

THE UNIVERSITY OF MANITOBA

THE CONSTRUCTION OF A TEST IN CANADIAN  
SOCIAL CONCEPTS FOR PUPILS IN JUNIOR  
AND SENIOR HIGH SCHOOL

MASTER'S THESIS

IN EDUCATION

ALLIN JOHN PYBUS  
WINNIPEG, MANITOBA

THE UNIVERSITY OF MANITOBA

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AND SENIOR HIGH SCHOOL

BEING A THESIS SUBMITTED TO THE COMMITTEE  
ON POST-GRADUATE STUDIES IN PARTIAL  
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EDUCATION

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BY

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WINNIPEG, MANITOBA

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CHAPTER I.  
INTRODUCTION.

PURPOSE OF THE STUDY.

The purpose of this thesis is the construction of a validated test on the concepts used in the Social Studies for Canadian Schools. The urgent need for some useful and practical test in history and the social studies has long been apparent. There has been much searching after, and some scientific investigation into the possibility of creating a test that actually would examine for understanding rather than those factors which are more easily examined: memory, English expression and the ability to write much in a limited time. Such a test should contain exercises which examine a student's power of reasoning, association, comparison and discrimination as well as his memory. This test should be wide in scope, generally acceptable, easily administered and graded, and should contain from fifty to one-hundred questions. History test-makers have had difficulty in devising such an examination although many different types of tests have been tried. Prior to 1915 the essay type of examination was most popular; from 1917 to 1927 various Standard Tests were experimented with; and during the past twenty years, the New-Type Tests have become the favorite tool of would-be test constructors.

### Theory of Test Construction

This would-be test constructor in attempting to build a social 'concepts' test was confronted by numerous difficulties. First, most of such tests already created are American and deal with American problems and use American terminology. Second, to date no test in history (or the social studies) has been generally accepted nor widely used, as has been the case in arithmetic, writing, reading and language. There was also the discouraging fact:

"that to date no one has succeeded in making a high grade test in history which is as readily given and as easily graded as is demanded of tests in general."<sup>1</sup>.

Exercises are required that could test a variety of mental processes and not memory only. The construction of such a test is the problem of this thesis. The method is explained in Chapter II.

With the foregoing difficulties in mind the writer built a test for the purpose of testing a Canadian student's understanding of basic social concepts without which there is little insight or intelligent thinking. By a student's understanding of a concept the writer means the sum total of the student's previous experience or knowledge regarding the concept concerned -- that is the student's approximation of

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<sup>1</sup>R. M. Tryon, Standard and New Type Tests in the Social Studies, The Historical Outlook, XVIII #4 (April 1927), p. 177.

the common understanding of the term. Many writers have attempted to define what they meant by a concept:

"The concept is the sum total of what you know about the object. It is the sum total of what you have retained from observing, dealing with, and thinking about the object. It is what it means to you. Anything that can be perceived by the senses or thought of, or imagined can be conceived--persons, things, events, qualities, and relations, concrete or abstract, individual or general'.

'An important task of education is to lead the pupil to condense his experiences and attach symbols to the concepts thus formed'. -- Prof. W. C. Bagley.

' --- that the memory of similarities between objects is called a concept.'<sup>1</sup>

The foregoing definition, as given by Joy M. Lacey, "a concept is what it means to you", is the definition or meaning of the term as used in this thesis.

The test used in this work has a number of definite limitations that should be mentioned at this point. First, it is a test for understanding and does not attempt to test accumulation of facts. It is a general examination of the student's knowledge and understanding of common yet vital terms in Canadian Social Studies. The background of the child, therefore, limits his success. The student's standard of reading ability and his vocabulary experience also definitely aid in determining his score, because a student with a wide vocabulary may recognize immediately that some answers are definitely

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<sup>1</sup>Joy M. Lacey, Social Study Concepts of Children in the First Three Grades, Teachers College Contributions to Education. #548, Columbia University, 1932, Pp. 11 and 12.



wrong and by elimination arrive at the correct answer, whereas a student with a more limited vocabulary is at a disadvantage since he recognizes only one or perhaps two of the statements as being wrong and therefore is forced to guess. A foreign background, or childhood spent among people of limited general knowledge, tends to limit or rather actually handicap the otherwise bright student in his efforts toward success in this test. A final and important limit to this test is that it does not attempt to measure attitude and is perhaps not even a measure of effort (it does not credit the steady plodder) but rather general intelligence plus a background of social training.

This test, or rather examination, contains one hundred multiple-choice questions validated and chosen by giving four one-hundred-question tests to more than one hundred and fifty students (boys and girls) who were in grade 8.1, that is they passed from Grade VIII in June and wrote the preliminary tests in September -- the first month of their Grade IX year. Each question is carefully worded so that there is no need for ambiguity as to rightness or wrongness of the answer. Each question has three, four or five answers only one of which is definitely correct. With four hundred questions it is possible to sample a wide field in the social studies. This possesses an additional strength because candidates cannot claim that the particular questions did not suit their training

or background for the reason that most of their strong and weak points are probed. The questions are designed to cover all levels of difficulty from Grade VI to Grade XI, but because Canadian Social Studies are stressed in Grade VIII the questions seemed especially good for a test of a body of students who had just completed that Grade. The writer realizes that the objective type of examination is subject to certain defects but he also believes that its many advantages warrant the time and effort required to construct it.

The questions were validated by using the quintile group scores. A thorough study and comparison was made of all the successful scores in the papers in both upper and lower quintile groups in each of the four tests. The questions that are considered most valid are those which show the greater difference of success in favor of the upper quintile over that of the lower quintile scores; such questions possess the greatest discriminating value -- they tend to measure best the students' power of discrimination. This method and the results of it are explained in detail in Chapter II.

The mental ability or I. Q. of each student was measured by the use of the 'Laycock Mental Ability Test', a copy of which is found in Appendix F.

The four preliminary tests were administered to one hundred and fifty-six students (boys and girls) in Grade 8.1 in Robert H. Smith Junior High School. This school is situated

in the residential section of south-west Winnipeg and is composed of students whose parents are chiefly of the professional class. The resultant validated test was then administered to 303 Grade VIII students, 289 Grade IX students and 247 Grade XI students all in Manitoba. The Grade VIII students were composed of 74 students from the country (Kelwood, Manitou, Melita, Wawanessa and Winkler), and 229 from the city (Faraday, Earl Grey and Robert H. Smith schools). The Grade IX classes comprised 61 students from the country (Kelwood, Manitou, Melita, Wawanessa and Winkler), and 228 from the city (Faraday, General Wolfe, a private Night School, and the Robert H. Smith School). The Grade XI students comprised 64 from the country (same schools as Grade IX), and 183 from the Isaac Newton and Gordon Bell High Schools, Winnipeg. This territory is sufficiently representative to allow for the formation of certain general conclusions in regard to the influence of different community types. The findings are set out in Chapter V.

Reliability is an important part of any test, and is second only to validity. The reliability of this test was assured in two ways: (a) objectivity of scoring, and (b) extended sampling. The reliability was checked statistically from the results of the two halves of the same test using 60 Grade IX papers. This is explained in Chapter VI and makes use of the Calculation of the Reliability Coefficient By the

### Method of Alternate Halves.<sup>1</sup>

Some schools contain separate boys' and girls' classes, while in other schools the classes are mixed. The writer therefore did not attempt to test equal numbers of boys and girls but rather the classes as they existed and has shown the resultant numbers for each in the Grades VIII, IX and XI in tables in Chapter VII. The boys seemed slightly more interested in this type of work than did the girls. Boys of High School Age seem to take a greater share in the responsibility in studying their society, their country and world affairs in general. Even the poorest students among the boys seem interested in the concept questions and all felt that they had done fairly well -- even those whose scores were in the lowest quintile. The girls did their best but their interest was not as spontaneous, nor were their scores on the average quite as high. Each student, both boys and girls, gave his age in years plus months. The results of the influence of age are given in detail in Chapter VII. In brief, the factor of age does not affect the scores as much as the grade standing of a student. Often some of the best marks on the concept test in the grade tested were made by the youngest yet brightest students in that grade. A third influence on the score was the type of community wherein the test was given. The general

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<sup>1</sup>G. M. Ruch, The Objective or New-Type Examination, p. 419. University of California: Scott, Foresman and Company, 1929.

background, the occupation of the father and the environment in which the family lives have a direct bearing upon the score which the student makes -- an influence so great that student effort and intelligence alone cannot overcome it. All this is indicated by the scores, figures and graphs as shown in Chapter VII.

In schools where an attempt had been made to group students homogeneously, in an effort to adapt the school to the variety of human abilities, many outstanding features were noticed. First, in the A classes the scores were consistently higher than in the B and C classes. Many investigators have found this to be true. In a recent educational bulletin J. L. Stenquist points out that:

"When Thorndike proved by objective measurement that in the majority of capacities the most gifted pupil will, in comparison with the least gifted of the same age, do over six times as much in the same time, or the same amount with one sixth as many errors he fired the shot that was destined to be heard around the educational world, and opened the door to a new kind of education."<sup>1</sup>

This discovery of differences of ability in individuals and in classes is thus no less important than the discovery that each student differs from his classmates. Today intelligent<sup>2</sup> educators take the homogeneous grouping for granted and every intelligent principal now demands continuous cumulative test

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<sup>1</sup>J. L. Stenquist, Fifteen Years of Testing, Baltimore Bulletin of Education, Baltimore: Bureau of Measurement, Statistics and Research, April 1938. Pp. 8 - 9.

<sup>2</sup>H. C. Morrison, Adaptive Capacity, Basic Principles of Education, p. 106. Chicago: Houghton Mifflin Company, 1934.

data to make such grouping possible. Any supposed dangers of this grouping and all the dire results as predicted in 1920 have failed to materialize. As a result the more up-to-date schools today argue that it is preferable to place together in a classroom pupils of a like degree of mental ability and at approximately the same level of achievement. This doctrine was revolutionary in 1920, and even today a few schools have not yet accepted it. However in the Robert H. Smith Junior High School where this test was given its preliminary validation, the method of homogeneous grouping has been followed with periodic adjustments of students. The principal uses the following criteria in shifting students into the most suitable classes: his personal judgment qualified by that of his teachers, the attitude of the student toward his studies in particular and society in general, and last but not least the academic results as shown on report cards. A second feature noticed in testing these homogeneously grouped grades in comparison with the heterogeneously grouped was that the Average Deviation was much smaller in the former type. In a Grade VIII C class examined the Average Deviation was 6.98 while in a Grade IX class of all abilities the A. D. was 14.64. This will be fully explained in Chapter VI, with tables giving the statistical evidence. Other features noticed in the testing were that more time was required by the C classes than by the A classes; that questions asked in a negative manner were

not generally understood by the C students and that the C students did much more guessing because of an inability to read than did the A or B classes. This reading difficulty is fairly obvious in all grades but particularly appalling in C classes. This reading weakness deserves attention because it is a serious student handicap. Reavis points to this:

"One of the most common disabilities found among high-school pupils is the lack of development of the fundamental habits of reading. The lack of mastery of this basic tool renders difficult all work in which reading is involved." <sup>1</sup>

The aims of this thesis are varied -- the first is to produce a 'power test' rather than a rate or speed test. The time element, although always recorded, is not of very great importance because the writer felt that in testing and comparing students' achievements in any one grade and in many different schools the time should remain unlimited, for as Thorndike points out, the better students can work more quickly and therefore in all fairness to the slower students a time limit was not set but the students were informed that they should be able to complete the entire test in from twenty to forty minutes. A second aim of this thesis is to construct the test scientifically, and then to examine it statistically paying careful attention to its validation, reliability and general effectiveness. The test was constructed following the ideals as laid out by some of the

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<sup>1</sup>W. C. Reavis, Pupil Adjustment, Chicago: D. C. Heath and Company, 1926. p. 30.

best recognized and most successful test-constructors of our time. The building of such a test is an arduous, time-consuming and expensive task. As a guide the writer made use of the most recent data. Of two of the guide-books used J. L. Stenquist has this to say:

"Such books as 'The Construction and Use of Achievement Examinations' by Hawkes, Lindquist, and Mann, and 'The Objective Type of Examination' by Ruch are epoch making. A scientifically constructed test costs hundreds and often thousands of dollars to develop if it is to meet its proper specifications. Dr. Ruch estimated that acceptable test questions alone are worth at least one dollar each."<sup>1</sup>

With the purpose, the need, the difficulties, the theory of testing and the general aims of this thesis in mind let us now proceed to the manner of construction of this particular test.

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<sup>1</sup>Ibid., p. 4.



## CHAPTER II.

### HISTORY OF THE VALIDATED TEST USED

#### Construction of the Preliminary Tests

Four preliminary tests were constructed, each consisting of two samples and one hundred questions. In selecting the samples and questions the writer had three aims in mind:

- (1) The questions should be suitable for Canadian students.
- (2) The questions should be all of the multiple-choice or best-answer type, each with from three to five given responses.
- (3) The questions were to be chosen from similar social concept tests which had been validated in the United States, namely:

L. C. Pressey Tests--Tests and Measurements of Social Sciences. Kelley and Krey 1934. pp. 189 etc.

Wm. Henry Burton's Doctor's Thesis--"Nature and Amount of Civic Information Possessed by Chicago Children of Sixth Grade Level." Chicago, Ill.: 1924, Pp. 40 -- 259.

Gold-Bovee-Wesley Tests--The Historical Outlook Vol. XXIII. (Jan. 1932) Pp. 12 etc.

Tests #1 and #2 were composed of questions from the Pressey Tests; Test #3 was composed of questions partly from the Pressey Tests, and the remainder from the Gold-Bovee-Wesley Tests; Test #4 from those used by Dr. Wm. Henry Burton.

The four tests although similar in construction did have some differences. Tests 1, 2 and 3 consisted of three foolscap-size pages each, while test 4 consisted of four such

pages because the latter contained more questions of five given responses. In addition the information sought concerning the pupil himself at the top of the first page of Tests 1, 2 and 3 was not asked for in Test 4 as the repetition of similar information was unnecessary. Even though the instructions were given orally at the time of the tests, they were also written on each of the four tests cautioning the students to answer all questions and to guess at those of which they were not certain. The instructions consisted of only four short sentences which although brief proved sufficient to be quite clear to the students.

Each preliminary test contained one hundred questions. This number was chosen for several reasons. First, the scores were more easily converted into percent. Secondly, with one hundred questions the test could be administered carefully during one forty-five minute period because

"the multiple-choice statement (for pupils between 11 and 14 yrs.) can be done two or three per minute."<sup>1</sup>

The 'social concepts' examination, in its preliminary form was given to one hundred and fifty-six students (boys and girls) who had passed Grade VIII and who were in their first month of study in Grade IX at Robert H. Smith Junior High School in Winnipeg. The four tests were given, each one week

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<sup>1</sup>Paul Klapper, The Teaching of History, D. Appleton & Co., New York: 1926, p. 266.

apart. The students were allowed sufficient time to complete each test. The upper and lower quintile groups of papers in each test were used to determine which questions had sufficient validity to warrant their being retained in the final test. A more complete analysis of the Preliminary Tests is given in the following section.

### The Preliminary Tests

A copy of Test #1 and its key are in Appendix A. These questions were taken from the Pressey Tests. Each question has four suggested completions. Such questions are in agreement with the principle that:

"These questions measure such things as cause and effect, relationships, factors underlying important developments, consequences of certain actions, and the significance of certain political, social, and economic situations and practices. Thus in many respects multiple-choice exercises may constitute the most significant section of the social studies examination."<sup>1</sup>

This particular type of question draws forth the best effort of the students by placing them in the proper attitude because they are interested in and enjoy writing such an examination. Then too, this new-type test in social concepts, although taking longer to construct is worthwhile because such an examination can be used to cover a large field and can gauge the pupil's ready judgment as developed by classroom activity, home environment and general experience. Experimentalists have found

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<sup>1</sup>Hawkes, Lindquist, Mann, The Construction and Use of Achievement Examinations, Houghton Mifflin Co., 1936 . p. 175.

the results of such a test more reliable than those of the old type. Kelley and Krey in their work agree with this:

"A variety of forms were used, the true-false, the completion, the matching and the multiple-choice forms being most favored. The questions were tried out and the results statistically analyzed. After a series of trials, the multiple-choice form of question was selected."<sup>1</sup>

This reliability will be brought out later in this chapter in the findings of all four preliminary tests from the scores of 156 pupils. The correction of such questions is completely objective and can be done by a clerk or untrained assistants. A copy of preliminary test #2 and its key are in Appendix A. This test is also composed of questions (four suggested completions) taken from the Pressey tests. A copy of preliminary test #3 and its answer key are given in Appendix A. This test is composed of eighty-three questions (four suggested completions) from the Pressey tests and sixteen questions (five suggested completions) from the Gold-Bovee-Wesley test. In order to make the hundredth question the writer made #100, a question concerning an 'elder nation', a concept important today and one used in a 'Dr. I. Q.' radio program in July 1943. A copy of preliminary test #4 and its answer key are given in Appendix A. These questions (three suggested completions) were all taken from Dr. Burton's test as mentioned previously. The questions were slightly more detailed in wording and re-

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<sup>1</sup>T. L. Kelley and A. C. Krey, Tests and Measurements in the Social Sciences, Part IV: Report of the Commission on the Social Studies, American Historical Association, 1934. P. 20.

quired four pages instead of the three used in the other tests. However, these differences had very little influence on the degree of difficulty for the student or in the time required.

In the scoring of all four tests a credit was given for each correct answer and no credit for unanswered or incorrectly answered statements. The reason for not penalizing a wrong answer is simple. Where the student must choose one answer from three to five possibilities, the chance for guessing is materially reduced, and reason must be the guide.

This conclusion is reached by most investigators.

"The multiple-choice type is perhaps the most valuable and the most generally applicable of all types of test exercises. -----It can be made particularly effective in requiring inferential reasoning, reasoned understanding, or sound judgment and discrimination on the part of the pupil; it is definitely superior to other types for these purposes."<sup>1</sup>

Chapman's study mentions the injustice done if a penalty is made by what he calls the right-minus-wrong method. This study concludes that:

"by making the penalty for errors sufficiently great, we can probably deter the wise, but we shall lower the reliability."<sup>2</sup>

In each test the student had before him a number of given responses, only one of which was correct. He was required to decide which response was correct and then to place the

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<sup>1</sup>Hawkes, Lindquist, Mann, The Construction and Use of Achievement Examinations, Houghton Mifflin Co., 1936, p. 138.

<sup>2</sup>G. M. Ruch and others, Objective Examination Methods in the Social Studies, Scott, Foresman & Co., Chicago, 1926, p. 58.

corresponding letter on the straight line to the right of the question. These lines are arranged in a vertical column in order to be more easily and more rapidly corrected.

