter wheat is grown extensively in Canada, since the growing season is about nine months long.
10. More spring wheat than winter wheat is raised in Kansas.
11. The Mormons who settled in Utah developed a system of irrigation.
12. Since Japan is so thinly settled, she is desirous of getting more immigrants.
13. The Rocky Mountains are in the eastern part of the United States.
14. Shanghai is the greatest trade center of China because of its central location and its transportation facilities.
15. The monsoon wind brings rain to the Sahara Desert and causes oases to be formed there.
16. Since Alaska is south of the United States, it has a warm climate.

17. The opening of the Suez Canal helped the trade of Asia by giving a shorter route to Europe and the Atlantic Coast of North America.
18. Agricultural production in Egypt is greatly lessened because of the Nile River.
19. Most of the world’s supply of diamonds comes from the mines near Kimberley.
20. The warm climate of Siberia makes coffee one of her chief products.
21. Ecuador is the most progressive nation of South America because of its location in the southern part of that continent.
22. The approximate temperature of a region can be determined by learning the longitude of that region.
23. The largest city in the United States is Philadelphia.
24. The rabbit is one of the chief enemies of the sheep farmer of Australia.
25. The cassava, which is widely used as a food by the natives of Central America, is an edible root somewhat like the sweet potato.
26. The Hawaiian Islands raise sugar cane, pineapples, and bananas because of the semi-tropical climate.
27. The earth revolves around the sun once each ten years.
28. Rotation of the earth causes day and night.
29. An eclipse of the moon is caused by the sun’s coming between the earth and the moon.
30. The equinox is that time when the days and nights are of equal length.

PART II

DIRECTIONS: Place the number of the part which makes the best answer to the statement in the parenthesis before the statement.

(3) Biology is a: 1. habit. 2. education. 3. science.
In this sample, “science” is the correct answer. The number of the word “science” is 3. The figure 3 has been placed in the parenthesis.

31. A football game played in New York City at twelve o’clock could be heard over the radio in Denver when it is [1. ten 2. eleven 3. twelve 4. one] o’clock in Denver.
### PART III

**DIRECTIONS:** From the list of answers in Column II select the word or phrase which matches each item of Column I, and write the number of the answer in the parenthesis at the left. The answers of one section may be matched with the items in Column I of the same section only. The example has been correctly marked.