Each test was given to the various classes during a regular school period, usually in the afternoon when the periods are forty-five minutes. The tests were given each one week apart and really created much interest throughout all classes.

#### The Validated Test

The four preliminary tests were given to five different classes, two of them girls and three of them boys. All classes were in Grade 8.1, that is each student had passed from Grade VIII into Grade IX and was in the first month of that school term. The preliminary tests were administered by the writer assisted by some of the teachers at Robert H. Smith School at weekly intervals during September. The girls' classes consisted of 77 students, 42 A girls and 35 B girls. The boys' classes consisted of 89 students, 37 A boys, 32 B boys and 19 C boys. The classes are graded A, B, and C based on general scholastic ability as determined from teachers' opinions, student's attitude and quarterly report card. Table I shows the average mark of each class on each of the four tests. It also indicates that the A class of boys did better than the A class of girls--the difference in the averages being 7.2 marks. The B class of boys did better than the B class of girls--

the difference in the averages being 4.9 marks. The C class of boys had the lowest average of the five classes. On the whole, Table I shows that the boys did better than the girls in their knowledge of social concepts.

Another result of the testing was that scores obtained by any one student on the four tests were usually within a few marks of each other. This fact is illustrated in Appendix D first for similarity, and then showing the greatest variation in scores received by any one student. Such scores would indicate that the four preliminary tests were of almost equal student difficulty. On the four tests each of the five classes examined did most poorly on Test #1, and next best on Test #3. Test #1 results were slightly lower perhaps because this type of test was new to all of the students. Test #2, although the questions were exactly the same type as used in Test #1, gave results which averaged 4% better in the C boys' class to 6.7% better in the B boys' class.

TABLE I

THE AVERAGE STANDINGS FOR GIRLS AND BOYS IN PRELIMINARY TESTS

Girls			Boys			
<u>A Class</u>	<u>B Class</u>	Total	<u>A Class</u>	<u>B Class</u>	<u>C Class</u>	Total
42	35	77	38	32	19	89
Av. Marks						
Test #1 75.2	#1 68.8		#1 83.7	#1 73	#1 68	
#2 78.7	#2 73.8		#2 88.3	#2 80.3	#2 72	
#3 76.6	#3 72		#3 84.5	#3 73.7	#3 70.8	
#4 79.1	#4 72.1		#4 85.7	#4 79.4	#4 74.5	
Av. of Av.		Av.				Av.
77.4	71.7	74.5	85.6	76.6	71.3	77.8

The scores of Tests #1, #2, #3 and #4 were used to determine which questions would have sufficient validity to warrant their being chosen for a place in the final test. In Test #1 the 145 scores were divided into three groups: First, the lower quintile of 30 of the lowest scores, then a middle group of 85 of the middle scores, and then the upper quintile of 30 scores. The choice of thirty (the quintile group) in the upper and lower groups was found necessary in order to use all



scores within the set limits e.g. in the upper group in Test I, all papers with scores of 83 to the highest of 95 were used and all scores 67 and below were included in the lower quintile group. It was found that a number of students made a certain mark and this made it necessary to include or exclude all of these scores. It then appeared that the use of quartile groups was impossible and a convenient group was chosen for each test-- Test #1 - 30 scores in both upper and lower groups, Test #2 - 32 scores, Test #3 - 31 scores, Test #4 - 29 scores. The middle group of papers in each test was set aside and only the upper and lower quintiles were used to discover the validity of each question. The scores used for each test are shown in Tables II - A, II - B, II - C, and II - D.

TABLE II - A

STUDENTS OF THE UPPER AND LOWER QUINTILES WITH THEIR  
RESPECTIVE MARKS TEST #1

Upper Quintile			Lower Quintile		
Student	Boy or Girl	Score	Student	Boy or Girl	Score
R W	B	95	T H	B	67
J F	B	94	D H	B	67
D G	B	94	S W	B	67
R F	B	91	E M	G	67
W D	B	90	D M	B	67
J M	B	90	G E	B	66
I H	G	90	R W	B	66
V C	B	89	J L	G	66
H A	B	89	J N	B	66
G C	B	89	A B	G	65
J H	B	88	P R	B	65
M B	B	88	S T	G	65
T J	B	88	L S	G	65
L J	B	88	M T	B	64
D S	B	88	W H	B	63
A C	B	87	P S	G	63
D M	B	87	R A	B	63
V N	G	86	D D	G	62
B W	B	86	R F	B	62
C R	B	86	S D	G	61
J M	G	85	J R	G	60
G H	B	85	M M	G	60
M S	B	85	R J	G	59
A K	B	85	K H	G	57
N B	G	84	H C	B	57
G H	B	84	T F	B	57
K M	B	84	R G	B	56
M R	G	84	W G	B	55
T W	B	83	G E	B	52
D H	B	83	A Z	B	52

BOYS 25  
GIRLS 5

BOYS 18  
GIRLS 12

TABLE II - B

STUDENTS OF THE UPPER AND LOWER QUINTILES WITH THEIR  
RESPECTIVE MARKS TEST #2

Upper Quintile			Lower Quintile		
Student	Boy or Girl	Score	Student	Boy or Girl	Score
R W	B	98	T F	B	74
I H	G	96	S D	G	72
D S	B	95	J G	G	72
H A	B	95	B S	G	72
G H	B	95	H H	G	72
W D	B	95	D M	B	72
V C	B	94	C A	B	72
J M	B	94	E J	G	72
D G	B	94	G E	B	71
A C	B	94	N P	G	71
C R	B	93	J N	G	71
M B	B	93	T S	B	70
C M	G	93	M T	G	70
V P	G	93	R J	B	70
J F	B	93	B H	B	70
L J	B	93	J R	G	69
C H	B	93	T H	B	69
M S	B	93	H C	B	69
G G	B	93	N B	G	69
T J	B	92	M E	B	68
D M	B	92	E E	B	67
J M	B	92	P R	B	66
E C	G	91	N A	G	66
G C	B	91	W G	B	66
R F	B	91	C R	G	65
T W	B	90	A B	G	65
M R	G	90	J L	G	64
M T	G	90	R J	B	61
G H	B	90	M T	B	58
J H	B	90	K H	G	57
R G	B	89	L K	G	56
J B	B	89	R G	B	55
BOYS	26		BOYS	16	
GIRLS	6		GIRLS	16	

TABLE II - C

STUDENTS OF THE UPPER AND LOWER QUINTILES WITH THEIR  
RESPECTIVE MARKS TEST #3

Upper Quintile			Lower Quintile		
Student	Boy or Girl	Score	Student	Boy or Girl	Score
A W	B	96	K S	B	68
D G	B	95	B S	G	68
H A	B	94	J R	G	68
C R	B	93	D G	B	67
D S	B	93	L S	G	67
J F	B	93	J D	G	67
V C	B	92	G G	B	67
L J	B	92	J M	G	67
J M	B	92	M T	G	66
V P	G	92	E M	G	66
I H	G	90	S M	G	66
G H	B	90	R F	B	66
W D	B	89	E I	B	65
A C	B	89	D M	B	65
G C	B	89	J N	B	65
A C	B	89	T F	B	63
D M	B	89	W G	B	62
M S	B	88	N P	G	62
G G	B	87	R J	B	62
J M	B	87	D D	G	61
M B	B	87	J L	G	61
K C	B	87	R J	G	61
H C	G	86	E E	B	61
R F	B	86	P R	B	59
J H	B	86	J G	G	58
J M	G	86	G E	B	57
N G	G	86	H C	B	56
C M	G	86	R G	B	54
A K	G	85	W H	B	50
V N	G	85	L K	G	50
R H	B	85	I H	G	49

BOYS 23  
GIRLS 8

BOYS 16  
GIRLS 15

TABLE II - D

STUDENTS OF THE UPPER AND LOWER QUINTILES WITH THEIR  
RESPECTIVE MARKS TEST #4

Upper Quintile			Lower Quintile		
Student	Boy or Girl	Score	Student	Boy or Girl	Score
D G	B	96	M T	G	70
R W	B	96	S W	B	70
D M	B	93	P R	B	70
G G	B	93	J D	G	69
J B	G	93	J G	G	69
J F	B	93	N B	G	69
B W	B	92	W H	B	69
K C	B	92	W G	B	69
M B	B	91	D D	G	69
C R	B	91	J L	G	68
A C	B	90	A B	G	68
J M	B	90	K H	G	67
G C	B	90	P S	G	67
L J	B	90	N M	G	67
H A	B	89	R F	B	67
J M	B	89	R G	B	67
D S	B	89	R J	B	67
C H	B	89	J S	B	66
D P	G	88	S F	G	66
I H	G	88	B S	G	66
A W	B	88	N A	G	64
V P	G	88	N L	G	64
C M	G	88	E E	B	62
P M	B	88	S M	G	62
R F	B	88	V W	G	61
M R	G	87	N B	G	59
S C	G	87	H C	B	57
P K	B	87	C R	G	54
A C	B	87	L K	G	49

BOYS 22  
GIRLS 7

BOYS 10  
GIRLS 19

A thorough study and comparison was made of all the correct responses in the papers in the upper and lower quintile groups in each of the four tests. The number of boys' papers and the number of girls' papers in each group were indicated in Table II. The significance of these results is discussed in the conclusions in Chapter IX.

The questions that are considered best are those which show the greater difference of success in favor of the upper quintile over that of the lower quintile scores; such questions possess the greatest discriminating value. Question 1 on Test #I showed that 30 students in the upper group while only 25 in the lower group gave the correct answer. This gave a discriminating power or value of 1.2. Question 2 on Test #I showed 30 correct answers in the upper group and 28 in the lower giving a discriminating value of 1.07. This method of comparing correct responses in the upper and lower groups was followed for the 400 questions in Tests 1, 2, 3 and 4. Of these four hundred questions used in the preliminary tests three hundred were discarded and the one hundred remaining were used to make up the required 'validated test'. Of the one hundred questions chosen all except one had a validation of 1.875 or better. This one<sup>1</sup> was retained as a check for further use with the validated test. Such a question ought to possess a

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<sup>1</sup>Preliminary Test 1, Question #53.

consistently lower rate of validity. One other question #100 in Test 3, although it did show validity, was not retained because it was purely an information question. All this validation, including the questions used, is set out in detail in Appendix B.

It is interesting to note that Test #1 (three answer responses) yielded thirty chosen questions or exactly one and one-half times as many as were obtained from Test #4 (also three answer responses). The only explanation that might be offered is that the weaker students learned how to discriminate to a better degree through the practice obtained in answering four tests and thus by making higher scores in Test #4 cut down the number of validated questions. The one hundred questions were drawn from the tests as follows: Test #1 provided 30 questions, Test #2 -- 25 questions, Test #3 -- 25 questions and Test #4 -- 20 questions. A copy of the Instructions, Validated Test and Key is given in Appendix C.

This validated test was next used to examine student ability in a number of urban and rural schools at the levels of Grades VIII, IX and XI. The scores obtained and the conclusions drawn are outlined in the remaining part of this thesis.

## CHAPTER III

### AN ANALYSIS OF RESULTS FROM THE VALIDATED TEST SCORES OBTAINED BY NINETY-TWO JUNIOR HIGH SCHOOL STUDENTS IN THE CITY OF WINNIPEG

#### Use of the Social Concept Test

The social concept test, the construction of which was explained in the previous chapter, was printed on three foolscap-size sheets of paper and was used to test student achievement in the understanding of concepts with Grade VIII and IX classes. The ninety-two students tested were grouped as follows: 33 Grade IX students (29 boys and 4 girls) from Robert H. Smith School classified in three types 6 A students, 8 B students, and 19 C students; 59 Grade VIII C students including 29 students (16 boys and 13 girls) from Robert H. Smith Junior High School, and 30 students, all boys, from Faraday Junior High School.

The Laycock Mental Ability Test<sup>1</sup> was administered to these same students for the purpose of determining each student's I. Q. The results are classified into seven groups for the purpose of comparing the mental ability of a Grade VIII C class with a Grade IX heterogeneous class and are set out in Table III page 29. Some evident differences are: the Grade VIII C class has 1.7% in the "Borderline" classification while the Grade IX class has none; the Grade VIII class has only 5% of its students with an I. Q. of 120 or more while the Grade IX class has 27.3% or

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<sup>1</sup>Copy of Laycock Mental Ability Test in Appendix E.



more than one-quarter of its number. These class differences in ability must be kept in mind by any teacher who attempts to teach effectively either class or similar types of classes. In schools where students are graded according to ability e.g. Grade VIII A, VIII B, VIII C (Robert H. Smith School) the teacher has two teaching advantages: he can interest a greater percentage of any given class by teaching at the level understood by the greatest number of its members which in this case is 52.3% for the Grade VIII class as compared with 45.5% for the unclassified Grade IX class; he can also teach at a speed which can be followed with interest by the greatest number of students. These factors are important for Thorndike has pointed out that the brighter students not only learn more but they learn faster.

TABLE III.

RESULTS FROM LAYCOCK MENTAL ABILITY TEST

Classification <sup>1</sup>	I. Q.	Grade VIII C		Gr. IX unclassified	
		No. of Children	% in each I. Q. group	No. of Children	% in I.Q. group
Feebleminded	0-69	0	0	0	0
Borderline	70-79	1	1.7	0	0
Backward	80-89	5	9	5	15.1
Normal	90-99	9	15	3	9.1
	100-109	22	37.3	12	36.4
Bright	110-119	19	32	4	12.1
Very Bright	120-129	3	5	7	21.2
Very Superior	130-139	0	0	2	6.1
TOTAL		59	100	33	100

Note: The inclusion of six A students and eight B students among the thirty-three Grade IX students is perhaps the reason for 27% of the Gr. IX I. Q.'s being over 120.

<sup>1</sup>R. Pintner, Intelligence Testing, p. 117, New York: Henry Holt and Co., (June 1939).

Table IV which follows indicates the relative standings in I. Q., Concept Test, and School Report of the thirty-three students in the Grade IX heterogeneous group. One important factor here should be noted. On the December marks used three subjects not included were music, art and physical training. The subjects used in computing the students' averages were history, English, mathematics, science, French, also Latin with the A students, manual arts with boys only and domestic science with girls only. Because this group was drawn from three rooms an individual classification of A, B, or C is given for each student. The A and B students did much better on all tests than did the C's. The younger students made better scores on the concept test than did the overage students as shown by the two thirteen-year-olds with ranks of 3rd and 11th respectively whereas the seventeen-year-olds ranked 21st and 25th respectively.

A similar comparison of results is given for the 59 students in the Grade VIII C homogeneous group in Table V page 32.

A comparison of the Concept scores received by the Grade VIII's and Grade IX's is given in Figure 1 page 33. The graph indicates that the range of the Grade VIII C concept scores is much less than the range of the Grade IX A, B and C scores which is perhaps a result of the homogeneous grouping of the Grade VIII class whereas the Grade IX class contains students of all abilities.

TABLE IV

GRADE IX RESULTS FOR LAYCOCK TEST, CONCEPT TEST,  
AND SCHOOL REPORT (AVERAGE MARK)

Type of Class	Student	I.Q. Rank	Laycock Test I.Q.	Concept Test	Rank on Concept Test	School Report Av.	Rank on School Report	Age Yrs. + Months	Sex
A	H I	1	134.15	85	5	84	3	14	G
B	V P	2	130	88	3	82	4	13	G
A	D G	3	127.22	96	1.5	80	5.5	14+6	B
A	Wm D	4	124.26	83	6	85	2	14+7	B
B	V N	5	124.08	73	8	77	7	14+5	G
B	N B	6	122.42	56	14	80	5.5	14+1	G
C	E R	7	121.21	52	19	67	10	14	B
A	J F	8	121.18	86	4	86	1	14+11	B
A	R W	9	120.38	96	1.5	76	8	14+6	B
B	K M	10	115.95	63	11	56	17.5	13+11	B
C	C A	11	114.54	48	26	56	17.5	15+2	B
B	G G	12	112.7	82	7	75	9	16+1	B
C	T S	13	111.98	50	23	53	25	14+3	B
B	M S	14	109.64	63	11	42	33	14+3	B
C	T H	15	109.58	54	16.5	52	27	14	B
B	D G	16	109.41	45	27	54	22	14+9	B
C	R J	17	108.38	31	29	63	12	14	B
C	K S	18	106.59	29	31	66	11	14+4	B
C	R A	19	102.7	63	11	54	22	16+1	B
C	G R	20.5	101.79	52	19	54	22	14+5	B
C	H C	20.5	101.79	26	33	62	13.5	14	B
C	G G	22	101.77	54	16.5	53	25	14+10	B
B	P S	23	101.14	50	23	43	32	15+5	B
B	J S	24	101.12	52	19	55	20	15	B
C	S W	25	100	41	28	62	13.5	15	B
C	H D	26	97.60	60	13	50	28.5	14+5	B
C	A Wo	27	91.6	64	9	48	30.5	16+2	B
C	A Wi	28	91.33	55	15	56	17.5	15+2	B
C	R W	29.5	86.6	49	25	50	28.5	17+6	B
C	R R	29.5	86.6	51	21	60	15	17+1	B
C	M T	31	86.4	50	23	53	25	15+1	B
C	R G	32	85.88	29	31	48	30.5	14+1	B
C	E E	33	82.49	29	31	56	17.5	15	B

TABLE V

GRADE VIII C RESULTS FOR LAYCOCK TEST, CONCEPT TEST,  
AND SCHOOL REPORT (AVERAGE MARK)

School	Student	Rank I.Q.	Laycock Test I.Q.	Concept Test	Rank	School Report Av.	Rank
F	K S	1	124.53	46	5	54.1	49
R	D A	2	123.39	40	11	64	24.5
R	A L	3	122.4	29	38	54	51
F	W S	4	119.5	33	24.5	66.1	13
R	H T	5	118.9	67	1	48	57
R	D A	6	118.6	61	3	65	19.5
R	F R	7	118.2	37	15.5	71	4.5
R	L L	8	117.58	45	6	77	1
R	D L	9	116.35	28	40	64	24.5
R	N M	10	116.1	40	11	63	30
F	M D	11	115.9	23	53.5	64	24.5
R	E J	12	115.4	65	2	58	43
R	D O	13	114.5	29	38	50	53.5
R	S H	14	113.37	30	34	66	14.5
F	A L	15	112.42	23	53.5	54.9	48
F	A G	16	112.26	30	34	68.1	9
R	C K	17	112.11	26	43.5	54	51
R	J J	18	112.10	23	53.5	58	43
F	S K	19	112.05	35	19	64.9	21
R	A W	20	111.5	42	7.5	58	43
R	P D	21	111.3	35	19	65	19.5
F	S F	22	110.04	31	30	49.3	55
F	M N	23	108.8	47	4	62.1	32
F	K W	24	108.4	34	22	59	41
F	A L	25	107.7	24	50.5	65.8	18
R	M J	26	107.4	26	43.5	70	6
F	A B	27	106.17	23	53.5	66.6	11
F	R T	28	106.13	32	27	57.3	45
F	R S	29	105.6	25	47.5	69.9	7
F	G L	30	105.4	30	34	67.4	10
F	E B	31	104.8	22	56	61.6	34
R	B C	32	104.37	26	43.5	66	14.5
R	D K	33	104.3	39	13.5	76	2
F	R L	34	104.24	21	58	63.4	28
F	G M	35	104.21	21	58	63.2	29
R	M P	36	102.9	34	22	71	4.5
R	L B	37	102.8	36	17	65.9	16.5
R	C C	38	102.4	40	11	62	33

TABLE V (Continued)

School	Student	Rank I.Q.	Laycock Test I.Q.	Concept Test	Rank	School Report Av.	Rank
F	L K	39	101.9	37	15.5	62.9	31
R	S T	40	101.3	30	34	61	38
R	S G	41	101.22	35	19	49	56
F	L A	42	101.21	32	27	59.8	40
F	S R	43	100.6	34	22	61.2	35.5
R	C H	44	100	33	24.5	57	46
F	K A	45	99.4	29	38	63.7	27
F	S P	46	98.8	25	47.5	64.3	22
F	C W	47	97.6	42	7.5	64	24.5
F	E S	48	95.9	41	9	66.3	12
F	E M	49	94.5	32	27	61.2	35.5
R	J W	50	94.2	31	30	50	53.5
F	L J	51	92.1	31	30	69.2	8
F	M R	52	91.7	30	34	71.2	3
R	D B	53	90.6	39	13.5	55	47
F	M D	54	87.9	21	58	61	38
F	R R	55	87.3	25	47.5	65.9	16.5
R	T E	56	86.6	27	41	54	51
R	K E	57	86.4	24	50.5	46	58
R	D R	58	80.3	25	47.5	61	38
R	J A	59	70	26	43.5	45	59

Robert H. Smith School -- 16 Boys  
13 Girls

Faraday School -- 30 Boys.



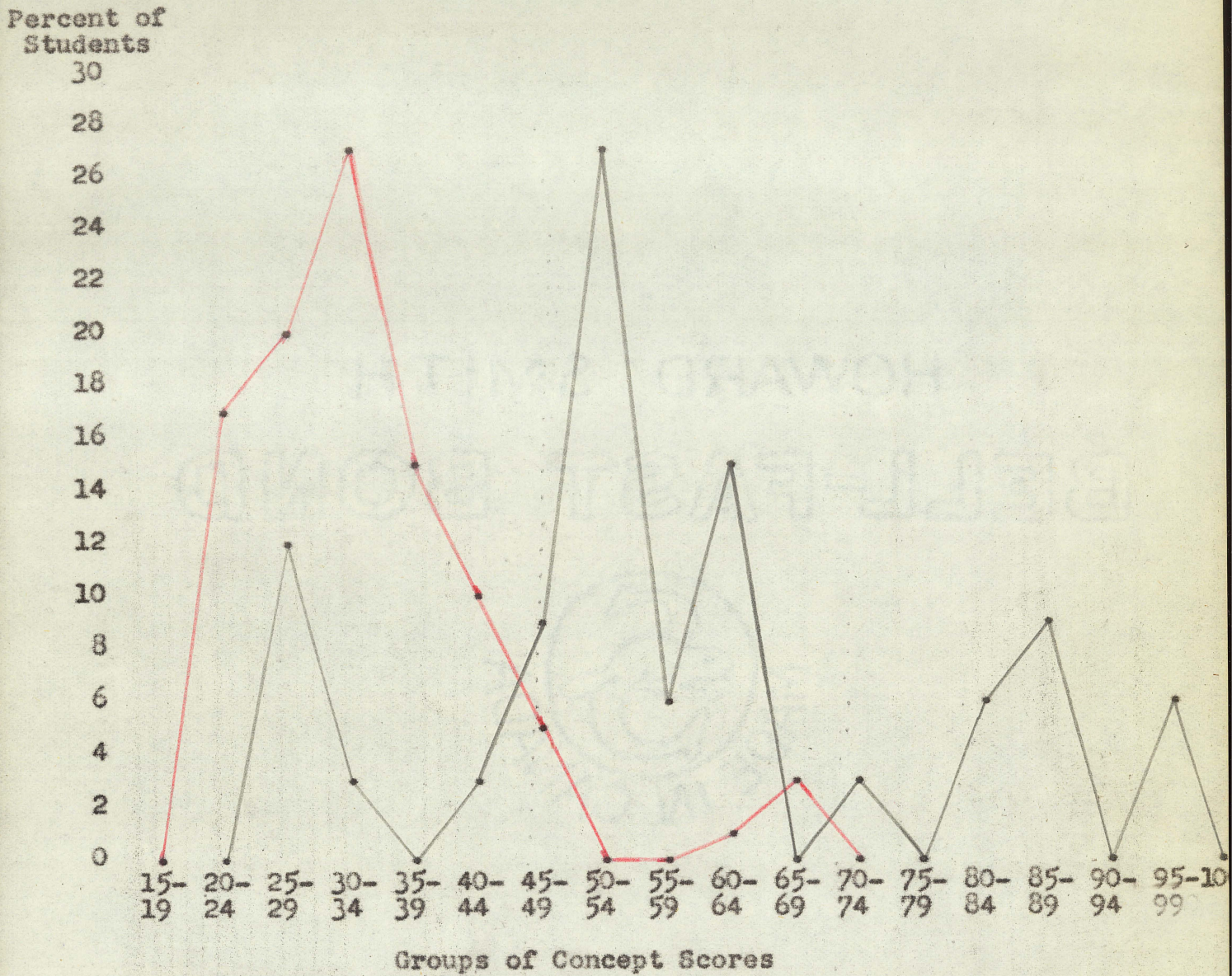


Fig. 1 -- Showing a comparison of Grade VIII C and Grade IX (A, B and C) Concept Scores.

— 59 Grade VIII C students  
— 33 Grade IX (A, B and C) students



In order to check the Correlation between the Laycock Mental Ability Test and the Social 'Concept' Test the Spearman's Rank-Difference Method was used. The rankings as shown for the Grade IX class in Table IV page 31 are listed in Table VI page 37. The difference for each student is given in the column under 'D'. The writer then squared each difference and added the thirty-three squared differences to derive the total 2210. Using this sum of the squares rho was determined to be .6306, and by use of tables  $r = .6478$ . The probable error is  $\pm .074$ . Therefore the Coefficient of Correlation between the Laycock Mental Ability Test and the Concept Test is  $.6478 \pm .074$ .

Similarly the Coefficient of Correlation between the Laycock Mental Ability Test and the School Report results as shown in Table VII is  $.71 \pm .65$ .

The scores of thirty Grade VIII C students were also used to check the coefficient of correlation between the Laycock I.Q. and the Concept scores, and between the I.Q. and School Report averages. These students were similar to the forementioned Grade IX students in that they also were from Robert H. Smith School, but they were different in one respect, namely, this class was a homogeneous group of C students. The correlation coefficients were as follows: for the I.Q. and Concept Test  $r = .5 \pm .103$  and for the I.Q. and Report (Average Mark)  $r = .4 \pm .113$ . The writer believes that these results showing a higher correlation between the concept test and intelligence will more often be the case than the opposite result where the correlation between school report average and



intelligence is higher as shown by the Grade IX students mentioned in the foregoing paragraphs. This belief was further substantiated by evidence derived from the use of scores of an unclassified Grade VIII group of thirty boys in Faraday School. Correlations similar to those mentioned in the preceding paragraphs were computed and the coefficients were .17 for the I.Q. and Concept Scores, and -.11 for the I.Q. and the School Report. A further investigation into this phase of the test might prove interesting if time and space permitted.

TABLE VI

CORRELATION BY SPEARMAN'S RANK-DIFFERENCE METHOD

FOR GRADE IX STUDENTS

Student	Rank in I.Q. Test	Rank in Concept Test	D	D <sup>2</sup>	
H I	1	5	4	16	
V P	2	3	1	1	
D G	3	1.5	-1.5	2.25	
W D	4	6	2	4	
V N	5	8	3	9	
N B	6	14	8	64	
E R	7	19	12	144	Probable Error of
J F	8	4	-4	16	Spearman's Rank
R W	9	1.5	-7.5	56.25	Coefficient
K M	10	11	1	1	
C A	11	26	15	225	P.E. $\rho = \frac{.7063(1 - 2)}{N}$
G G	12	7	-5	25	
T S	13	23	10	100	
M S	14	11	-3	9	$= \frac{.7063(1 - .39765)}{\pm 5.74}$
T H	15	16.5	1.5	2.25	
D G	16	27	11	121	
R J	17	29	12	144	
K S	18	31	13	169	$= \frac{.7063 \times .60235}{\pm 5.74}$
R A	19	11	-8	64	
G R	20	19	-1	1	$= \pm .074$
H C	21	33	12	144	
G G	22	16.5	-5.5	30.25	
P S	23	23	0	0	
J S	24	19	-5	25	
S W	25	28	3	9	
H D	26	13	-13	169	
A W	27	9	-18	324	
A W	28	15	-13	169	
R W	29	25	-4	16	
R R	30	21	-9	81	
M T	31	23	-8	64	
R G	32	31	-1	1	
E E	33	31	-2	4	

No. 33

$$\Sigma D^2 = 2210$$

$$\rho = 1 - \frac{6 \Sigma D^2}{N(N^2 - 1)} = 1 - \frac{6 \times 2210}{35904} = 1 - \frac{13260}{35904} = \frac{22644}{35904} = \frac{1887}{2992} = .6306$$

Therefore  $r = .6478$

The Coefficient of Correlation between the Laycock Mental Ability Test and the Concept Test is  $.6478 \pm .074$

TABLE VII  
CORRELATION BY SPEARMAN'S RANK-DIFFERENCE METHOD  
FOR GRADE IX STUDENTS

Student	Rank in I.Q. Test	Rank in School Report	D	D <sup>2</sup>	
H I	1	3	2	4	
V P	2	4	2	4	
D G	3	5.5	2.5	6.25	
W D	4	2	-2	4	
V N	5	7	2	4	
N B	6	5.5	-.5	.25	
E R	7	10	3	9	
J F	8	1	-7	49	Probable Error of
R W	9	8	-1	1	Spearman's Rank
K M	10	17.5	7.5	56.25	Coefficient
C A	11	17.5	6.5	42.25	
G G	12	9	-3	9	P.E. $\rho = \frac{.7063(1-\rho^2)}{\sqrt{N}}$
T S	13	25	12	144	
M S	14	33	19	361	
T H	15	27	12	144	$= \frac{.7063(1-.688^2)}{\sqrt{33}}$
D G	16	22	6	36	
R J	17	12	-5	25	
K S	18	11	-7	49	
R A	19	22	3	9	$= \frac{.7063 \times .527}{1.574}$
G R	20.5	22	1.5	2.25	
H C	20.5	13.5	-7	49	
G G	22	25	3	9	
P S	23	32	9	81	$= \pm .065$
J S	24	20	-4	16	
S W	25	13.5	-11.5	132.25	
H D	26	28.5	2.5	6.25	
A W	27	30.5	3.5	12.25	
A W	28	17.5	-10.5	110.25	
E W	29.5	28.5	-1	1	
R R	29.5	15	-14.5	210.25	
M T	31	25	-6	36	
R G	32	30.5	-1.5	2.25	
E E	33	17.5	-15.5	240.25	

N. 33

$$\sum D^2 = 1865$$

$$\rho = 1 - \frac{6 \sum D^2}{N(N^2-1)} = 1 - \frac{6 \times 1865}{35904} = 1 - \frac{11190}{35904} = \frac{24714}{35904} = \frac{12357}{17952} = .688$$

Therefore  $r = .71$

The Coefficient of Correlation between the Laycock Mental Ability Test and the School Report Average is  $.71 \pm .065$

Table VIII shows the quintile rankings for the Grade IX class for I.Q., Concept Score and December School Report Average. This table makes obvious some special problem cases in this class. The writer wishes to mention four of these. The first case is N B who is a B girl in Quintile-1 in ability (I.Q.) and in School Report, but in the Concept test she ranks 14th or in Quintile-3. Her general knowledge in the social concepts seems far too low for a girl of her ability. The second case is K S a boy in a C class. He ranks in Quintile-3 in ability and in Quintile-2 in school report. His weakness too is in an understanding of the concepts as shown by his position in Quintile-5. Perhaps his being a poor reader with a lack of concentration may account partly for this. The third case is A W an overage boy in a C class. He ranks in Quintile 4 in ability and Quintile 5 in school work. His outstandingly high score in the concept test placed him in Quintile-2. The writer thought that the boy must have copied to make 64 on the test but a second test in private gave the boy 68 which confirmed his position in Quintile-2. Apparently students of relatively low ability, if especially interested in the social science field, are able to score as high as very superior students who do not seem particularly interested. The fourth problem case indicated in Table VIII is that of A W1. He is a C boy whose ability is in the lowest group yet he ranked in Quintile-3 in both concept test and school report. He works well and tries his best, yet requires encouragement, patience and careful handling in order to prevent his inferiority complex from developing a dislike for school and examinations.



TABLE VIII

A QUINTILE RANKING OF THE GRADE IX CLASS

Column I Rank in Ability to learn -- I.Q.			Column II Rank in Achieve- ment -- Concept Test	Column III Rank in Achieve- ment -- School Report	Type of Class in which each Column I student is placed
Rank	Student	Sex			
Quintile 1					
1	H I	G	D G	J F	A
2	V P	G	R W	WmD	B
3	D G	B	V P	H I	A
4	WmD	B	J F	V P	A
5	V N	G	H I	D G	A
6	N B	G	WmD	N B	B
Quintile 2					
7	E R	B	G G	V N	C
8	J F	B	V N	R W	A
9	R W	B	A W	G G	A
10	K M	B	K M	E R	B
11	C A	B	M S	K S	C
12	G G	B	R A	R J	B
Quintile 3					
13	T S	B	H D	S W	C
14	M S	B	N B	H C	B
15	T H	B	A W	R R	C
16	D G	B	T H	K M	B
17	R J	B	G G	C A	C
18	K S	B	E R	A W	C
19	R A	B	G R	E E	C
20.5	G R	B	J S	J S	C
20.5	H C	B	R R	D G	C
Quintile 4					
22	G G	B	T S	R A	C
23	P S	B	P S	G R	B
24	J S	B	M T	T S	B
25	S W	B	R W	G G	C
26	H D	B	C A	M T	C
27	A W	B	D G	T H	C
Quintile 5					
28	A W	B	S W	H D	C
29.5	R W	B	R J	R W	C
29.5	R R	B	K S	A W	C
31	M T	B	R G	R G	C
32	R G	B	E E	P S	C
33	E E	B	H C	M S	C



## CHAPTER IV

### A COMPARISON OF RESULTS IN TESTING GRADE XI STUDENTS IN GORDON BELL HIGH SCHOOL, ISAAC NEWTON HIGH SCHOOL, AND IN FIVE RURAL HIGH SCHOOLS

The validated social concept test was administered to 246 Grade XI students from Gordon Bell High School (73 students), Isaac Newton High School (110 students) and Five Rural High Schools (63 students). Of these 246 students 91 were boys and 155 were girls.

The distribution of the scores is set out in Table IX which shows that the students of Gordon Bell School had the best median score 78. This may be due to a number of factors: first, these students on the whole are usually from families where the father's occupation is professional, semi-professional and managerial, and the skilled trades; second, this group has the greatest percentage of boys 41%; third, this group for the most part makes use of leisure time in a way which tends to broaden general knowledge and understanding of current affairs.

The rural students placed second with a median of 64. Some influencing factors on this median are: first, as a general rule in smaller towns only those students who show marked ability tend to reach the Grade XI level thus resulting in a student body of fairly high native ability; second, many of these students are following a purely academic course and therefore have spent considerable time and effort on the study of social concepts; third, the natural environment of the small town has a negative influence in that any one district has a limited and somewhat narrow outlook on social affairs

in general; and fourth the rural towns chosen by the writer were those possessing forward-looking principals who were interested in bettering the standard of education and whose students may therefore do better in general on such a test.

The students from Isaac Newton High School placed third with a median of 56. Some factors influencing this median are: first, many of these students are from the unskilled laboring class and their home environment does not give them any natural advantage; second, many of these students have little leisure time being forced by economic circumstances to spend their out-of-school hours in gainful employment; and third, this group of students has the greatest percentage of girls, 63.6%; and fourth, these students are for the most part non-Angle-Saxon, from another cultural background with the result that they possess a language handicap.

TABLE IX

DISTRIBUTION OF CONCEPT SCORES FOR GRADE XI STUDENTS

Scores	Gordon Bell	Isaac Newton	Rural Schools
95	0	0	1
90-94	10	1	4
85-89	14	2	2
80-84	8	2	2
75-79	9	5	9
70-74	3	9	3
65-69	9	8	9
60-64	9	18	6
55-59	5	12	10
50-54	2	14	7
45-49	3	13	4
40-44	0	6	3
35-39	1	14	2
30-34	0	2	1
25-29	0	3	0
20-24	0	1	0
Total no. of Students	73	110	63
Median	78	56	64
No. of boys	30	40	21
No. of girls	43	70	42



## CHAPTER V

### VALIDATED SOCIAL CONCEPT TEST RESULTS IN RURAL AND IN URBAN SCHOOLS

The validated social concept test was written by 838 students in Grades VIII, IX and XI in both city and country schools. Of these 838 students 198 live in rural areas while the remaining 640 live in Winnipeg and its suburbs. Of the country students 74 were in Grade VIII, 61 were in Grade IX and 63 were in Grade XI; of the city students 229 were in Grade VIII, 228 were in Grade IX, and 183 were in Grade XI.

A summary of the number of students in each grade, the schools, and the average mark for each grade in rural and urban schools is given in Table X. In both country and city schools the average for Grade VIII students is less than 5% lower than the average for the Grade IX students, however a much greater difference is apparent between the Grade IX results and the Grade XI results. A comparison by grades between country and city students shows that the Grade VIII's in the city averaged 6.7% higher than the Grade VIII's in the country and that the Grade IX's in the city averaged 5.7% higher than the rural Grade IX's but that the Grade XI's in the city averaged only .3% higher than the country Grade IX students. This similarity in the Grade XI's mean score may be due to a number of factors: first, selectivity in the rural towns tends to eliminate all poorer students, while in the city a greater percentage of students reach the Grade XI level; second, 110 students from one of the city schools come from

homes where the fathers' occupations are often unskilled labor, and where the mother-tongue is often non-English whereas the rural districts (with one exception) were Anglo-Saxon; third, the rural schools chosen for the test were perhaps better than the average because they had better trained teachers and the communities were old and well-established.