**Example:**

1. Coal is obtained from ****.  

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Anthracite</td>
<td>1. Coal is obtained from ****.</td>
</tr>
<tr>
<td>2. Friction</td>
<td>2. A small cyclone blowing with terrible force is a ****.</td>
</tr>
<tr>
<td>3. Royal Navy</td>
<td>3. Application of water to land by artificial methods is ****.</td>
</tr>
<tr>
<td>4. Diamond</td>
<td>4. Flat topped hills are called ****.</td>
</tr>
<tr>
<td>5. Sediment washed to the mouth of the river forms a ****.</td>
<td></td>
</tr>
<tr>
<td>6. Irrigation</td>
<td>6. Water is carried from mountains to cities by an ****.</td>
</tr>
<tr>
<td>7. Mines</td>
<td>7. Pearls come from ****.</td>
</tr>
<tr>
<td>8. Sesame</td>
<td>8. Among the products manufactured by the Du Pont Company is ****.</td>
</tr>
<tr>
<td>9. Paint</td>
<td>9. Mountains have been formed by ****.</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>( )</th>
<th>( )</th>
<th>( )</th>
</tr>
</thead>
<tbody>
<tr>
<td>33. The Arctic Circle is [1, ten 2. twenty-three and a half 3. forty 4. forty-seven] degrees from the North Pole.</td>
<td>The highest mountain peak in the world is: 1. McKinley. 2. Blanc. 3. Aconcagua. 4. Everest.</td>
<td>The chief export of Australia is: 1. meat. 2. wheat. 3. wool. 4. cotton.</td>
</tr>
<tr>
<td>34. Rice is an important crop in parts of India because of: 1. the cool climate. 2. the scarcity of rainfall. 3. the heavy rainfall. 4. the utility of machinery.</td>
<td>The Himalaya Mountains are in: 1. North America. 2. South America. 3. Asia. 4. Africa.</td>
<td>Australia was originally used as: 1. a resort for the British royal family. 2. a British penal colony. 3. a region for exploitation by the Japanese. 4. a naval base by the United States.</td>
</tr>
<tr>
<td>35. Transportation of products from the interior of Siberia is very difficult because: 1. there are no rivers in that region. 2. the region is very mountainous. 3. the rivers flow into the Arctic Ocean, which is often frozen. 4. most of Siberia is a desert.</td>
<td>The Arctic Circle is: 1. the Tropic of Cancer. 2. the Tropic of Capricorn. 3. forty. 4. thirty and a half degrees from the North Pole.</td>
<td>Japan has never been invaded. This fact is largely due to her being protected by: 1. a large army. 2. mountains. 3. the Great Wall. 4. the sea.</td>
</tr>
<tr>
<td>37. The greatest entrepot in the world is: 1. New York. 2. Brussels. 3. Tokio. 4. London.</td>
<td>A person would have to cross the Dardanelles to get from the: 1. Black Sea to the Caspian Sea. 2. Black Sea to the White Sea. 3. Adriatic Sea to the Mediterranean Sea. 4. Aegean Sea to the Black Sea.</td>
<td>The Great Lakes, which form a very important transportation route, were formed by: 1. water erosion. 2. a great moving mass of ice. 3. being dug by man. 4. rivers.</td>
</tr>
<tr>
<td>38. The chief export of Australia is: 1. meat. 2. wheat. 3. wool. 4. cotton.</td>
<td>The capital of Australia is: 1. Sydney. 2. Melbourne. 3. Canberra. 4. Perth.</td>
<td>The Great Lakes, which form a very important transportation route, were formed by: 1. water erosion. 2. a great moving mass of ice. 3. being dug by man. 4. rivers.</td>
</tr>
<tr>
<td>39. A person would have to cross the Dardanelles to get from the: 1. Black Sea to the Caspian Sea. 2. Black Sea to the White Sea. 3. Adriatic Sea to the Mediterranean Sea. 4. Aegean Sea to the Black Sea.</td>
<td>The capital of Australia is: 1. Sydney. 2. Melbourne. 3. Canberra. 4. Perth.</td>
<td>The Great Lakes, which form a very important transportation route, were formed by: 1. water erosion. 2. a great moving mass of ice. 3. being dug by man. 4. rivers.</td>
</tr>
<tr>
<td>40. The Kattegat Strait is between: 1. Russia and Turkey. 2. Sweden and Denmark. 3. Rumania and Bulgaria. 4. Ireland and Scotland.</td>
<td>The chief export of Australia is: 1. meat. 2. wheat. 3. wool. 4. cotton.</td>
<td>The Great Lakes, which form a very important transportation route, were formed by: 1. water erosion. 2. a great moving mass of ice. 3. being dug by man. 4. rivers.</td>
</tr>
<tr>
<td>41. The Emerald Isle is: 1. Ireland. 2. Spitzbergen. 3. Iceland. 4. Sicily.</td>
<td>The chief export of Australia is: 1. meat. 2. wheat. 3. wool. 4. cotton.</td>
<td>The Great Lakes, which form a very important transportation route, were formed by: 1. water erosion. 2. a great moving mass of ice. 3. being dug by man. 4. rivers.</td>
</tr>
<tr>
<td>42. The Panama Canal is under the control of: 1. the United States. 2. England. 3. France. 4. Colombia.</td>
<td>The Great Lakes, which form a very important transportation route, were formed by: 1. water erosion. 2. a great moving mass of ice. 3. being dug by man. 4. rivers.</td>
<td>The Great Lakes, which form a very important transportation route, were formed by: 1. water erosion. 2. a great moving mass of ice. 3. being dug by man. 4. rivers.</td>
</tr>
<tr>
<td>43. The dividing line between the Torrid and the South Temperate Zones is the: 1. Tropic of Cancer. 2. Tropic of Capricorn. 3. Arctic Circle. 4. Antarctic Circle.</td>
<td>The highest mountain peak in the world is: 1. McKinley. 2. Blanc. 3. Aconcagua. 4. Everest.</td>
<td>The Great Lakes, which form a very important transportation route, were formed by: 1. water erosion. 2. a great moving mass of ice. 3. being dug by man. 4. rivers.</td>
</tr>
<tr>
<td>44. The chief enemy of forests is 5. fire.</td>
<td>The chief export of Australia is: 1. meat. 2. wheat. 3. wool. 4. cotton.</td>
<td>The Great Lakes, which form a very important transportation route, were formed by: 1. water erosion. 2. a great moving mass of ice. 3. being dug by man. 4. rivers.</td>
</tr>
<tr>
<td>45. The chief export of Australia is: 1. meat. 2. wheat. 3. wool. 4. cotton.</td>
<td>The chief export of Australia is: 1. meat. 2. wheat. 3. wool. 4. cotton.</td>
<td>The Great Lakes, which form a very important transportation route, were formed by: 1. water erosion. 2. a great moving mass of ice. 3. being dug by man. 4. rivers.</td>
</tr>
<tr>
<td>46. Australia was originally used as: 1. a resort for the British royal family. 2. a British penal colony. 3. a region for exploitation by the Japanese. 4. a naval base by the United States.</td>
<td>The Great Lakes, which form a very important transportation route, were formed by: 1. water erosion. 2. a great moving mass of ice. 3. being dug by man. 4. rivers.</td>
<td>The Great Lakes, which form a very important transportation route, were formed by: 1. water erosion. 2. a great moving mass of ice. 3. being dug by man. 4. rivers.</td>
</tr>
</tbody>
</table>
FORM A.