The average score of all 640 city students is almost 4 marks higher than the average score of the 198 country students. This fact has little real significance because the numbers of students in each grade for rural and urban groups are not in the same proportion. The average scores, however, for the Grades VIII, IX and XI for both rural and urban groups do show a definite progression. This factor is significant because it indicates that this test is examining the student's power of discrimination which is apparently a result of native intelligence, personal development (environment) and maturation shown by the grade level attained rather than by the student's chronological age. It is the grade or educational attainment of the student that determines his success in this test.

**TABLE X**  
**SCHOOLS, NUMBER OF STUDENTS AND GRADE AVERAGES**

Country Schools	No. of Grade VIII Students	No. of Grade IX Students	No. of Grade X Students	
K D	8	10	5	
M U	25	15	14	
H A	22	13	24	
W A	5	4	5	
W R	14	19	15	
<b>Total</b>	<b>74</b>	<b>61</b>	<b>63</b>	<b>Grand total 198</b>
<b>Average Score</b>	<b>34.8</b>	<b>39.3</b>	<b>64.1</b>	<b>45.5</b>
<b>City Schools</b>				
E G	73	0	0	
F Y	32	91	0	
G B	0	0	73	
G W	0	93	0	
I N	0	0	110	
N S	0	11	0	
R S	124	33	0	
<b>Total</b>	<b>229</b>	<b>228</b>	<b>183</b>	<b>Grand total 640</b>
<b>Average Score</b>	<b>41.5</b>	<b>45</b>	<b>64.4</b>	<b>49.3</b> <b>Grand total of Country and city Students 838</b>

## CHAPTER VI

### THE RELIABILITY OF THE VALIDATED CONCEPT TEST

#### Reliability

The test questions used in this thesis were chosen because their validity had already been carefully determined as shown in Chapter II. The test will now be examined for reliability which, in a technical sense, applied to tests in general, is a means of expressing the consistency of performance of the test. The importance of this factor is second only to validity as a criterion of the worth of a test or examination.

Reliability, as in the case of validity, may be defined by means of a number of statements, which, collectively and individually, serve to explain the concept.

"1. Reliability refers to the degree to which a test measures whatever it does measure; not necessarily what it is claimed to measure.

2. Reliability refers to the degree of accuracy of measurement.

3. Reliability refers to the amount of confidence that may be placed in the mark or score on a test as a measure of some ability of a pupil.

4. Reliability is one aspect of validity. A valid test is necessarily reliable, but a reliable test need not have high validity, or for that matter have any validity at all for a particular purpose.

5. Reliability refers to the stability of an estimate of a pupil's ability from one sampling to another. For example, if a certain standard test is marketed with six equal or equivalent forms, this test is not reliable if the fluctuations of pupil's scores from one form to the next is very large.

6. Summary: (a) Reliability is guaranteed in two principal ways: (1) objectivity of scoring, and (2) extended sampling (length of test).

(b) Unreliability due to subjectivity can be nearly or entirely eliminated by the use of new-type questions like true-false, multiple-choice, completion, matching tests, etc.

(c) Unreliability due to limited sampling is never entirely eliminated.

- (d) Any test score involves greater or less error.
- (e) Other things being equal, intensive sampling tends to be more reliable.
- (f) Theoretically, a test must be infinitely long in order to be perfectly reliable."<sup>1</sup>

No test is infallible. Even the best test ever constructed is not perfectly reliable -- that is, if the test were repeated under identical conditions, it is improbable that every student would make exactly the same score he made before, or would maintain precisely the same position in the group examined. Moreover, human nature is sufficiently variable so that an occasional pupil's test score may fail by a wide margin to reveal his true ability or achievement because of obscure psychological factors over which the examiner may have no control and of which he may be unaware. Because of this fact results given in averages are a safer estimate. For the same reason numerous tests should be used and any results derived should be considered only as a guide to the teacher and not as a final authority as to the student's ability or achievement.

#### The Method Used

The reliability of this test is calculated as shown in Table XI where the reliability coefficient is determined by the method of chance halves. The scores of successive halves of sixty Grade IX students as shown in columns X and Y, were used as a basis for the calculation. The solution for  $r$  is given in detail at the bottom of Table XI. The reliability coefficient for the halves (1st half of test vs. 2nd half of test) was found to be .924. By using the Spearman-Brown prophecy formula,  $r_{nn} = \frac{nr}{1+(n-1)r}$ , this coefficient .924

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<sup>1</sup>G. M. Ruch, The Objective Or New-Type Examination, University of California: Scott, Foresman and Company, 1929, Pp. 41+62.

was "stepped up" to .96 which is the estimated reliability of the entire examination of one hundred questions. Kelley<sup>1</sup> has shown that the % of reduction in standard error of estimate for a coefficient of .96 is 72. This gives an estimate of approximately 72% better than chance for the reliability of this test.

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<sup>1</sup>T. L. Kelley, Statistical Method, New York: The MacMillan Coy, 1923, pp. 172-174.

TABLE XI

CALCULATION OF THE RELIABILITY COEFFICIENT BY THE METHOD

OF CHANCE HALVES FOR CONCEPT TEST IN GR. IX CLASS

(60 Students)

Student	X	Y	$x^1$	$y^1$	$(x^1)^2$	$(y^1)^2$	$x^1y^1$
GB	42	39	+18	15	324	225	270
GW	35	37	11	13	121	169	143
IS	21	20	-3	-4	9	16	12
TE	29	32	5	8	25	64	40
LM	21	20	-3	-4	9	16	12
BK	25	28	1	4	1	16	4
BM	18	22	-6	-2	36	4	12
IH	27	24	3	0	9	0	0
RR	17	16	-7	-8	49	64	56
RF	24	26	0	2	0	4	0
LP	16	16	-8	-8	64	64	64
JP	17	24	-7	0	49	0	0
JM	16	16	-8	-8	64	64	64
LL	16	19	-8	-5	64	25	40
HN	14	16	-10	-8	100	64	80
RD	16	18	-8	-6	64	36	48
BW	12	16	-12	-8	144	64	96
ES	14	19	-10	-5	100	25	50
SW	13	19	-11	-5	121	25	55
DC	14	13	-10	-11	100	121	110
MW	15	16	-9	-8	81	64	72
HM	15	12	-9	-12	81	144	108
VT	11	19	-13	-5	169	25	65
JC	12	11	-12	-13	144	169	156
JW	12	15	-12	-9	144	81	108
MM	15	11	-9	-13	81	169	117
LR	13	13	-11	-11	121	121	121
RW	49	47	25	23	625	529	575
PG	16	11	-8	-13	64	169	104
DG	49	47	25	23	625	529	575
AR	12	14	-12	-10	144	100	120
VP	46	42	22	18	484	324	396
PN	12	13	-12	-11	144	121	132
BD	46	37	22	13	484	169	286
MS	35	28	11	4	121	16	44
GG	40	42	16	18	256	324	288
KM	32	31	8	7	64	49	56
VN	43	31	19	7	361	49	133

TABLE XI - (Continued)

Student	X	Y	$x^1$	$y^1$	$(x^1)^2$	$(y^1)^2$	$x^1y^1$
T S	22	28	-2	4	4	16	-8
A W	32	32	8	8	64	64	64
H C	15	12	-9	-12	81	144	108
B A	32	31	8	7	64	49	56
K S	16	13	-8	-11	64	121	88
B G	13	16	-11	-8	121	64	88
H D	32	28	8	4	64	16	32
N B	29	27	3	3	25	9	15
R J	16	15	-8	-9	64	81	72
A W	27	28	3	4	9	16	12
S W	25	16	1	-8	1	64	-8
G G	28	26	4	2	16	4	8
C A	24	24	0	0	0	0	0
T H	25	28	1	4	1	16	4
R W	25	24	1	0	1	0	0
G A	24	29	0	5	0	25	0
T S	28	22	4	-2	16	4	-8
E R	29	23	5	-1	25	1	-5
J S	23	29	-1	5	1	25	-5
R R	25	26	1	2	1	4	2
I H	47	37	23	13	529	169	299
J F	42	45	18	21	324	441	378
(Sums)			19	-1	7121	5551	5804
Guessed Mean	24	24					
True Mean	24.32	23.98					

$$r = \frac{\frac{\sum x^1 y^1}{N} - \left( \frac{\sum x^1}{N} \cdot \frac{\sum y^1}{N} \right)}{\sqrt{\frac{(\sum x^1)^2}{N} - \left( \frac{\sum x^1}{N} \right)^2} \sqrt{\frac{(\sum y^1)^2}{N} - \left( \frac{\sum y^1}{N} \right)^2}}$$

$$= \frac{\frac{5804}{60} - \left( \frac{19}{60} \cdot \frac{-1}{60} \right)}{\sqrt{\frac{7121}{60} - \left( \frac{19}{60} \right)^2} \sqrt{\frac{5551}{60} - \left( \frac{-1}{60} \right)^2}} = \frac{348,259}{377,071.05}$$

= .924 Therefore .924 is the reliability coefficient for either half of the examination. The Reliability Coefficient for the whole examination as shown by the "Spearman Prophecy Formula",

$$r_{nn} = \frac{nr}{1 + (n-1)r}, \text{ is } \frac{2(.924)}{1 + (2-1)(.924)} = \frac{1.848}{1.924} = .9605 = .96$$



### Median Deviation

It is often helpful to obtain an index of the variability of scores, that is the closeness with which the scores are grouped about the median. The amount by which any score differs from the median is called its median deviation. A score which is greater than the median will have a positive deviation; a score which is less will have a negative deviation. The sum of the deviations without regard to sign, divided by the total number of scores in the group, gives the median deviation, usually indicated by the abbreviation, Md. D. Using this method the writer computed the median deviation for the scores of 59 Grade VIII C students to be 6.98 as shown in Table XII, and for the scores of 33 Grade IX A, B and C students to be 14.64 as shown in Table XIII. The large difference in the two deviations is natural because the Grade VIII class is a homogeneous group whose scores do not vary greatly from the median, whereas the Grade IX class is a heterogeneous group containing both very high (96) and very low (26) scores which do vary greatly from the median. The median deviation of the scores from the two foregoing classes is outlined here in order to further emphasize the fact that this is not only a reliable but also a valid test.

TABLE XII

CALCULATION OF MEDIAN DEVIATION  
FOR 59 GRADE VIII C STUDENTS

Score	Frequency	Deviation	Deviation X Frequency
21	3	-10	-30
22	1	-9	-9
23	4	-8	-32
24	2	-7	-14
25	4	-6	-24
26	4	-5	-20
27	1	-4	-4
28	1	-3	-3
29	3	-2	-6
30	5	-1	-5
31	3	0	0
32	3	1	3
33	2	2	4
34	3	3	9
35	3	4	12
36	1	5	5
37	2	6	12
39	2	8	16
40	3	9	27
41	1	10	10
42	2	11	22
45	1	14	14
46	1	15	15
47	1	16	16
61	1	30	30
65	1	34	34
67	1	36	36
Total	59		Add without 412 regard to signs.

True Median 31

$$\text{Median Deviation} = \frac{\text{Sum of (D F)}}{N} = \frac{412}{59} = 6.98$$

TABLE XIII

CALCULATION OF MEDIAN DEVIATION  
FOR 33 GRADE IX A, B, C STUDENTS

Score	Frequency	Deviation	Deviation X Frequency
26	1	-28	-28
29	3	-25	-75
31	1	-23	-23
41	1	-13	-13
45	1	-9	-9
48	1	-6	-6
49	1	-5	-5
50	3	-4	-12
51	1	-3	-3
52	3	-2	-6
54	2	0	0
55	1	1	1
56	1	2	2
60	1	6	6
63	3	9	27
64	1	10	10
73	1	19	19
82	1	28	28
83	1	29	29
85	1	31	31
86	1	32	32
88	1	34	34
96	2	42	84
Total	33		483

Add without  
regard to  
signs

True Median 54

$$\text{Median Deviation} = \frac{\text{Sum of (D.F)}}{N} = \frac{483}{33} = 14.64$$

### Distribution of Scores

The scores in this test were determined by counting only the total number of correct responses from the answers given to the one hundred questions. The students were advised to attempt all questions and they were not penalized for guessing. Such a system of scoring has frequently been used by various test constructors, although for very careful work perhaps the formula  $(\text{Score} = R - \frac{W}{N-1})$  is preferable. In support of the method of counting the correct responses only, the writer wishes to draw attention to the following:

"----- that the use of the formula  $(\text{Score} = R - \frac{W}{N-1})$  penalizes wrong responses to a slight degree. -- Foster and Ruch. Furthermore it appears that it has not been proven that there is any consistently greater reliability of scores computed by one method than by those found by another. It is, therefore, recommended that for ordinary classroom tests the scores upon multiple-answer tests containing four or more suggested answers for each exercise or item be determined merely by counting the number of correct responses. For two and three-response tests and perhaps, though probably not, for four-response tests, the formula,  $(\text{Score} = R - \frac{W}{N-1})$  should be used. --Odell."<sup>1</sup>

The distribution of all Grade VIII scores (303 students) is set out in Table XIV. The mean score is 39.7. The distribution of all Grade IX scores (289 students) is set out in Table XV. The mean score is 43.7. The distribution of all Grade XI scores (246 students) is set out in Table XVI. The mean score is 63.2. This same distribution for Grade VIII, IX and XI is explained graphically in Figure 2. These three tables, XIV, XV and XVI and Figure 2 all point to the high degree of reliability possessed by this test.

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<sup>1</sup>C. W. Odell, Traditional Examinations and New-Type Tests, Urbana, Ill.; Bureau of Educational Research, University of Illinois: The Century Co., 1928, p. 289.

TABLE XIV

DISTRIBUTIONS OF PUPIL SCORES, AND THE MEDIAN FOR GRADE,  
THE MEAN AND THE RANGE, AND Q1 (LOWEST SCORE IN  
UPPER FIFTH) AND Q5 (TOP SCORE IN LOWER FIFTH)

Score	Frequency in Grade VIII	Score	Frequency in Grade VIII	Score	Frequency in Grade VIII
91	1	67	1	43	7
90		66		42	8
89		65	2	41	8
88		64	2	40	12
87		63	4	39	11
86		62	2	38	7
85	1	61	3	37	11
84	2	60	5	36	10
83	1	59		35	10
82		58	1	34	8
81		57	1	33	11
80		56	4	32	14
79	2	55	2	31	11
78	1	54		30	12
77	1	53	3	29	13
76		52	1	28	8
75	1	51	1	27	8
74	1	50	4	26	12
73		49	4	25	14
72	2	48	9	24	3
71	1	47	7	23	7
70	2	46	8	22	3
69	1	45	4	21	4
68	1	44	4	20	1

Total Students Gr. VIII = 303  
No. of Schools = 6  
Median = 36  
Mean = 39.7  
Range = 71  
Q1 = 48  
Q5 = 29

Distribution of Students  
Winkler 14  
Kelwood 8  
Melita 22  
Wawanesa 5  
Manitou 25  
Faraday 32  
R.H. Smith 24  
Earl Grey 73  
303

TABLE XV

DISTRIBUTION OF PUPIL SCORES, MEDIAN FOR GRADE, MEAN,  
AND RANGE AND Q 1 (LOWEST SCORE IN UPPER FIFTH)  
AND Q 5 (TOP SCORE IN LOWER FIFTH)

Score	Frequency in Grade IX	Score	Frequency in Grade IX	Score	Frequency in Grade IX
96	2	70	4	44	10
95		69	1	43	10
94		68	1	42	5
93		67	1	41	10
92	1	66	1	40	5
91		65		39	9
90		64	2	38	6
89	1	63	3	37	10
88	1	62	2	36	9
87		61	3	35	8
86	1	60	4	34	5
85	1	59	1	33	9
84		58	7	32	9
83	1	57	3	31	14
82	1	56	2	30	13
81	1	55	2	29	6
80	2	54	5	28	6
79	1	53	6	27	8
78	1	52	6	26	6
77		51	2	25	3
76		50	7	24	3
75	1	49	5	23	4
74		48	4	22	
73	1	47	7	21	2
72	3	46	6	20	1
71	2	45	7		

Total Students = 289

No. of Schools = 9

Median = 41

Mean = 43.7

Range = 76

Q 1 = 35

Q 5 = 31

Distribution of Students

Manitou	15
Melita	13
Winkler	19
Kelwood	10
Wawanesa	4
Faraday	91
R.H. Smith	33
G. Wolfe	93
Night School	11
	289

TABLE XVI

DISTRIBUTION OF PUPIL SCORES, MEDIAN FOR GRADE, MEAN,  
RANGE AND Q 1 (LOWEST SCORE IN UPPER FIFTH)  
AND Q 5 (TOP SCORE IN LOWER FIFTH)

Score	Frequency in Grade XI	Score	Frequency in Grade XI	Score	Frequency in Grade XI
95	1	71	2	47	3
94	2	70	3	46	3
93	2	69	3	45	7
92	4	68	3	44	2
91	3	67	4	43	
90	4	66	6	42	3
89	1	65	6	41	2
88	4	64	6	40	2
87	5	63	3	39	2
86	3	62	9	38	3
85	5	61	11	37	5
84	5	60	3	36	6
83	1	59	3	35	1
82	1	58	5	34	1
81	3	57	12	33	1
80	2	56	6	32	1
79	7	55	1	31	
78	5	54	5	30	
77	2	53	3	29	3
76	5	52	6	28	
75	4	51	4	27	
74	3	50	5	26	
73	3	49	4	25	
72	4	48	3	24	
				23	1

Total Students Gr. XI = 246  
No. of Schools = 7  
Median = 64  
Mean = 63.2  
Range = 72  
Q 1 = 79  
Q 5 = 48