EMPORIA SILENT READING TEST
Grades III to VIII
By H. E. Schrammel and W. H. Gray
Kansas State Teachers College, Emporia, Kansas

Published by Bureau of Educational Measurements
Kansas State Teachers College, Emporia

Possible score 77-80
Number wrong and omitted

Name .......................................................... Age ................................ Grade ................................
School ........................................................ Teacher .........................................................
Town ........................................................ State ......................................................... Date .................................

DIRECTIONS: This is a test in Silent Reading. You will find a number of exercises like the sample below. Read these exercises, one at a time, as rapidly as possible. On the right side of each exercise you will find a number of statements of questions on what you have read. For each of these questions there are several answers. Only one of these is correct. Decide which is the right answer, and write its number in the parenthesis before the question. If necessary, you may reread part or all of an exercise to find the right answer.

Now read this sample exercise

Little John ran down the road. He had a reading book in one hand, a spelling book in the other, and a lunch-box under his right arm.

Now read the questions on the right of the exercise you just read. The correct answer to question No. 1 is “John,” and the number of this word is “3.” Hence a figure “3” has been placed in the parenthesis before the question.

The correct answer to statement No. 2 is “school.” The number of this word is “2.” Hence the figure “2” has been placed in the parenthesis.

What is the correct answer to question No. 3? Write its number in the parenthesis before this question.

Questions on the sample exercise.
1. (3) What was the boy’s name?
2. (2) The boy was probably going to:
   1. church. 2. school. 3. a circus.
3. ( ) The boy traveled on:
   1. horseback. 2. foot. 3. skates.

Now, when the signal to begin is given, read as many of the following exercises as you can, and answer the questions that belong with each exercise. You will have exactly fifteen (15) minutes.

A lion went to sleep in the forest. A wee mouse ran up and down his back. The lion awoke and caught the mouse in his great paw.

The crow will quickly discover anything that looks like a trap or snare set to catch him, but it takes him a long time to decide whether it is a snare or not.

1. ( ) The lion was in a:
   1. cave. 2. forest. 3. den. 4. cage.
2. ( ) The lion caught a:
   1. rat. 2. dog. 3. mouse. 4. deer.
3. ( ) The animal named in this exercise is a:
   1. hawk. 2. rabbit. 3. chicken. 4. crow.
4. ( ) The crow makes decisions on traps:
   1. slowly. 2. rapidly. 3. never. 4. by calling other crows.

Copyright, 1933, by Kansas State Teachers College, Emporia, Kansas.
When we took Rover to the veterinary at Sea Cliff, the first question that was put to us was, "What kind of dog is he?" and all we could say was, "He is—oh, well, just a kind of dog." In fact, Rover looked like several kinds of dog. We never knew just what kind he was, but we thought a lot of him.