Rural Schools: Kelwood,  
Manitou, Melita,  
Wawanesa, Winkler -- 63

Urban Schools: Gordon Bell,  
Isaac Newton -- 183



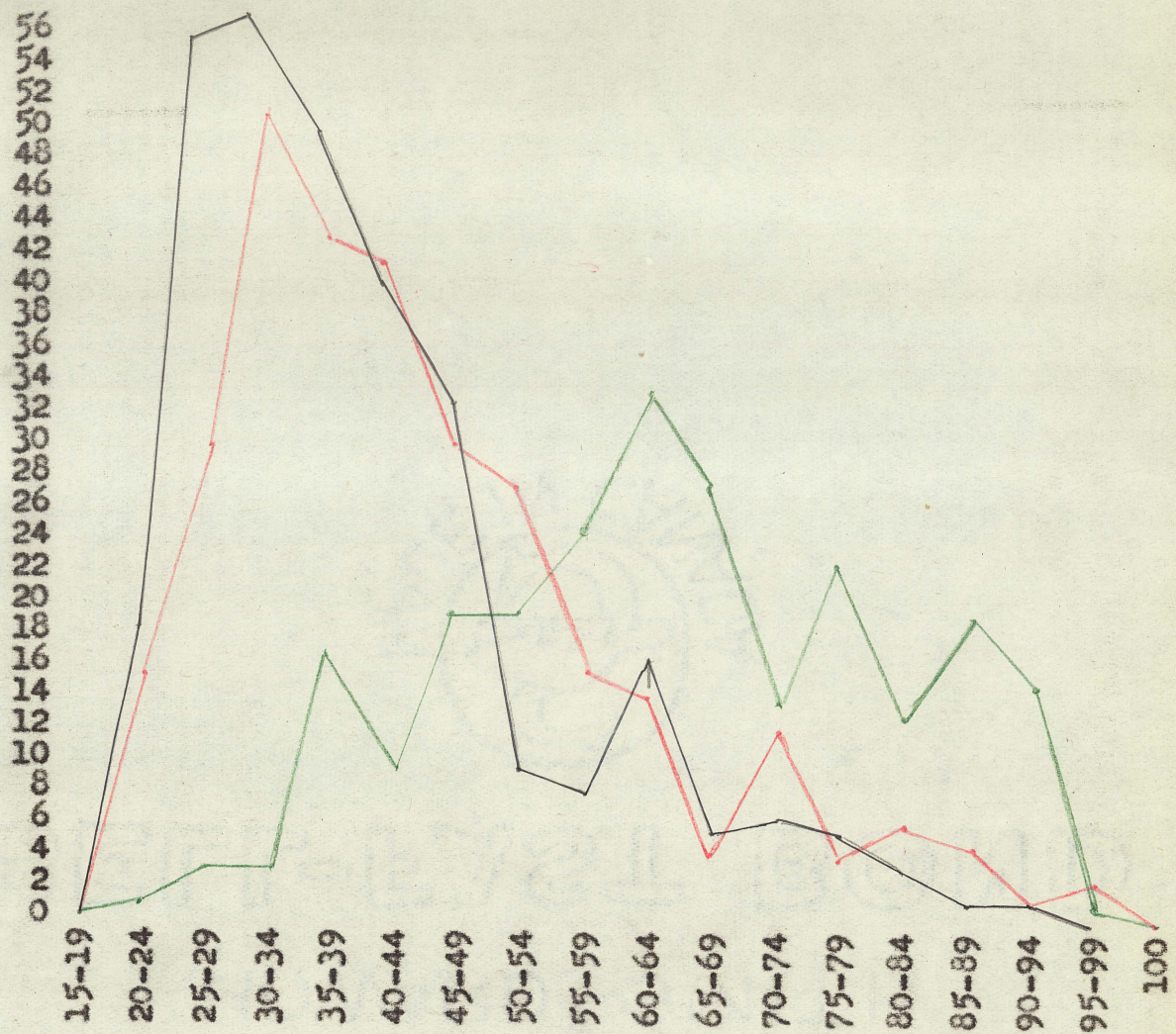


Fig. 2 -- Showing the distribution of scores for grades VIII, IX and XI.

— GRADE VIII  
— GRADE IX  
— GRADE XI



### Summary

In this chapter it has been shown that the reliability determined on the basis of chance halves is .96 for the whole test. The test therefore may be considered to have a high degree of reliability. Further evidence has been adduced to show that the test is valid since successive grades produce successively increasing means.

## CHAPTER VII

### SOME FACTORS WHICH INFLUENCE PUPIL SUCCESS

#### Influence of Sex

Boys in general are not only more interested in the Social Studies than are the girls but they make better scores. This is shown in detail by a study of three grade XI classes, three grade IX classes, and three grade VIII classes. In eight of the nine classes the boys had a greater percentage of their number with scores over the median mark than did the girls. The one exception is the M U school grade IX class in which the boys had 44.4% of their number with scores greater than the median, 38, whereas the girls had 50% of their number with scores greater than 38. The results for the nine classes, showing the number of boys and girls in each class, the class median, and the percentage in each group whose scores were greater than the median is given in Table XVII.

#### Influence of Age, Grade, Type of Grade, Background of Student and Interests

The age of the pupil does not greatly affect the score in this concept test, whereas the grade, the type of grade A, B or C, the community, the occupation of the father and the social experience of the pupil are factors in determining his relative success. Table I page 19 shows that A classes average 5.7% to 9% higher in their scores than the B classes, and that the B class of boys averaged 5.3% higher than the C class of boys. Figure 2 on page 59 shows that on the average a grade IX class makes slightly higher scores than does a grade VIII class, whereas the grade XI class shows an outstanding increase over scores of a grade IX class.

TABLE XVII

INFLUENCE OF SEX ON CONCEPT-TEST SCORES

School	Grade	No. of Pupils		Median	No. of boys with mark over median	% of boys with mark over median	No. of girls with mark over median	% of girls with mark over median
		Boys	Girls					
G B	XI	30	43	78	18	60%	18	41.9%
I N	XI	20	57	57	18	90%	17	30%
I E	XI	20	13	52	14	70%	2	15.4%
N S	IX	7	4	28	4	57.1%	1	25%
W R	IX	10	9	33	5	50%	4	44.4%
M U	IX	9	6	38	9	44.4%	3	50%
M U	VIII	13	12	35	7	54%	5	41.7%
E G	VIII	11	62	73	6	54.5%	30	48.4%
R H S	VIII	32	16	48	20	62.5%	4	25%

The occupational work of the father has a direct bearing upon the background and the type of community in which the child is reared. This total influence upon the pupil's scores in social concepts is most apparent. The social-economic status of the pupils is examined here by choosing the scores of six girls and six boys in each of seven recognized classifications.<sup>1</sup> The average scores of the seven groups in this limited sampling placed the professional group in third place (average 52) instead of in first place as suggested by Terman and Merrill. Except for this one difference all the other averages seem to be in the recognized order. The results are set out in the following table.

TABLE XVIII

GRADE IX AVERAGE SCORES ACCORDING TO FATHER'S OCCUPATION

Fathers Occupational Classification	Grade IX Pupils	Average Score
I Professional (10 from city 2 from country) Doctors Dentists Druggists Teachers Ministers	six boys and six girls in each classifi- cation	52
II Semi-professional and Managerial		64.4
III Clerical, Skilled-trades, and Retail Business		62.7
IV Rural Owners (farmers)		44.3
V Semi-skilled, Minor Clerical, Minor Business		42.4
VI Slightly-skilled		38.1
VII Day Laborers, urban and rural		32.8

<sup>1</sup>Terman and Merrill. Measuring Intelligence. Stanford University: Houghton Mifflin Company, 1939. Pp. 48.

The effect of pupil interest as shown by his preferred school subjects did not yield any definite findings. A variety of choice was found in all schools, although the social studies seemed as great a favorite as any.

The scores of the urban pupils on the average are consistently higher than the scores made by rural pupils. Two hundred and twenty-nine grade VIII urban pupils averaged 6.7 higher in scores than did seventy-four grade VIII rural pupils. Two hundred and twenty-eight grade IX urban pupils averaged 5.7 higher in scores than did sixty-one grade IX rural pupils. In grade XI however the difference is very slight, only .3 in favor of the urban pupils. These relationships have been set out in detail in Table X on page 46.

This chapter has shown that the various factors which determine a pupil's success in this test are: sex, grade level, type of class, social-economic status of the parent, and the general background and type of community in which the family lives.

## CHAPTER VIII

### A RE-CHECK ON THE VALIDATION OF THE ONE HUNDRED QUESTIONS

The method explained in chapter II, employing the upper and lower quintile results, was used with one hundred and eighty-seven completed Grade IX papers to recheck the validation of each question. Of these 187 papers, 55 were from the country and 132 were from the city. In each quintile group there were the scores of thirty-seven pupils. The upper quintile consisted of scores from 26 boys and 11 girls, only 5 of which were from the country and the remaining 32 were from the city. The lower quintile scores were from 14 boys and 23 girls, 15 of whom were from the country and 22 from the city. This shows that there were more than twice as many boys in the upper quintile group as there were girls, while in the lower quintile group the girls were almost twice as numerous as the boys. This is further proof that the boys do better on this test than do the girls. In the upper quintile group only five papers were from the country whereas thirty-two were from the city. In the lower quintile group 15 papers were from the country and 22 from the city. In other words only 13.5 percent of the upper group were from rural areas while in the lower group the rural districts supplied 40.5 percent of the scores or three times as many. This is additional data to indicate that pupils in grade IX if living in urban areas make better scores than if living in rural districts. These facts for the upper and lower quintile groups are given in Table XIX on the following page.

TABLE XIX

UPPER AND LOWER QUINTILE GROUPS FROM 187 GRADE IX PUPILS  
WITH THEIR RESPECTIVE SCORES

Upper Quintile				Lower Quintile			
Pupil	Sex	Rural or Urban	Score	Pupil	Sex	Rural or Urban	Score
1. R W	B	U	96	M W	G	R	31
2. D G	B	U	96	G S	G	U	30
3. C T	B	U	93	R M	G	U	30
4. T S	B	R	89	J V	G	U	30
5. V P	G	U	88	P K	G	U	30
6. J F	B	U	87	G K	B	U	30
7. I H	G	U	84	E H	G	U	30
8. W D	B	U	83	L T	G	R	30
9. G G	B	U	82	A F	B	R	30
10. A H	B	U	80	D H	G	R	30
11. E E	B	U	80	H N	G	R	30
12. A S	B	U	79	A F	G	U	30
13. J N	G	U	78	K S	B	U	29
14. E H	G	U	75	F S	G	U	29
15. V N	G	U	74	R G	B	U	29
16. W W	B	U	72	E E	B	U	29
17. G W	B	R	72	B W	G	R	28
18. P R	G	U	71	V L	G	U	28
19. G P	B	U	70	E E	G	U	28
20. J A	G	U	70	V S	G	U	28
21. I B	G	U	70	H M	G	U	28
22. L E	G	U	70	J W	B	R	27
23. A M	B	U	66	H M	G	R	27
24. A W	B	U	64	D C	G	R	27
25. A Y	B	U	64	P G	B	R	27
26. B A	B	U	63	B C	B	U	27
27. M S	B	U	63	A K	G	R	27
28. K M	B	U	63	A R	B	R	27
29. N M	B	U	62	H P	G	U	26
30. J V	B	U	62	M M	B	R	26
31. H D	B	U	61	H C	B	U	26
32. G W	B	U	61	B H	B	U	25
33. H D	B	U	60	P N	G	R	24
34. S B	G	U	60	I C	G	U	23
35. J G	B	R	58	E W	B	U	23
36. D B	B	R	58	J R	B	U	23
37. L M	G	R	58	I C	G	R	23
Boys 26			Rural 5	Boys 14			Rural 15
Girls 11			Urban 32	Girls 23			Urban 22

In Table XX the revalidation of the one hundred questions is set out, and a comparison is made with the previous validation results as obtained in the preliminary tests. Three new factors influence the validation. The pupils chosen were in Grade IX but having been examined in December instead of September they had three months more of school training; these students were not all from Robert H. Smith School but were from various rural and urban schools; and third, there was an increase in the number of scores used from 155 to 187 in the calculation of the power to test pupil discrimination possessed by each question. In general most of the questions retained sufficient validation to warrant them a place in the test. The introduction of pupils from rural areas and from other city schools may have caused some of the shifting in the degree of validation for certain questions. For example, the terms 'repudiated' and 'frontier' were better understood by the rural pupils whereas the concept 'caucus' seemed to be better understood by the urban pupils. The concepts 'referendum' and 'political platform' gave both urban and rural pupils much difficulty. In the column under 'Remarks' the writer has listed all of the concepts and has indicated the order for the questions in the final form of the test. Two factors influencing the order were the number of given responses to each question and the degree of validation attained by each question. The test in its final form will be found at the end of this chapter. One question #65 was taken from the test because of its low validation, 1.15, and because it was perhaps more American than Canadian. Therefore a new question, #99, with five given responses, has been put into the final test to give the required one hundred questions. This particular question was chosen because in some other work the writer is doing it was found to be valid.



TABLE XX

RE-VALIDATION OF THE TEST QUESTIONS AND COMPARISON WITH FORMER VALIDATION

Question	Upper Group 37 Papers	Lower Group 37 Papers	Validation on both rural and city pupils	Former Validation on R. H. S. pupils	Remarks Concept	Final Test No.
1.	29	4	29+4 =7.25	2.75	amendments	21
2.	25	14	25+14=1.79	3	judicial	22
3.	23	3	23+3 =7.6	10	domestic	23
4.	26	9	26+9 =2.9	3	suffrage	24
5.	33	16	33+16=2.06	1.93	inflation	25
6.	30	9	30+9 =3.3	2.27	diplomacy	26
7.	32	14	32+14=2.3	2.54	religious tolerance	27
8.	31	14	31+14=2.2	2.3	abolitionists	28
9.	31	20	31+20=1.55	2.5	legislation	29
10.	34	21	34+21=1.62	2.16	nullified	30
11.	21	12	21+12=1.75	2.1	armistice	31
12.	20	8	20+ 8=2.5	2.2	exploits	32
13.	33	20	33+20=1.65	2.16	jurisdiction	33
14.	36	24	36+24=1.5	1.08	event	34
15.	33	18	33+18=1.83	1.93	revenue	35
16.	28	12	28+12=2.3	2.5	embargo	36
17.	21	5	21+5 =4.2	2.6	militia	37
18.	27	13	27+13=2.08	3	socialist	38
19.	20	7	20+7 =2.86	2.8	secession	39
20.	16	2	16+2 =8	7	referendum	40
21.	28	6	28+6 =4.6	4	ratified	41
22.	23	8	23+8 =2.9	2.5	belligerents	42
23.	26	8	26+8 =3.25	2.36	emancipation	43
24.	21	8	21+8 =2.6	6.5	impeached	44
25.	33	17	33+17=1.9	1.93	clergy	45
26.	33	7	33+7 =4.7	1.93	appointment	46
27.	27	6	27+6 =4.5	2.8	graft	47
28.	30	9	30+9 =3.3	5.2	confederacy	48
29.	14	11	14+11=1.3	3.75	repudiated	49
30.	27	5	27+5 =5.4	2	caucus	50
31.	33	25	33+25=1.32	2.21	administration	51
32.	33	6	33+6 =5.5	2.6	reparations	52
33.	19	7	19+7 =2.7	14	frontier	53
34.	34	9	34+9 =3.8	2	injunction	54
35.	29	11	29+11=2.64	2.2	urban	55
36.	25	1	25+1 =25	10.5	sedition	56
37.	28	6	28+6 =4.6	25	arbitration	57
38.	34	8	34+8 =4.25	2.29	abdicate	58
39.	30	14	30+14=2.14	2.09	denomination	59
40.	37	12	37+12=3.1	2.5	compromise	60
41.	37	11	37+11=3.4	2	negotiations	61
42.	37	11	37+11=3.4	2.3	conservation	62

TABLE XX (Continued)

Question	Upper Group 37 Papers	Lower Group 37 Papers	Validation on both rural and city pupils	Former Validation on R. H. S. pupils	Remarks Concept	Final Test No.
43.	27	2	27+2 = 13.5	2.09	appropriation	63
44.	18	1	18+1 = 18	8.6	conflagration	64
45.	34	19	34+19 = 1.79	1.94	customs	
					officers	65
46.	25	4	25+4 = 6.25	4.6	annexed	66
47.	23	4	23+4 = 5.75	27	a commission	67
48.	25	3	25+3 = 8.3	4.14	constitution	68
49.	32	8	32+8 = 4	2.23	a decree	69
50.	29	7	29+7 = 4.14	3.62	powers	70
51.	28	10	28+10 = 2.8	2.75	veto	71
52.	32	11	32+11 = 2.9	2.9	a statute	72
53.	29	4	29+4 = 7.25	2.7	spoils system	73
54.	28	13	28+13 = 2.15	2.2	rebate	74
55.	30	8	30+8 = 3.75	2.64	commodity	75
56.	31	10	31+10 = 3.1	4.3	war of	
					aggression	76
57.	37	15	37+15 = 2.47	1.875	census	77
58.	23	6	23+6 = 3.8	4.4	bureau	78
59.	34	10	34+10 = 3.4	2	campaign	79
60.	32	16	32+16 = 2	2.5	reform	80
61.	24	2	24+2 = 12	2.63	capital	81
62.	34	8	34+8 = 4.25	3.25	expenditures	82
63.	15	15	15+15 = 1	2.3	indemnity	98
64.	15	7	15+7 = 2.14	3	political	
					platform	83
65.	23	20	23+20 = 1.15	1.9	representatives	omit
					immigrants	99
66.	26	7	26+7 = 3.7	4.8	an issue	84
67.	28	11	28+11 = 2.5	2.9	contraband	85
68.	24	14	24+14 = 1.7	3	civil service	86
69.	23	16	23+16 = 1.44	2.25	policy	87
70.	33	10	33+10 = 3.3	3.1	oppression	88
71.	30	11	30+11 = 2.73	2.3	heresy	89
72.	27	10	27+10 = 2.7	3	democratic	90
73.	25	11	25+11 = 2.3	3	the government	91
74.	30	11	30+11 = 2.7	3.71	industrial rev.	92
75.	25	9	25+9 = 2.8	4.6	constitutional	93
					monarchy	
76.	13	11	13+11 = 1.18	1.875	homogeneous	100
77.	26	3	26+3 = 8.7	3.25	a pacifist	94
78.	14	6	14+6 = 2.3	3.75	coup d'etat	95
79.	30	2	30+2 = 15	4.6	franchise	96
80.	10	5	10+5 = 2	12	Karl Marx	97
81.	30	12	30+12 = 2.5	2.1	council	1
82.	31	10	31+10 = 3.1	1.923	graft	2

TABLE XX (Continued)

Question	Upper Group 37 Papers	Lower Group 37 Papers	Validation on both rural and city pupils	Former Validation on R. H. S. pupils	Remarks Concept	Final Test No.
83.	36	9	$36 \div 9 = 4$	2.15	consumer	3
84.	15	13	$15 \div 13 = 1.15$	2.1	postal	
					savings bank	4
85.	27	17	$27 \div 17 = 1.6$	2.75	speculator	5
86.	22	9	$22 \div 9 = 2.4$	3.4	urban	6
87.	24	15	$24 \div 15 = 1.6$	2.14	reason for	
					immigrants	7
88.	13	5	$13 \div 5 = 2.6$	3.75	felony	8
89.	21	14	$21 \div 14 = 1.5$	2	criminals	9
90.	20	14	$20 \div 14 = 1.43$	2.75	subpoena	10
91.	37	28	$37 \div 28 = 1.32$	7.7	ballot	11
92.	14	8	$14 \div 8 = 1.75$	2.57	political	
					platform	12
93.	37	7	$37 \div 7 = 5.3$	3.2	political	
					machine	13
94.	25	11	$25 \div 11 = 2.3$	1.93	primary	
					election	14
95.	28	3	$28 \div 3 = 9.3$	3.43	injuncton	15
96.	28	13	$28 \div 13 = 2.15$	3	boycott	16
97.	19	13	$19 \div 13 = 1.46$	1.9	transportation	17
98.	28	16	$28 \div 16 = 1.75$	1.92	cotton gin	18
99.	24	12	$24 \div 12 = 2$	2.3	Cornwallis	19
100.	32	7	$32 \div 7 = 4.57$	6.5	dynasty	20

INSTRUCTIONS WHICH ARE TO BE READ TO THE CLASS  
JUST BEFORE THE TEST IS WRITTEN

1. Fill in all of the lines at the top of page one. Be definite with "occupation of parent".
2. The time usually required for the writing of this test is from twenty to forty minutes.
3. Take all the time you require working steadily. When you have completed the answers mark on page one the time you required. The time element is not important.
4. Do you understand the given examples? (Examiner is to explain them).
5. Write the answer to each question in a capital letter (block style) on the line to the right of the question.
6. Please use ink.
7. Try to answer all questions, do not omit any -- guess if you are not sure of the answer. You should try to make as logical or shrewd a guess as possible. There is no penalty for an incorrect answer as only correct answers are counted.
8. You will notice that the questions are for Grades VII to Grade XII, so you may find some of them rather difficult. Simply do your best.
9. Your marks will be returned to you.