The next day is Saturday, the best day of the week. Then Franz's mother and father make the hard climb from the city of Bern to the stone hut on the heights to see their boy who lives with his grandfather. They bring clean clothes, bread, sausage, cabbage, and potatoes. When they go down the mountain, their horse almost staggers as he carries all the cheeses the grandfather has made since the Saturday before.

Whenever the horse stopped, which it did very often, John fell off in front; and whenever it went on again, which it generally did rather suddenly, he fell off behind. Otherwise he kept on pretty well, except that he had a habit of now and then falling off sideways; and, as he generally did this on the side on which Alice was walking, she soon found that it was the best plan not to walk quite close to the horse.

Long ago, in England, there was a great forest where knights and nobles often went to hunt the deer. In the midst of this forest stood a little grassy mound of earth, beneath which dwelt a goblin. He was a pleasant, kind-hearted goblin; and when the knights, weary with the hunt, threw themselves down near his home to rest, he took pity on them and went out to them, bearing in his hands a large horn filled with a magic liquor that made them fresh and strong.

Camera hunting in the tropics is not only curiously fascinating, but dangerous. Several methods are employed to snap the picture. Sometimes a "blind" is erected, probably near a water hole where animals come to drink both day and night. The "blind," on which the camera is placed, is a platform covered and screened with boughs of trees.

5. ( ) Rover was taken to a:
   1. picnic. 2. dog show. 3. doctor. 4. swimming hole.

6. ( ) The dog was:
   1. a German police. 2. a rat terrier. 3. a spaniel. 4. of unknown breed.

7. ( ) Franz lives:
   1. in the valley. 2. with his parents. 3. on the mountain. 4. in Bern.

8. ( ) What does Franz's mother bring that is not food?
   1. clothes. 2. sausage. 3. money. 4. potatoes.

9. ( ) The boy rode:
   1. fast. 2. well. 3. poorly. 4. on a mule.

10. ( ) Alice traveled:
    1. behind John. 2. on foot. 3. on her pony. 4. in a cart.

11. ( ) The horse:
    1. walked steadily. 2. galloped rapidly. 3. trotted slowly. 4. traveled spasmodically.

12. ( ) The goblin:
    1. lay down to rest. 2. gave the knights liquor. 3. was cruel to his visitors. 4. never left his home.

13. ( ) The knights went to the forest to:
    1. hunt deer. 2. visit the goblin. 3. rest. 4. shoot squirrels.

14. ( ) The attitude of the knights toward the goblin was:
    1. distrustful. 2. friendly. 3. fearsome. 4. hostile.

15. ( ) The camera in the story is used to:
    1. kill animals. 2. catch game. 3. study animals. 4. frighten animals.

16. ( ) The "blind" is a:
    1. smoke screen. 2. window shade. 3. bandage for the eyes. 4. place to conceal the camera.

17. ( ) The "blind" is usually put near a:
    1. pool. 2. cave. 3. hut. 4. tree.
In the springtime of the year, 1912, the "Titanic," a great and beautiful ocean liner, was making her way toward this country. She had on board hundreds of gay and happy people. One dark night as she was speeding toward her destination, she ran into an iceberg. The damage done the magnificent ship was so great that she soon began to sink. She carried life boats but not enough for such a large number of people. But there were instruments on board that made it possible to send messages of distress across the dark and lonely sea.

It is pickling time; and kitchens, yours and mine, are fragrant with spicy syrups and the delicious aroma of fruits and vegetables fresh from the garden. There is something delightfully old-fashioned about it. It always makes me grow reminiscent and think about familiar, old-timey things like print aprons and hot gingerbread and sweet cider and a pan of currant buns. And I never start to make pickles that I don't want to run the whole gamut of fruity favorites which gave such a zest to grandmother's home-made sausage or whole-baked ham.

When the liar lies, he does a lot of other things too: and if we can catch him doing them, why, then we can catch him lying. This new branch of knowledge is only a few years old, and it seems that it is developing rapidly into an exact science. Happily, it is also used to absolve the innocent by finding that they show no guilty reactions when grilled. For one thing, the liar's blood-pressure grows jumpy when he lies; so does his pulse; his breathing changes; even his glands secrete more or less of their products into the blood-stream and cause symptoms that can be detected.

Fruit is one of the most pleasant necessities in a nutritious menu. There are many delectable fresh products which will spare the purse of the homemaker and make every member of the family happy. Golden skinned bananas are favorites with the children and bring in each closely wrapped "finger" an abundance of vitamins and minerals to add value to the easily digested calories which they also provide. Apples for school lunch or for any meal of the day are not to be forgotten, and nowadays they are on the markets practically all seasons of the year. And always, dried apricots, prunes, and peaches form a dependable background of nutritious and economical fruit, in which the vitamins have been preserved to a surprising degree and which make an excellent contribution to any part of the meal. Fruit twice a day is a good rule to keep in mind when planning meals.
The goal for each child should be, not merely freedom from disease, but the possession of abounding, positive health. With good health the child is ready and able to seek the other good things of life. Ill health is a great handicap to success and, when prolonged, becomes a tragedy. The child who is always a little "below par" can never achieve his best, while the bright-eyed, vigorous child usually makes his adjustments with ease. Health, by which we mean the adequate functioning of the organism to meet the various physical demands of existence, is the basic factor in enriching life.

Blind persons are now enabled to "see" by means of electric eyes, which guide the blind about their homes by giving them a sense of direction. The electric eye, or photo-electric cell, is made up like a flashlight, with a small buzzer connected to its battery. Convenient electric lights are then placed about passages and hallways, particularly at turns. The blind person turns the electric eye about much as a person having his sight would direct a flashlight. When the device points to a light source, contact is made and the buzzer sounds. As long as the buzzer is sounding, the blind user knows he is on the right path.

While 250 million Hindus prayed for Mahatma Gandhi in his "fast unto death" at Yerovda jail, Poona, India, and the eyes of the world were turned toward that spot, a blaze of lights in the Indian Office in London until almost midnight of September 26 attested the speed with which the British government was working to do its part toward ending the nationalist leader's hunger strike. For six days and five hours the Mahatma had lived on water with salt or soda. He was under observation of eight physicians, who noted his swift decline from day to day. But when word came that the British government had agreed to accept the electoral compromise reached between the Cast Hindus and the "Untouchables," Gandhi stopped his fast.

Reduced to simplest terms, a crime is an act in violation of any law. A man who drives his car at thirty miles an hour in a twenty-mile zone is a criminal. Arrest, trial, and conviction taken separately or together are not necessary to change "lawbreaking" into a criminal act. More technically, a crime may be defined as follows: a crime is an act believed to be of such serious consequence to the well-being of society and to affect adversely the interests or the life of the state, that it has been brought within the cognizance of the law and there specifically prohibited—generally with a penalty prescribed for its commission. Likewise, the omission of an act expressly enjoined by the law constitutes a crime.

30. ( ) The basis of an enriched life is: 1. freedom from disease. 2. positive health. 3. exercise. 4. a good mind.
31. ( ) Ill health: 1. always gains sympathy. 2. increases one's mental ability. 3. is a great handicap. 4. has no effect on a child.
32. ( ) The adequate functioning of the body to meet the physical demands of life is called: 1. health. 2. success. 3. freedom from disease. 4. existence.
33. ( ) The "electric eye" responds to: 1. darkness. 2. light. 3. sound. 4. the buzzer.
34. ( ) "Electric eyes" are at present useful to blind persons for getting about: 1. their homes. 2. town. 3. public buildings. 4. museums.
35. ( ) Through the "electric eye" the blind person: 1. is able to see everything. 2. can see light. 3. is given a sense of direction. 4. can see colors only.
36. ( ) Gandhi was fasting because: 1. he was ill. 2. he had been ordered to do so. 3. there was a famine in India. 4. he wanted England to accept the electoral compromise.
37. ( ) The Mahatma is: 1. an English official. 2. an "untouchable." 3. the Nationalist leader in India. 4. a fictitious character.
38. ( ) The British government: 1. accepted the compromise. 2. refused to accept the compromise. 3. took no action. 4. accepted a modification of the compromise.
39. ( ) A crime is defined as: 1. an offense for which one is convicted in court. 2. the violation of a law. 3. an act for which one is summoned to court. 4. an insult to the police.
40. ( ) One can become a criminal: 1. only by committing an illegal act. 2. only by being arrested. 3. only after he has been in jail. 4. by omission as well as by commission.
41. ( ) Criminal acts are always offenses against: 1. society. 2. public officials. 3. one's neighbors. 4. business concerns.
## PART I