THE PYBUS CANADIAN SOCIAL CONCEPT TEST

Grades VII to XII

NAME OF STUDENT \_\_\_\_\_ PRESENT GRADE \_\_\_\_\_  
ADDRESS \_\_\_\_\_ BOY OR GIRL \_\_\_\_\_  
SCHOOL \_\_\_\_\_ AGE \_\_\_\_\_ YEARS + \_\_\_\_\_ MONTHS  
OCCUPATION OF PARENT \_\_\_\_\_ TIME REQUIRED \_\_\_\_\_

EXAMPLE: 1. What name is given to the land next to the sea?  
(A) the mountains (B) the valleys (C) the plains  
(D) the coast. D

2. What official in Canada represents the king of England?  
(A) the premier (B) the governor-general (C) attorney-general  
(D) Mr. King. B

INSTRUCTIONS: Attempt all questions or guess at all answers.  
There is no penalty for a wrong answer. Put the capital letter on  
the line in the right-hand margin as shown in the foregoing examples.  
Do your best. Your results will be returned to you.

QUESTIONS.

SECTION A

1. Who makes laws for the city? (A) the council (B) the judges and the courts (C) the mayor and a special committee. \_\_\_\_\_
2. What is graft? (A) money stolen or received dishonestly (B) money used to pay officers with (C) money used to pay for city parks and boulevards. \_\_\_\_\_
3. What is a consumer? (A) a person who manufactures goods of any kind (B) a person who uses goods of any kind (C) a person who stores goods of any kind. \_\_\_\_\_
4. What is a postal savings bank? (A) a post-office department which will send money through the mail for you (B) a post-office department where you can leave money for safe keeping (C) a post-office department which is just like a regular bank. \_\_\_\_\_
5. What is a speculator? (A) a man who buys only the best and safest stocks and bonds (B) a merchant who shares the profits with his customers (C) a man who tries to make much money quickly by buying and selling. \_\_\_\_\_
6. What is an urban population? (A) a population living in the country (B) a population living in the cities (C) a population living in a foreign country. \_\_\_\_\_
7. Why do employers wish many immigrants to come to America? (A) because this makes wages lower (B) because all the immigrants are skilful workers (C) because they are easy to manage. \_\_\_\_\_

8. What is a felony? (A)a crime which is very serious (B)a crime which is not very serious (C)a crime for which you are fined but not put in jail. \_\_\_\_\_
9. Are most criminals well educated or not? (A)most of them are educated, but find it easier to steal than to work (B)most of them are uneducated and do not know any better (C)most of them are well educated and use their brains to plan crimes. \_\_\_\_\_
10. What is a subpoena? (A)an order for a man's arrest when he is guilty (B)an order to appear in court at a certain time (C)an order freeing a man from jail when he is not guilty. \_\_\_\_\_
11. What is a ballot? (A)a piece of paper used in voting (B)a committee which counts votes (C)a place where voting is done. \_\_\_\_\_
12. What is a political platform? (A)the stand from which the speakers make their speeches (B)the statement of what the party believes in (C)a list of men who are running for office. \_\_\_\_\_
13. What is a political machine? (A)an automobile used to get voters to the voting place (B)a group of men who run political affairs to suit themselves (C)a box into which votes are put to be counted. \_\_\_\_\_
14. What is a primary election? (A)the very first election of the year (B)an election to select candidates for a later election (C)an election which decides important things. \_\_\_\_\_
15. What is an injunction? (A)a court order making people do, or stop doing a certain thing (B)a place where several railroads come together (C)a breakdown of machinery which stops work in a factory. \_\_\_\_\_
16. What is a boycott? (A)a form of taxation used in foreign countries (B)something like a reform school for bad boys (C)a refusal to do business with certain people. \_\_\_\_\_
17. Which is correct? (A)Transportation by water costs more than transportation by railroad (B)Transportation by water costs less than transportation by railroad (C)Transportation by water costs just the same as by railroad. \_\_\_\_\_
18. Eli Whitney is noted for his invention of the (A)spinning jenny (B)cotton gin (C)telegraph. \_\_\_\_\_
19. Cornwallis surrendered at: (A)Valley Forge (B)Yorktown (C)Gettysburg. \_\_\_\_\_
20. What is a dynasty? (A)a ruling family (B)a league of nations (C)an electrical appliance. \_\_\_\_\_

SECTION B

21. What name is given to additions to the constitution?  
(A)doctrines (B)amendments (C)assemblies (D)declarations. \_\_\_\_\_
22. What term is used in referring to the entire system of courts?  
(A)legislative (B)administrative (C)supervision (D)judicial. \_\_\_\_\_
23. Which word refers to affairs relating to one's own country?  
(A)foreign (B)international (C)domestic (D)diplomatic. \_\_\_\_\_
24. What does suffrage mean? (A)to suffer punishment (B)to endure suffocation (C)the right to vote (D)a method of appointment. \_\_\_\_\_
25. What happens when the value of money is inflated? (A)it will buy more (B)it is not possible to invest it (C)it can be used to pay international debts (D)it will buy less. \_\_\_\_\_
26. What is the purpose of diplomacy? (A)to carry on affairs within a country (B)to elect governmental officers (C)to conduct relations between countries (D)to increase industrial output. \_\_\_\_\_
28. What were the people called who wished to do away with slavery?  
(A)prohibitionists (B)suffragists (C)abolitionists (D)monarchists. \_\_\_\_\_
29. What is meant by legislation? (A)the passing of laws (B)the convicting of criminals (C)the collecting of money (D)the enforcing of laws. \_\_\_\_\_
30. What happens when a law is nullified? (A)it is enacted (B)it is ratified (C)it is no longer in force (D)it becomes a decree. \_\_\_\_\_
31. Which word means a stopping of war long enough to discuss peace?  
(A)disarmament (B)insurrection (C)treaty (D)armistice. \_\_\_\_\_
32. What does a person do when he exploits others? (A)he is a diplomat (B)he charges too much for what he sells (C)he leads a riot (D)he hires others to work for him. \_\_\_\_\_
33. What does "jurisdiction" mean? (A)to obey (B)to refuse loyalty to (C)to defend (D)to have power over. \_\_\_\_\_
34. Which of the following may be described as an event? (A)interest in education (B)movement toward stricter law enforcement (C)development of an industry (D)declaration of war. \_\_\_\_\_
35. What is the money which the government collects for public use called? (A)revenue (B)appropriation (C)currency (D)allotment. \_\_\_\_\_
36. Which action closes ports to navigation? (A)naval battle (B)embargo (C)civil war (D)aviation. \_\_\_\_\_
37. Which is a citizen-army called out only in time of emergency?  
(A)volunteers (B)militia (C)brigade (D)police. \_\_\_\_\_

38. Which political party is opposed to private ownership? (A)Anti-Saloon League (B)revolutionist (C)loyalist (D)socialist. \_\_\_\_\_
39. What does secession mean? (A)to combine (B)to cooperate (C)to withdraw (D)to capture. \_\_\_\_\_
40. Which of the following is a process by which the people may express themselves directly on some question? (A)bureaucracy (B)paternalism (C)referendum (D)propaganda. \_\_\_\_\_
41. What action is taken on a treaty if those voting approve it? (A)it is consumed (B)it is dissolved (C)it is ratified (D)it is annexed. \_\_\_\_\_
42. Who are belligerents? (A)the neutral countries (B)the countries that are defeated (C)the countries that win (D)the countries that are fighting. \_\_\_\_\_
43. Which word means freedom from slavery? (A)pardon (B)agitation (C)emancipation (D)exemption. \_\_\_\_\_
44. Who may be impeached? (A)a business man (B)a criminal (C)a reporter (D)a president. \_\_\_\_\_
45. Which are called clergy? (A)ministers (B)statesmen (C)governors (D)judges. \_\_\_\_\_
46. Which is a way of filling certain public offices? (A)application (B)resignation (C)endorsement (D)appointment. \_\_\_\_\_
47. Which word refers to political corruption? (A)graft (B)lynching (C)revolt (D)mutiny. \_\_\_\_\_
48. What is a confederacy? (A)a decree (B)a league (C)a treaty (D)a petition. \_\_\_\_\_
49. What is repudiated? (A)debts (B)governors (C)mortgages (D)land. \_\_\_\_\_
50. For what is a caucus? (A)to elect a candidate (B)to defeat a candidate (C)to decide upon a candidate (D)to punish an unwilling candidate. \_\_\_\_\_
51. What name is given to the President's term of office? (A)decade (B)panic (C)campaign (D)administration. \_\_\_\_\_
52. What name is given to the money or goods paid by one country to another as settlement for damage done during a war? (A)tariff (B)currency (C)reparations (D)loan. \_\_\_\_\_
53. What is the outer edge of a civilized area called? (A)metropolis (B)suburbs (C)frontier (D)sea-coast. \_\_\_\_\_
54. When is an injunction most often used? (A)during a strike (B)during a battle (C)during an exploration (D)during a voyage. \_\_\_\_\_



55. What is the opposite of 'urban'? (A)foreign (B)metropolitan  
(C)illiterate (D)rural. \_\_\_\_\_
56. Which is a form of conspiracy against one's country? (A)sedition  
(B)opposition (C)criticism (D)immigration. \_\_\_\_\_
57. What term may be used to describe the peaceful settlement of  
disagreements? (A)arbitration (B)annexation (C)nullification  
(D)proclamation. \_\_\_\_\_
58. What people abdicate? (A)traitors (B)employees (C)kings  
(D)slaves. \_\_\_\_\_
59. Which is a denomination? (A)Baptist (B)Jew (C)German (D)Negro. \_\_\_\_\_
60. What do two nations have to do if they want quite different  
things but do not want to go to war about their differences?  
(A)repeal (B)ratify (C)compromise (D)mobilize. \_\_\_\_\_
61. What are the dealings of one country with another called?  
(A)amendments (B)documents (C)restorations (D)negotiations. \_\_\_\_\_
62. Toward which is the conservation movement directed? (A)toward  
political corruption (B)toward business reform (C)toward religious  
disputes (D)toward preserving forests. \_\_\_\_\_
63. How does the navy get money to build a new ship? (A)by annulment  
(B)by appropriation (C)by acquisition (D)by invention. \_\_\_\_\_
64. Which group does the important work at a conflagration?  
(A)ministers (B)firemen (C)statesmen (D)soldiers. \_\_\_\_\_
65. Where are customs officers found? (A)in cities of entry (B)in  
provincial capitals (C)in sweat shops (D)in the ten largest  
cities. \_\_\_\_\_
66. Which is annexed? (A)revolt (B)credits (C)land (D)neutrality. \_\_\_\_\_
67. What does the government sometimes appoint when it wants some  
matter investigated? (A)a company (B)an embassy (C)a commission  
(D)a delegate. \_\_\_\_\_
68. What gives the people the "fundamental law" by which they are  
governed? (A)constitution (B)manifesto (C)assembly (D)parliament. \_\_\_\_\_
69. Which is a law? (A)a petition (B)a dispatch (C)a cession  
(D)a decree. \_\_\_\_\_
70. What are the strongest nations in the world often called?  
(A)empires (B)league of nations (C)powers (D)democrats. \_\_\_\_\_
71. What is a veto? (A)a compromise (B)a political party (C)a demand  
for funds (D)a refusal by the president. \_\_\_\_\_

72. Which is a written law? (A)a negotiation (B)a statute (C)a publication (D)a veto. \_\_\_\_\_
73. What name is given to the misuse of patronage? (A)civil service (B)spoils system (C)factory system (D)secret service. \_\_\_\_\_
74. What is given by a railroad to certain companies so they can send things more cheaply than other companies? (A)resolution (B)rebate (C)ballot (D)competition. \_\_\_\_\_
75. Which is a commodity? (A)wheat (B)people (C)scenery (D)education. \_\_\_\_\_
76. Which is a war of aggression? (A)lockout (B)an invasion (C)retreat (D)a battle. \_\_\_\_\_
77. What does a census usually count? (A)resources (B)capital (C)expenditure (D)people. \_\_\_\_\_
78. Which term may refer to a division within a department of the government? (A)bureau (B)court (C)congress (D)cabinet. \_\_\_\_\_
79. What is a plan for several battles called? (A)siege (B)navy (C)campaign (D)expansion. \_\_\_\_\_
80. When a government tries to improve conditions, what is it called? (A)referendum (B)initiative (C)reform (D)campaign. \_\_\_\_\_
81. What name is given to the money used for financing industry? (A)tax (B)treasury (C)regime (D)capital. \_\_\_\_\_
82. What is money paid out by the government called? (A)expenditures (B)taxes (C)tariffs (D)assessments. \_\_\_\_\_
83. What is a platform? (A)a list of candidates (B)a statement of principles (C)a religious creed (D)a political slogan. \_\_\_\_\_
84. Which word is used to describe some important problem that needs to be settled? (A)an issue (B)a decision (C)an edict (D)a sanction. \_\_\_\_\_
85. Which are contraband during war? (A)houses (B)guns (C)battles (D)islands. \_\_\_\_\_
86. By whom are examinations held for the filling of many positions in the government? (A)party politics (B)public opinion (C)League of Nations (D)civil service. \_\_\_\_\_
87. Which word indicates the government's attitude on some important question? (A)policy (B)issue (C)patronage (D)crisis. \_\_\_\_\_
88. What exists when one group of people is unfair and cruel to another group? (A)independence (B)tolerance (C)treason (D)oppression. \_\_\_\_\_

89. For what have people been persecuted by the church?  
(A)migration (B)war (C)heresy (D)contraband. \_\_\_\_\_
90. In United States which party is at present opposed to the  
Republicans? (A)Democratic (B)Federalist (C)Liberal  
(D)Abolitionist. \_\_\_\_\_

SECTION C

91. Which word means the constituted authorities of a nation?  
(A)the banks (B)the president (C)the government (D)the supreme  
court (E)selective service. \_\_\_\_\_
92. The whole series of developments connected with the change from  
hand labor to machine production is known as: (A)mass production  
(B)large scale wage system (C)industrial revolution (D)trade  
unionism (E)mechanical evolution. \_\_\_\_\_
93. A government in which the king's powers are defined or limited by  
fundamental laws is called: (A)an absolute monarchy (B)a consti-  
tutional monarchy (C)a dual monarchy (D)an empire (E)a dictatorship. \_\_\_\_\_
94. A man who is strongly opposed to war is called: (A)a militarist  
(B)an aggressor (C)a humanist (D)a pacifist (E)an ambassador. \_\_\_\_\_
95. A coup d'etat is: (A)a discovery of vast mineral resources (B)the  
exclusive publication of astounding news (C)the sudden overthrow  
of the existing form of government (D)a slump in the French stock  
market (E)a corner on the wheat market. \_\_\_\_\_
96. The right to vote is called: (A)election (B)civic duty  
(C)license (D)ballot (E)franchise. \_\_\_\_\_
97. The father of modern socialism was: (A)Metternich (B)Rousseau  
(C)Adam Smith (D)Karl Marx (E)Louis Blanc. \_\_\_\_\_
98. What is the name given to money which the loser of a war pays as  
damages to the winner? (A)loan (B)appropriation (C)mortgage  
(D)indemnity (E)premium. \_\_\_\_\_
99. Which word means those who enter a country to live there?  
(A)middle class (B)immigrants (C)patriots (D)business men  
(E)emigrants. \_\_\_\_\_
100. A country like Japan, where the population is largely of the same  
race, has the same general customs and traditions, and speaks  
the same language, is said to be: (A)heterogeneous (B)ingenious  
(C)reactionary (D)versatile (E)homogeneous. \_\_\_\_\_

KEY TO THE FINAL SOCIAL CONCEPT TEST

SECTION A

1. A
2. A
3. B
4. B
5. C
6. B
7. A
8. A
9. B
10. B
11. A
12. B
13. B
14. B
15. A
16. C
17. B
18. B
19. B
20. A

SECTION B

21. B
22. D
23. C
24. C
25. D
26. C
27. D
28. C
29. A
30. C
31. D
32. B
33. D

34. D
35. A
36. B
37. B
38. D
39. C
40. C
41. C
42. D
43. C
44. D
45. A
46. D
47. A
48. B
49. A
50. C
51. D
52. C
53. C
54. A
55. D
56. A
57. A
58. C
59. A
60. C
61. D
62. D
63. B
64. B
65. A
66. C
67. C
68. A
69. D
70. C

71. D
72. B
73. B
74. B
75. A
76. B
77. D
78. A
79. C
80. C
81. D
82. A
83. B
84. A
85. B
86. D
87. A
88. D
89. C
90. A

SECTION C

91. C
92. C
93. B
94. D
95. C
96. E
97. D
98. D
99. B
100. E

## CHAPTER IX

### SUMMARY AND CONCLUSIONS

The validated test was administered to almost one thousand students attending Manitoba schools and was well received by both students and teachers. The test consisting of one hundred questions was found very convenient as to length and required from twenty to forty minutes to administer. The questions are intended to examine the student's powers of reasoning, association, comparison and discrimination as well as his memory. The questions are varied and are wide enough in scope to be generally acceptable in Canadian schools for all grades from Grade VII to Grade XII inclusive. The test is easily administered, has definite instructions and has two trial examples to acquaint the student with the method of answering. The amount of writing required by the student is limited for he has merely to print one letter to indicate the answer to each question. These questions test the student's knowledge of the concepts or 'what the words mean to him', rather than his ability to write hastily or his ability to express himself in eloquent English. The questions are in multiple-choice forms which seem most favored by present-day test constructors and definitely superior according to Hawkes, Lindquist, Mann<sup>1</sup> for testing in the Social sciences.