**DIRECTIONS:** Get the right answers to as many examples as you can, and write them in the spaces left for them near each example. Make your answers stand out clearly. You will have 15 minutes for this part.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. $8 + 9 = $</td>
<td>11. Add</td>
<td>20. $1000 \times 78 = $</td>
<td>31. $2\frac{3}{4} - 1\frac{1}{2} =$</td>
<td></td>
</tr>
<tr>
<td>2. $18 \div 2 =$</td>
<td>12. $976 \div 4 =$</td>
<td>21. $25 - 16.85 =$</td>
<td>32. $1\frac{1}{2} \times 2\frac{1}{2} =$</td>
<td></td>
</tr>
<tr>
<td>3. $3 \times 7 =$</td>
<td>13. $9000 - 2768 =$</td>
<td>22. Multiply</td>
<td>33. Add</td>
<td></td>
</tr>
<tr>
<td>4. $16 - 7 =$</td>
<td>14. $763 \times 34 =$</td>
<td>$786 \div 407 =$</td>
<td>$4.5$</td>
<td></td>
</tr>
<tr>
<td>5. Multiply</td>
<td>15. $8 \div 2432 =$</td>
<td>$3\frac{1}{4} - \frac{1}{4} =$</td>
<td>$12.3$</td>
<td></td>
</tr>
<tr>
<td>6. Subtract</td>
<td>16. Add</td>
<td>23. $\frac{3}{4} + \frac{3}{4} =$</td>
<td>$27.9$</td>
<td></td>
</tr>
<tr>
<td>7. Add</td>
<td>17. Multiply</td>
<td>24. $\frac{3}{8} + \frac{3}{4} =$</td>
<td>$48.2$</td>
<td></td>
</tr>
<tr>
<td>8. $2 \times 1286 =$</td>
<td>18. Multiply</td>
<td>25. $85 - 29% =$</td>
<td>34. $97.8 \times 426 =$</td>
<td></td>
</tr>
<tr>
<td>9. $869 - 298 =$</td>
<td>19. $800 \div 100 =$</td>
<td>26. Add</td>
<td>35. $98.8 - 29.95 =$</td>
<td></td>
</tr>
<tr>
<td>10. $2.75 \times 4 =$</td>
<td>27. $\frac{3}{4} \div \frac{3}{4} =$</td>
<td>28. $\frac{3}{8} \times \frac{3}{4} =$</td>
<td>36. $87.425 \div 325 =$</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Copyright, 1934, Kansas State Teachers College, Emporia, Kansas*
PART II.

DIRECTIONS: Work these problems on separate paper, and write the answers in the spaces left for them. You will have 15 minutes for this part.

1. Dale has saved 90¢. If he buys a toy plane for 35¢, how much will he have left?

Ans. ............................................

2. At Christmas time the second grade children packed a box of canned food for the children's home. They had 25 qt. of beets, 36 qt. of fruit, and 9 qt. of peas. How many quarts in all did they pack?

Ans. ............................................

3. How many three-cent stamps can be bought for 15 cents?

Ans. ............................................

4. At 5¢ a bar, how much will four candy bars cost?

Ans. ............................................

5. John sold 24 papers on Monday, 20 on Tuesday, 25 on Wednesday, and 33 on Thursday. How many did he sell in all?

Ans. ............................................

6. At 30¢ a pound, how much will ½ pound of nuts cost?

Ans. ............................................

7. James sells Saturday Evening Posts at 5¢ each. One week he took in $1.25. How many Posts did he sell?

Ans. ............................................

8. May weighs 57 pounds, but she should weigh 63 pounds. How many pounds is May's weight below what it should be?

Ans. ............................................

9. At 3 for a dime, how many post cards can be bought for 50 cents?

Ans. ............................................

10. Mr. Jones earns $145 a month. How much does he earn in a year?

Ans. ............................................

11. Mrs. Martin gave the clerk a five-dollar bill to pay for $3.48 worth of groceries. How much change did she receive?

Ans. ............................................

12. The third grade collected 52¢ for the Junior Red Cross, the fourth grade, 87¢, and the fifth grade, 75¢. What was the total amount collected.

Ans. ............................................

13. Frank saves ½ of his earnings. Every Saturday he earns $1.50. How much does he save each week?

Ans. ............................................

14. Mr. Clark bought 3 shirts at $1.65 each and 2 ties at $3.50 each. How much did the shirts and ties together cost?

Ans. ............................................

15. A passenger plane leaves Kansas City at one o'clock and arrives in Chicago at three-thirty. How long does it take to make the trip?

Ans. ............................................

16. Jack received $2 for his birthday. He spent 15¢ for a ticket to the picture show and 48¢ for a ball. How much had he left?

Ans. ............................................

17. What is the distance around a square field 85 feet long?

Ans. ............................................

18. What is the area of a basket ball court which is 90 ft. long and 60 feet wide?

Ans. ............................................

19. Mrs. Johnson paid $44.16 for electricity during the year. What was her average monthly bill?

Ans. ............................................

20. How many badges 4 inches long can be cut from a piece of ribbon 1 yard long?

Ans. ............................................

21. May bought $¼ yards of ribbon at 24 cents a yard. How much change should she have received if she paid with a $1 bill.

Ans. ............................................

22. Ted can make a running broad jump of 12½ ft. Dan's record is 11½ ft. How much farther can Ted jump than Dan?

Ans. ............................................

23. What will a 14½-pound turkey cost at 28¢ a pound?

Ans. ............................................

24. Mary practices on the piano ½ hour in the morning, ¼ hour at noon, and ¼ hour after school. How much time does she spend practicing?

Ans. ............................................

25. If a boy buys 100 papers for $1.25 and sells them for 2 cents each, how much does he make?

Ans. ............................................

26. The scale of a history map is 1 in. = 600 mi. How far apart are two cities that are 2½ in. apart on the map?

Ans. ............................................

27. A plane travels from New York to Chicago, a distance of 784 miles, in 4½ hours. What does the plane average per hour?

Ans. ............................................

28. A swimming tank is 36 ft. long, 28 ft. wide, and 8 ft. deep. How many cubic feet of water does it hold?

Ans. ............................................
TEST II
FORM A

KANSAS ARITHMETIC TEST
Grades VI-VIII

Name ........................................... Age .................................... Grade ...................................

School ......................................... Teacher ......................................

Town ........................................... State ........................... Date ...........................

---

PART I.

DIRECTIONS: Work as many of the following examples as you can and write the answers in the spaces left for them. Reduce all answers to lowest terms. Make your answers stand out clearly. You will have 15 minutes for this part.

1. Add
5
7
4
9

2. 2 6 - 8 =

3. Add
4 6 8
1 5 7
4 0 9
3 6 7

4. Subtract
5 6 5 1
4 6 7 2

5. Multiply
8 4 5
5 0 2

6. 2 5 ) 5 7 0 0

7. 1 ¼ - ½ =

8. Add
$2 8 . 6 5
2 . 1 0
3 9 . 1 8
. 5 6

9. 2 5% of 6 4 =

10. Multiply
6 . 2 9
. 3 7

11. 2 . 3 ) 6 . 2 1

12. Add
1 8 3 ¾
7 2 1 ¼
6 ¼

13. 4 2 8 5 ÷ 1 0 0 =

14. Multiply
5 4 . 7 6
. 0 8 7

15. 3 5 × 1 0 0 0 =

16. 6 is ...... % of 6 0

17. 7 2 8 × 0 =

18. 7 oz. = ...... lb.

19. 3 ¼ × 6 ¼ × 1 ¾ =

20. . 0 2 5 = ...... %

21. % 5 ÷ % 6 =

22. Add
5 ft. 6 in.
3 ft. 4 in.
6 ft. 9 in.
7 ft. 8 in.

23. 1 5 ¾ ÷ 3 =

24. Subtract
3 yd. 4 ft. 5 in.
6 yd. 5 ft. 7 in.

25. ½% of 9 0 is .......