In the preceding chapters of this study various weaknesses and strengths of this test have been indicated. In the first place there are some obvious dangers in the use of any new-type tests. They do take much longer to construct and do require technical skill and patience in preparation to give satisfactory results. Poorly

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<sup>1</sup>H. E. Hawkes, E. F. Lindquist, C. R. Mann, op. cit., p. 138.

constructed tests also miss the point; they lead the student to fail in acquiring all the aims of instruction in the particular field under consideration and give him no opportunity for original thought. The exclusive use of such new-type tests does fail to give the pupil the necessary practice in effective exposition but this criticism should not eliminate all use of such tests. Another danger or weakness in this test is the possibility of guessing in the first twenty three-response questions, however as the majority of questions (eighty) are either of the four-response or five-response type this is not a serious objection. There may also be the danger of suggesting the incorrect answer to the pupil but this is unlikely if the pupils are reasonably familiar with the subject matter. Another criticism is that such a test does not develop the initiative of the pupils as some tests do. This is not an argument against its use but merely against its overuse. A test of the multiple-choice type is said to be somewhat easier because although a student cannot think outright of a desired response he will recognize it when it is placed before him. This criticism may be partly true, but the writer believes that if so such a result is good for it encourages the student and it provides success which is one of the greatest stimulants to further effort in any given field of work. Another criticism of the usual test composed of multiple-choice questions is that such questions attempt to emphasize facts rather than the application of principles to the solution of problems. This test in social concepts does not emphasize facts, but rather tests the student's powers of reasoning, association, comparison and discrimination as well as memory. Two other possible weaknesses are: first, the questions

are not in order of difficulty, and second, the questions are so highly validated that the test is perhaps too difficult now for a Grade VII pupil and may also be discouraging for a weak Grade VIII pupil. This second weakness (checked by further testing not mentioned in this thesis) was found not to be serious because the weak pupils thought they had done well on the test even when their scores were later found to be as low as 25%.

In the second place this concept test of the multiple-choice-question type has many definite advantages. The writer believes that although the traditional essay type of test still has decided value for testing certain educational aims, the new-type test of multiple responses has many different vital advantages such as: appealing to the interest and enjoyment of the pupil, taking less time to administer and much less teacher's time and effort to correct, and testing a large field of information in a relatively short time. R. M. Tryon sums up a discussion of such tests and their relative advantages as follows:

- "1. Such tests are more reliable, valid, objective and comprehensive than the old type.
2. They are more economical of the teacher's time.
3. They are better than the old for diagnostic purposes.
4. They encourage desirable study habits.
5. They test ability to organize facts, apply facts and solve problems.
6. They are less dependent than the old type on physical endurance and ability to write, spell and compose."<sup>1</sup>

An additional strength of the multiple-choice type of test is that the pupils themselves believe that it is a fairer test. This factor is important for it is generally understood that often a teacher's marks are unreliable, that is, they are in general inaccurate measures of the abilities of pupils.

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<sup>1</sup>R. M. Tryon, op. cit., p. 175.

"It is not too much to say that the mark which a pupil receives on an examination paper depends upon the teacher who grades the paper, as well as upon what the pupil places upon the paper."<sup>1</sup>

Another strength possessed by this concept test is that it arouses the interest of the pupils (some pupils later took the test home and tested other members of the family including the father) and it serves to motivate the pupil to intelligent inquiry and study into the concepts that he did not understand. Because the test is interesting it also stimulates and increases pupil concentration and self-reliance. This test gives a highly objective and accurate measurement of the pupil's knowledge of many common social concepts. The pupil in order to do well on this test must not only know the facts but what is important must be able to translate those facts into ideas that will explain to him why one of the possible answers is correct or why in his opinion the others are incorrect.

In giving the four preliminary tests to the one hundred and fifty-six pupils mentioned in Chapter II the writer noted certain results. First, the boys as a rule made better scores than did the girls (see Table XVII page 62), secondly the A classes did better than the B classes, and the B classes did better than the C classes, and third, the scores for any one student on his four tests were surprisingly similar. These scores are given in Appendix D.

Table III on page 29 sets forth the results of the Laycock Mental Ability Test used to determine the I.Q. for pupils in a Grade VIII C group of 59 pupils, and a Grade IX heterogeneous group of 33 pupils. Table IV on page 31 indicates the relative standings of

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<sup>1</sup>W. S. Monroe, J. C. De Voss, and F. J. Kelley, Educational Tests and Measurements, Kansas State Normal School: Houghton Mifflin Company, 1917. p. 7.



these same pupils in I.Q., Concept Test and School Report. In the Grade IX group two girls ranked first and second in I.Q., but on the Concept Test they ranked fifth and third respectively, and on the school report ranked third and fourth respectively. This again shows that even the girls with higher intelligence do not do as well in history or social concepts as do the boys. Table V on page 32 shows a similar comparison for the Grade VIII group and again proves that high ranking in intelligence does not always assure a student of high achievement as shown by scores received in the Concept Test.

There are several indications that this Concept Test is an achievement rather than an intelligence test. In the first place the correlation between the Laycock Mental Ability Test and the Social 'Concept' Test, derived statistically in Table VI page 37 by the Spearman's Rank-Difference Method, shows a coefficient of correlation of  $.6478 \pm .074$ . This coefficient being relatively low is evidence that the Social 'Concept' Test is an achievement test rather than an intelligence test. Table VII page 38 shows the calculation of the coefficient of correlation between the Laycock Mental Ability and the average of marks from (Dec.) School Report. The coefficient of correlation in this case is  $.71 \pm .065$ . This indicates that the standing on the December School Report (P.T., Music and Art excluded) from the Robert H. Smith School is a better indication of the pupil's actual intelligence than is the score he acquired on the Social Concept Test. This again shows that the Social Concept Test measures achievement.

The quintile ranking for a class of thirty-three Grade IX pupil results in I.Q., Concept Test and School Report is given in

Table VIII, page 40. This method of comparison is used with a definite purpose in mind.

"It is one means of graphically portraying the status of the individual student in the group and of revealing some of his needs".<sup>1</sup>

It shows which pupils are working at their full capacity; it also shows the problem cases -- the pupils who make considerably above or below their I.Q. rating. Up to the present we have been very slow to recognize that similar differences in mental ability do exist. Now although our measures are not perfect they do make possible a more valid mental measurement than we have had in the past. The greatest problem of testing however still remains and that is the meaning and interpretation of results, and the use of such results to aid the pupil examined.

Chapter IV deals with the results obtained from the use of the Social Concept Test with three groups of Grade XI pupils -- 73 from Gordon Bell High School, 110 from Isaac Newton High School and 63 from five rural high schools. The results are given in Table IX, page 43 which show: that the median score in Gordon Bell School was highest, 78; that the median score in the five rural high schools was 64; and that the median score for Isaac Newton High School was 56, the lowest. The third median is lowest for a number of possible reasons: there were more girls than boys in the group; these pupils have little opportunity in which to read or talk with educated people; and many of them are from the unskilled laboring class and their home environment does not give them much help; and they are for the most part non-Anglo-Saxon, from another cultural background with the result that they possess a language handicap.

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<sup>1</sup>C. E. Germane and E. G. Germane, Personnel Work in High School, p. 109. New York: Silver Burdett Co., 1941.

In a comparison of results of the urban and the rural pupils as given in Table X, page 46, the following conclusions were reached: the urban pupils averaged four marks higher than the rural pupils; in both urban and rural communities the test scores showed a definite gradation from grade to grade; also that the power of pupil achievement progresses with the grade level attained rather than with the chronological age.

The reliability coefficient was determined by the method of chance halves. The scores of sixty Grade IX pupils were used and the calculation is given in Table XI, page 50. The reliability coefficient for the whole examination as shown by the "Spearman Prophecy Formula" is .96. This coefficient indicates that the test possesses a very high degree of reliability.

The median deviations for two groups of pupils are given in Tables XII and XIII. The median deviation for the homogeneous group of fifty-nine Grade VIII pupils is 6.98, while the median deviation for the heterogeneous group of thirty-three Grade IX pupils is 14.64. This is a further indication that the test is not only reliable but also valid.

Tables XIV, XV and XVI show the distribution of scores for the total number of students examined in Grades VIII, IX and XI respectively. The Average mark for the Grade VIII students is 39.7, the average for the Grade IX students is 43.7 and the average for the Grade XI students is 63.2. Therefore until further testing is done this would suggest the following norms if the test is written before Xmas of the school year: Grade VIII, 40; Grade IX, 44; and Grade XI, 64. Figure 2 on page 59 shows the distribution of all three

grades on the one graph. The interpretation of this figure and the three tables forementioned is further proof of the validity of this test since successive grades produce successively increasing means.

The father's occupation tends to influence the score attained by the pupil. Table XVIII using a limited sampling of eighty-four pupils shows with one exception that the scores did follow the order suggested by Terman and Merrill. The exception was the scores obtained by the pupils whose fathers were professional men. They ranked third instead of first as suggested.

On the revalidation of the whole test based on scores from 187 Grade IX pupils every question except one again validated positively. This question #63 whose previous validation was 2.3 now dropped to 1. Because the concept, "indemnity", is considered important by the writer it was retained in the final test as number 98 and was made a five-response question thus becoming more difficult. Question #65 in the test used did validate but with a ratio of only 1.15. This question was omitted from the final test because of this and for another reason -- the concept "representatives" is an American concept rather than Canadian. In its place a new question #99, dealing with immigrants, was inserted in the final test. This particular question was selected because its validity has been proven in some work other than mentioned in this thesis. All the remaining ninety-eight questions were retained in the final test. Their order was changed as shown in Table XX for the purpose of classifying them into Section A, three-response questions; Section B, four-response questions; and Section C five-response questions.

The re-validated test as set up in Chapter VIII and organized in the forementioned sections is submitted as a test in Canadian social concepts, valid and reliable, suitable for use in Grades VII to XII.

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APPENDIX A

TEST #1 OF SOCIAL STUDY CONCEPTS.

NAME OF STUDENT \_\_\_\_\_ PRESENT GRADE \_\_\_\_\_  
 ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_  
 WHAT TWO SUBJECTS DO YOU LIKE BEST? \_\_\_\_\_  
 OCCUPATION OF PARENT \_\_\_\_\_ AGE \_\_\_\_\_ YEARS + \_\_\_\_\_ MONTHS  
 BOY OR GIRL \_\_\_\_\_

- Example. 1. Who is the head of the United States government?  
 (A) the Governor (B) the Secretary (C) the President  
 (D) the King. C
2. What name is given to the land next to the sea?  
 (A) the mountains (B) the coast (C) the plains  
 (D) the valleys. B

INSTRUCTIONS:

Attempt all questions or guess at all answers. There is no penalty for a wrong answer. Put your letter on the line in the right hand margin as shown in the foregoing examples. Do your best. Your results will be returned to you.

QUESTIONS.

1. What do we call a more or less permanent settlement in a new country? (A) a democracy (B) a colony (C) a tariff (D) a continent. \_\_\_\_\_
2. What is usually invested? (A) a mortgage (B) some money (C) a person (D) some goods. \_\_\_\_\_
3. What is the daughter of a king called? (A) a queen (B) a prince (C) a gentleman (D) a princess. \_\_\_\_\_
4. What name is given to a place where thousands of people live? (A) a house (B) a city (C) a village (D) a school. \_\_\_\_\_
5. Where would you expect to find a judge when he is at work? (A) in a courtroom (B) in a store (C) in a schoolroom (D) on a farm. \_\_\_\_\_
6. What name is given to additions to the constitution? (A) doctrines (B) amendments (C) assemblies (D) declarations. \_\_\_\_\_
7. What word means loyalty to one's country? (A) neutrality (B) migration (C) patriotism (D) constitution. \_\_\_\_\_
8. What term is used in referring to the entire system of courts? (A) legislative (B) administrative (C) supervision (D) judicial. \_\_\_\_\_
9. What are people when they first enter a foreign country? (A) citizens (B) laborers (C) aliens (D) peasants. \_\_\_\_\_
10. What is the ideal purpose of politics? (A) to eliminate graft (B) to elect the best possible men (C) to organize public opinion (D) to keep candidates from being selfish. \_\_\_\_\_
11. Which word refers to affairs relating to one's country? (A) foreign (B) international (C) domestic (D) diplomatic. \_\_\_\_\_
12. What is meant by "the authorities"? (A) high officials (B) foreigners (C) heads of corporations (D) inventors. \_\_\_\_\_
13. What does suffrage mean? (A) to suffer punishment (B) to endure suffocation (C) the right to vote (D) a method of appointment. \_\_\_\_\_
14. Which is a form of natural resources? (A) factories (B) cities (C) forests (D) schools. \_\_\_\_\_

TEST #1 -- continued.

15. What happens when the value of money is inflated? (A)it will buy more (B)it is not possible to invest it (C)it can be used to pay international debts (D)it will buy less
16. When a law is repealed what is always the result? (A)it is enforced more rigidly (B)it is amended (C)it is no longer in force (D)it is a source of dissatisfaction.
17. Which phrase refers to the entire business of making woolen clothing? (A)the woolen shops (B)the woolen industry (C)the wool-growers (D)sheep ranchers.
18. Who is the official head of a monarchy? (A)a king (B)president (C)dictator (D)judge.
19. What happens when money depreciates? (A)it becomes less valuable (B)it will buy more (C)it has to go back to the mint (D)it can be used in foreign countries.
20. Which is a raw material? (A)cloth (B)paper (C)timber (D)chair.
21. What is the purpose of diplomacy? (A)to carry on affairs within a country (B)to elect governmental officers (C)to conduct relations between countries (D)to increase industrial output.
22. What name is given to things brought into Canada from a foreign country? (A)customs (B)imports (C)pioneers (D)bonds.
23. What does religious tolerance mean? (A)making all people belong to one church (B)believing everything in the Bible (C)believing in science instead of the church (D)allowing people to believe what they will.
24. What is the name given to the activities of any group for the purpose of getting a certain bill through the legislature? (A)lobbying (B)electioneering (C)voting (D)secret service.
25. What were the people called who wished to do away with slavery? (A)prohibitionists (B)suffragists (C)abolitionists (D)monarchists.
26. What is meant by legislation? (A)the passing of laws (B)the convicting of criminals (C)the collecting of money (D)the enforcing of laws.
27. What happens when a law is nullified? (A)it is enacted (B)it is ratified (C)it is no longer in force (D)it becomes a decree.
28. Which word means those who enter a country to live there? (A)middle class (B)immigrants (C)patriots (D)business men.
29. Which word means giving money to an officer of the government to influence his actions? (A)bribery (B)counterfeiting (C)piracy (D)politics.
30. Which laws refer to the manufacture, sale or transportation of liquor? (A)sedition laws (B)naturalization laws (C)prohibition laws (D)corporation laws.

TEST #1 -- continued.

31. Which word means a prolonged attempt to conquer some fortified place? (A)a battle (B)a siege (C)a skirmish (D)a retreat. \_\_\_\_\_
32. Which means a robber on the seas? (A)bandit (B)thief (C)pirate (D)highwayman. \_\_\_\_\_
33. What is one way of attacking a fortification? (A)by skirmishing (B)by massacre (C)by reinforcements (D)by bombardment. \_\_\_\_\_
34. What is a court's decision called? (A)a tariff (B)a verdict (C)a proposal (D)a prohibition. \_\_\_\_\_
35. Which word means to gain someone's good will after it has once been lost? (A)tolerate (B)accuse (C)conciliate (D)condemn. \_\_\_\_\_
36. Which is the law-making body of a city? (A)council (B)association (C)jury (D)senate. \_\_\_\_\_
37. What word means bringing goods into a country without paying duty? (A)scandal (B)graft (C)counterfeiting (D)smuggling. \_\_\_\_\_
38. Which word means to give each person whatever he deserves? (A)charity (B)divorce (C)despotism (D)justice. \_\_\_\_\_
39. Which word means a stopping of war long enough to discuss peace? (A)disarmament (B)insurrection (C)treaty (D)armistice. \_\_\_\_\_
40. What is the result of independence, in a governmental sense? (A)unlimited freedom (B)self-government (C)control by others (D)lack of initiative. \_\_\_\_\_
41. What is a person owned by another called? (A)an emperor (B)a savage (C)a priest (D)a slave. \_\_\_\_\_
42. Which is an invention? (A)peninsula (B)steamboat (C)lightning (D)settlement. \_\_\_\_\_
43. To what is a panic most often due? (A)too much capital (B)too little bankruptcy (C)too much speculation (D)too little trade. \_\_\_\_\_
44. What is the process of carrying things from one place to another called? (A)translation (B)transition (C)transaction (D)transportation. \_\_\_\_\_
45. What do you cast at an election? (A)a policy (B)an official (C)a promise (D)a ballot. \_\_\_\_\_
46. What name is frequently given to a new town in a new country? (A)settlement (B)metropolis (C)prairie (D)siege. \_\_\_\_\_
47. What does a person do when he exploits others? (A)he is a diplomat (B)he charges too much for what he sells (C)he leads a riot (D)he hires others to work for him. \_\_\_\_\_
48. What word means an agreement between two countries to give each other trade privileges? (A)reciprocity (B)emancipation (C)finance (D)conspiracy. \_\_\_\_\_
49. Which term means legal punishment by death? (A)assination (B)execution (C)spy (D)imprisonment. \_\_\_\_\_
50. When is there usually a period of reconstruction? (A)after a period of prosperity (B)after a war (C)after religious persecution (D)after a new president is elected. \_\_\_\_\_

TEST #1 -- continued.