26. 6 ) 2 5 ft. 6 in.

27. Change to a decimal 6 ½ %

28. 4 2 ) 8 4 1 6 8

29. Find the square root of 12 1

30. Find the square root of 1 0 8 . 1 6

---

Copyright, 1934, Kansas State Teachers College, Emporia, Kansas
PART II.

DIRECTIONS: Get the correct answers to as many examples as you can. Reduce all answers to lowest terms and place them on the blanks below the problems. You will have 15 minutes for this part.

1. John had 27 marbles when his father gave him 18 more. How many did he then have?
Ans. ............................................ .

2. Jack's mother bought him a new suit for $7.58, an overcoat for $6.75, and a pair of shoes for $2.20. How much should the clerk have charged her?
Ans. ............................................ .

3. John can do a job in 9 minutes and 6 seconds. Sam can do the same work in 7 minutes and 26 seconds. How much faster is Sam than John?
Ans. ............................................ .

4. There are 21 members in a class; 9 of them are boys. How many girls are there in the class?
Ans. ............................................ .

5. A teacher divided 84 sheets of construction paper equally among 6 pupils. How many sheets did each one get?
Ans. ............................................ .

6. A $75.12 debt is to be paid in installments of $6.26. How many such installments will be required?
Ans. ............................................ .

7. Roy bought a $2.79 sweater, paying for it out of his $5.23 savings account. How much has he left?
Ans. ............................................ .

8. A dealer who had been selling a certain lamp for $4 raised the price 12 1/2%. What did the lamp then sell for?
Ans. ............................................ .

9. Wiener cost 14 cents a dozen. A class is going to have a picnic and will need 54 wieners. How much will they cost?
Ans. ............................................ .

10. Four boys weigh 47 lb., 55 lb., 67 lb., and 71 lb. What is their average weight?
Ans. ............................................ .

11. A man traveled 129 miles in 3 hours. What was his average rate of speed?
Ans. ............................................ .

12. If Tom mows 1/3 of the lawn, and Bill mows 1/4 of it, what fraction is left for Bob to mow?
Ans. ............................................ .

13. Which is the greater numerically, the perimeter of a square 8 ft. on a side or the area?
Ans. ............................................ .

14. In manual training a boy wants to saw a board which is 8 3/4 feet long into lengths measuring 9/8 ft. How many such pieces will he get?
Ans. ............................................ .

15. The population of a certain state is 53,125. If there are 85 counties in the state, what is the average population of each county?
Ans. ............................................ .

16. Dick's father had 3 1/2 acres of hay, which averaged 1 1/2 tons to the acre. What was the total yield?
Ans. ............................................ .

17. A man who weighed 220 pounds went on a diet and lost 15% of his weight. What did he then weigh?
Ans. ............................................ .

18. A man insured his $800-dollar automobile for 80% of its full value. If the rate is 80¢ for each 100 dollars' protection, what will the annual premium be?
Ans. ............................................ .

19. The dimensions of a rectangular tank are 2 ft. x 3 ft. x 2 ft. What is the weight of the water in this tank when full? (Water weighs 62.4 lb. per cu. ft.)
Ans. ............................................ .

20. A farmer bought 6 boards 2 inches thick, 4 inches wide, and 15 feet long. At 8¢ a board foot, what will the lumber cost?
Ans. ............................................ .

21. Mr. Smith borrowed $850 from the bank at 7% interest. If he pays the interest every six months, how much does he pay each time?
Ans. ............................................ .

22. The weights of Ruth and her mother are in the same ratio as the weights of John and his father. Ruth weighs 40 lb., her mother, 120 lb., and John, 60 lb. What is the weight of the father?
Ans. ............................................ .

23. A dealer pays $540 for a piano and wishes to sell it so as to make a profit of 20% of the selling price. What must he sell it for?
Ans. ............................................ .

24. How many square inches are there in the surface of an open cylinder 20 inches long and 7 inches in diameter? (π = 3.14)
Ans. ............................................ .

25. A baseball diamond is a square 90 feet on a side. How far is it from second base to home plate?
Ans. ............................................ .