51. What does "jurisdiction" mean? (A)to obey (B)to refuse loyalty to (C)to defend (D)to have power over. \_\_\_\_\_
52. Which name is given to the head of a ministry? (A)premier (B)governor (C)consul (D)ambassador \_\_\_\_\_
53. Which of the following may be described as an event? (A)interest in education (B)movement toward stricter law enforcement (C)development of an industry (D)declaration of war. \_\_\_\_\_
54. What is the money which the government collects for public use called? (A)revenue (B)appropriation (C)currency (D)allotment. \_\_\_\_\_
55. Which belongs to the navy? (A)tank (B)regiment (C)cavalry (D)cruiser. \_\_\_\_\_
56. Which is the final act in electing a president? (A)voting (B)petition (C)compromise (D)nomination. \_\_\_\_\_
57. Which is a political party? (A)Puritan (B)Republican (C)Episcopal (D)Gentile. \_\_\_\_\_
58. Which action closes ports to navigation? (A)naval battle (B)embargo (C)civil war (D)aviation. \_\_\_\_\_
59. Which is a statement of religious beliefs? (A)creed (B)petition (C)resolution (D)treaty. \_\_\_\_\_
60. Which is a citizen-army called out only in time of emergency? (A)volunteers (B)militia (C)brigade (D)police. \_\_\_\_\_
61. Which political party is opposed to private ownership? (A)Anti-Saloon League (B)revolutionist (C)loyalist (D)socialist. \_\_\_\_\_
62. What are the representatives at political conventions called? (A)commissioners (B)delegates (C)visitors (D)democrats. \_\_\_\_\_
63. When two countries make an agreement to help each other what is it called? (A)competition (B)disarmament (C)alliance (D)election. \_\_\_\_\_
64. If fifty people vote unanimously for a certain officer, how many votes does he get? (A)25 (B)49 (C)0 (D)50 \_\_\_\_\_
65. What is one way of getting soldiers? (A)by confiscation (B)by arrest (C)by draft (D)by pension. \_\_\_\_\_
66. Which term describes property that represents a large money value? (A)poverty (B)wealth (C)profit (D)supply. \_\_\_\_\_
67. With what is finance chiefly concerned? (A)farms (B)money (C)people (D)rights. \_\_\_\_\_
68. Which is the science that is concerned particularly with ships? (A)militarism (B)chemistry (C)agriculture (D)navigation. \_\_\_\_\_
69. What is meant by reclamation? (A)civilizing a savage (B)educating a child (C)converting a heathen (D)making waste land useable. \_\_\_\_\_
70. Which word means an official written statement? (A)empire (B)document (C)conference (D)committee. \_\_\_\_\_

TEST #1 -- continued.

71. What is the opposite of a military occupation of a country or city? (A)ammunition (B)evacuation (C)proscription (D)rehabilitation. \_\_\_\_\_
72. Which word refers to those people who are employed in mills, factories, or mines? (A)monopoly (B)wealth (C)capitalism (D)labor. \_\_\_\_\_
73. What is given to a people to prove their ownership of the land they settle upon? (A)petition (B)charter (C)doctrine (D)amendment. \_\_\_\_\_
74. Which people are hostile? (A)citizens (B)employees (C)enemies (D)allies. \_\_\_\_\_
75. What does secession mean? (A)to combine (B)to cooperate (C)to withdraw (D)to capture. \_\_\_\_\_
76. How long is a century? (A)10 yrs. (B)50 yrs. (C)100 yrs. (D)1000 yrs. \_\_\_\_\_
77. What word means the period during which a legislature is meeting? (A)defeat (B)epoch (C)session (D)congress. \_\_\_\_\_
78. Which is a form of currency? (A)a pound of sugar (B)a college degree (C)a museum (D)a silver dollar. \_\_\_\_\_
79. What are people permanently located in a country called? (A)inhabitants (B)foreigners (C)emigrants (D)capitalists. \_\_\_\_\_
80. Which of the following is a process by which the people may express themselves directly on some question? (A)bureaucracy (B)paternalism (C)referendum (D)propaganda. \_\_\_\_\_
81. What action is taken on a treaty if those voting approve it? (A)it is consumed (B)it is dissolved (C)it is ratified (D)it is annexed. \_\_\_\_\_
82. What name is given to the chief legislative body of England? (A)parliament (B)congress (C)estates-general (D)reichstag. \_\_\_\_\_
83. Who succeeds a president dying in office? (A)the secretary of state (B)the speaker of the House (C)the chief justice of the supreme court (D)the vice-president. \_\_\_\_\_
84. Who are belligerents? (A)the neutral countries (B)the countries that are defeated (C)the countries that win (D)the countries that are fighting. \_\_\_\_\_
85. Which word means freedom from slavery? (A)pardon (B)agitation (C)emancipation (D)exemption. \_\_\_\_\_
86. Which word means privileges no one can legally take from us? (A)laws (B)doctrines (C)rights (D)institutions. \_\_\_\_\_
87. Who may be impeached? (A)a business man (B)a criminal (C)a reporter (D)a president. \_\_\_\_\_
88. Which are called clergy? (A)ministers (B)statesmen (C)governors (D)judges. \_\_\_\_\_
89. Which word means freedom from disturbance? (A)treaty (B)peace (C)hostility (D)law. \_\_\_\_\_
90. Which is a way of filling certain public offices? (A)application (B)resignation (C)endorsement (D)appointment. \_\_\_\_\_



TEST #1 -- continued.

91. What is a poll? (A)a place to vote (B)a ballot  
(C)an unfair election (D)a type of violence.
92. Which word is similar in meaning to invalid? (A)delinquent  
(B)unconstitutional (C)fugitive (D)immoral.
93. What determines the necessities, comforts, and luxuries  
which the average home insists upon? (A)public opinion  
(B)states' rights (C)standard of living (D)universal  
suffrage.
94. Which word refers to political corruption? (A)graft  
(B)lynching (C)revolt (D)mutiny.
95. What word might we use in place of illegal? (A)injustice  
(B)liberty (C)unequal (D)unlawful.
96. What is at the head of the judiciary branch of the  
government? (A)public opinion (B)district attorney's  
office (C)capital punishment (D)the supreme court.
97. What are those people called who are living in the country  
they were born in? (A)civilians (B)citizens (C)Americans  
(D)aliens.
98. What is a confederacy? (A)a decree (B)a league (C)a treaty  
(D)a petition.
99. What is repudiated? (A)debts (B)governors (C)mortgages  
(D)land.
100. What is a caucus for? (A)to elect a candidate (B)to defeat  
a candidate (C)to decide upon a candidate (D)to punish an  
unwilling candidate.

ANSWER KEY TO PRELIMINARY TEST #1.

PAGE 1

1	B
2	B
3	D
4	B
5	A
6	B
7	C
8	D
9	C
10	B
11	C
12	A
13	C
14	C
15	D
16	C
17	B
18	A
19	A
20	C
21	C
22	B
23	D
24	A
25	C
26	A
27	C
28	B
29	A
30	C
31	B
32	C
33	D

PAGE 2

34	B
35	C
36	A
37	D
38	D
39	D
40	B
41	D
42	B
43	C
44	D
45	D
46	A
47	B
48	A
49	B
50	B
51	D
52	A
53	D
54	A
55	D
56	A
57	B
58	B
59	A
60	B
61	D
62	B
63	C
64	D
65	C
66	B

PAGE 3

67	B
68	D
69	D
70	B
71	B
72	D
73	B
74	C
75	C
76	C
77	C
78	D
79	A
80	C
81	C
82	A
83	D
84	D
85	C
86	C
87	D
88	A
89	B
90	D
91	A
92	B
93	C
94	A
95	D
96	D
97	B
98	B
99	A
100	C

TEST #2 OF SOCIAL STUDY CONCEPTS

NAME OF STUDENT \_\_\_\_\_ PRESENT GRADE \_\_\_\_\_  
ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_  
WHAT TWO SUBJECTS DO YOU LIKE BEST? \_\_\_\_\_  
AGE \_\_\_\_\_ YEARS + \_\_\_\_\_ MONTHS  
OCCUPATION OF PARENT \_\_\_\_\_ BOY OR GIRL \_\_\_\_\_

Example. 1. Which term refers to cities? (A) national (B) urban  
(C) provincial (D) local. B  
2. What policy is opposed to that of centralization in gov-  
ernment? (A) provincial rights (B) competition (C) public  
opinion (D) Magna Charta. A

INSTRUCTIONS:

Attempt all questions or guess at all answers. There is no penalty for a wrong answer. Put your letter on the line in the right hand margin as shown in the foregoing examples. Do your best. Your results will be returned to you.

QUESTIONS

1. Which is another word for commerce? (A) government (B) trade  
(C) religion (D) crime. \_\_\_\_\_
2. What are the views of people in general called? (A) trade unions  
(B) public opinion (C) states' rights (D) civil service. \_\_\_\_\_
3. What does a company sell when it wants to increase its capital?  
(A) salaries (B) drafts (C) fees (D) stocks (E) manufactured goods. \_\_\_\_\_
4. What does interstate mean? (A) within a state (B) between cities  
(C) between states (D) within a country. \_\_\_\_\_
5. What is the official ceremony that marks the beginning of the  
President's term called? (A) nomination (B) coronation (C) convention  
(D) inauguration. \_\_\_\_\_
6. What do we call the place where disagreements are tried before a  
judge? (A) capital (B) navy (C) court (D) public opinion. \_\_\_\_\_
7. What happens when money is inflated? (A) it will buy more (B) it is  
not possible to invest it (C) it can be used to pay international  
debts (D) it will buy less. \_\_\_\_\_
8. Which is the flat or rolling type of country? (A) seashore  
(B) valley (C) prairie (D) divide. \_\_\_\_\_
9. Of what is a "grant" often composed? (A) land (B) people (C) labor  
(D) officers. \_\_\_\_\_
10. What name is given to an area of partly settled land belonging to  
a country? (A) province (B) nation (C) republic (D) investment. \_\_\_\_\_
11. What does majority mean? (A) a minority (B) an officer in the army  
(C) more than fifty per cent of the votes (D) a successful can-  
didate. \_\_\_\_\_
12. What name is given to the President's term of office? (A) decade  
(B) panic (C) campaign (D) administration. \_\_\_\_\_
13. What name is given to the money or goods paid by one country to  
another as settlement for damage done during a war? (A) tariff  
(B) currency (C) reparations (D) loan. \_\_\_\_\_
14. To what does naval refer? (A) ships (B) deserts (C) trains  
(D) tunnels. \_\_\_\_\_

TEST #2 -- continued.

15. By what method is the governor's office filled? (A)by initiative (B)by election (C)by recall (D)by endorsement.
16. Who occupies the papacy? (A)the pope (B)the president (C)the prime minister (D)the police.
17. What are the people called who join an army of their own accord? (A)generals (B)aliens (C)capitalists (D)volunteers.
18. Who decides whether or not a man is guilty of murder? (A)the jury (B)the judge (C)the witnesses (D)the lawyers.
19. What is made in the mint? (A)candy (B)money (C)clothes (D)bacon.
20. What is the outer edge of a civilized area called? (A)metropolis (B)suburbs (C)frontier (D)seacoast.
21. Of whom is the population composed? (A)banks (B)people (C)debts (D)proposals.
22. When is an injunction most often used? (A)during a strike (B)during a battle (C)during an exploration (D)during a voyage.
23. What is a tariff which seeks to help home industries? (A)tariff for revenue only (B)international revenue (C)free trade (D)protective tariff.
24. What is the opposite of "urban"? (A)foreign (B)metropolitan (C)illiterate (D)rural.
25. Which word means open revolt against authority? (A)diplomacy (B)agriculture (C)debate (D)delegates.
26. Which refers to the lowest social class in many countries? (A)representatives (B)peasants (C)inhabitants (D)delegates.
27. What are nations on the same side in a war called? (A)officers (B)allies (C)marshals (D)civilians.
28. Which is a mob? (A)a fleet of battleships (B)a decrease in prices (C)an excited group of people (D)a tax on imports.
29. Which is a form of conspiracy against one's country? (A)sedition (B)opposition (C)criticism (D)immigration.
30. A group of people at worship in a church is called: (A)a crowd (B)an audience (C)an assembly (D)a congregation.
31. What is the line that shows where one country stops and another begins? (A)boundary (B)monument (C)compass (D)ocean.
32. Which is something to be obeyed? (A)law (B)proposition (C)report (D)celebration.
33. Which term means the closing of the ports of one country by the naval forces of another? (A)embargo (B)naval battle (C)decision (D)blockade.
34. How does a person become a candidate for office? (A)by defeat (B)by nomination (C)by election to office (D)by appointment.
35. Who of the following represents Canada in the United States officially? (A)ambassador (B)senator (C)patriot (D)governor (E)High commissioner.
36. What is a group of people carrying on a particular business called? (A)a mandate (B)a company (C)a dividend (D)a community.
37. What is likely to result when all parties in the government have equal strength? (A)imperialism (B)massacre (C)amendment (D)deadlock.

TEST #2 -- Continued.

38. Where did the rich people of the South live in the early days? (A)on homesteads (B)in log cabins (C)on plantations (D)on river boats. \_\_\_\_\_
39. What word means about the same as revolution? (A)extra- \_\_\_\_\_  
dition (B)administration (C)penalty (D)rebellion. \_\_\_\_\_
40. What is necessary if desert land is to become fruitful? \_\_\_\_\_  
(A)migration (B)reparations (C)irrigation (D)capital. \_\_\_\_\_
41. To what does agriculture refer? (A)fishing (B)mining \_\_\_\_\_  
(C)farming (D)manufacturing. \_\_\_\_\_
42. What is the opposite of "modern"? (A)mediaeval \_\_\_\_\_  
(B)colonial (C)ancient (D)foreign. \_\_\_\_\_
43. Which is an expression of the government's opinion on \_\_\_\_\_  
something important? (A)doctrine (B)empire (C)budget \_\_\_\_\_  
(D)commerce. \_\_\_\_\_
44. Which term refers to a religious war? (A)an expansion \_\_\_\_\_  
(B)a revolution (C)a crusade (D)an offensive. \_\_\_\_\_
45. What term may be used to describe the peaceful settlement \_\_\_\_\_  
of disagreements? (A)arbitration (B)annexation (C>nulli- \_\_\_\_\_  
fication (D)proclamation. \_\_\_\_\_
46. What is the nation's capital? (A)the largest city \_\_\_\_\_  
(B)the chief seaport (C)the seat of the government \_\_\_\_\_  
(D)the center of its wealth. \_\_\_\_\_
47. How long is a decade? (A)10 years (B)25 years (C)50 years \_\_\_\_\_  
(D)100 years. \_\_\_\_\_
48. When do current events take place? (A)a long time ago \_\_\_\_\_  
(B)a short time ago (C)in the future (D)in the present. \_\_\_\_\_
49. Which name is given to the countries ruled by an emperor? \_\_\_\_\_  
(A)state (B)alliance (C)commonwealth (D)empire. \_\_\_\_\_
50. What people abdicate? (A)traitors (B)employees (C)kings \_\_\_\_\_  
(D)slaves. \_\_\_\_\_
51. Which is a denomination? (A)Baptist (B)Jew (C)German \_\_\_\_\_  
(D)Negro. \_\_\_\_\_
52. What do two nations have to do if they want quite \_\_\_\_\_  
different things but do not want to go to war about their \_\_\_\_\_  
differences? (A)repeal (B)ratify (C)compromise (D)mobi- \_\_\_\_\_  
lize. \_\_\_\_\_
53. What are the dealings of one country with another called? \_\_\_\_\_  
(A)amendments (B)documents (C)restorations (D)negotia- \_\_\_\_\_  
tions. \_\_\_\_\_
54. Which adjourns? (A)a treaty (B)the king (C)parliament \_\_\_\_\_  
(D)the constitution. \_\_\_\_\_
55. Which is an old soldier? (A)an invalid (B)a minister \_\_\_\_\_  
(C)a veteran (D)a convict. \_\_\_\_\_
56. What is usually the object of an expedition? (A)to invent \_\_\_\_\_  
something (B)to control something (C)to plan something \_\_\_\_\_  
(D)to discover something. \_\_\_\_\_
57. Toward which is the conservation movement directed? \_\_\_\_\_  
(A)toward political corruption (B)toward business reform \_\_\_\_\_  
(C)toward religious disputes (D)toward preserving forests \_\_\_\_\_

TEST #2 -- Continued.

58. Which is a continent? (A)Panama (B)London (C)Asia  
(D)France. \_\_\_\_\_
59. What usually determines your nationality? (A)the people  
you live with (B)the school you attend (C)the country you  
were born in (D)the government of your city. \_\_\_\_\_
60. How does the navy get money to build a new ship? (A)by  
annulment (B)by appropriation (C)by acquisition (D)by  
invention. \_\_\_\_\_
61. Which is a method of deciding how much tax should be paid by  
different people? (A)assessment (B)endorsement (C)adjour-  
nment (D)annulment. \_\_\_\_\_
62. Which group does the important work at a conflagration?  
(A)ministers (B)firemen (C)statesmen (D)soldiers. \_\_\_\_\_
63. What does a city ordinarily sell when it needs money for  
some public improvement? (A)credits (B)lands (C)dividends  
(D)bonds. \_\_\_\_\_
64. Where are customs officers found? (A)in cities of entry  
(B)in provincial capitals (C)in sweat shops (D)in the ten  
largest cities. \_\_\_\_\_
65. What word means a method of influencing people to agree  
with you? (A)revolt (B)propaganda (B)election (D)victory. \_\_\_\_\_
66. What is plotting against one's own country called?  
(A)murder (B)witchcraft (C)riot (D)treason. \_\_\_\_\_
67. What do you do when you leave your own country to settle  
in another? (A)emigrate (B)retreat (C)surrender  
(D)abdicate. \_\_\_\_\_
68. Which is annexed? (A)revolt (B)credits (C)land (D)neutra-  
lity. \_\_\_\_\_
69. What does the government sometimes appoint when it wants  
some matter investigated? (A)a company (B)an embassy  
(C)a commission (D)a delegate. \_\_\_\_\_
70. What gives the people the "fundamental law" by which they  
are governed? (A)constitution (B)manifesto (C)assembly  
(D)parliament. \_\_\_\_\_
71. Which is a law? (A)a petition (B)a dispatch (C)a cession  
(D)a decree. \_\_\_\_\_
72. What is a king sometimes called? (A)a chancellor (B)a  
prime minister (C)a president (D)a sovereign. \_\_\_\_\_
73. What is a person called who locates in an unsettled  
section of his own country? (A)emigrant (B)pioneer  
(C)slave (D)proprietor. \_\_\_\_\_
74. What name is given to the organization of employees?  
(A)nations (B)political parties (C)pioneers (D)unions. \_\_\_\_\_
75. What word means a place where people live? (A)a monopoly  
(B)a community (C)a court (D)a decade. \_\_\_\_\_
76. What are affairs within a country called? (A)restricted  
(B)financial (C)manufacture (D)internal. \_\_\_\_\_
77. What is a civil war? (A)a war during the past 25 years  
(B)a war involving several nations (C)a war between two  
nations (D)a war within a single country. \_\_\_\_\_

TEST #2 -- Continued.

78. What are the strongest nations in the world often called?  
(A)empires (B)league of nations (C)powers (D)democrats. \_\_\_\_\_
79. What is the opposite of offensive? (A)conservative  
(B)active (C)inventive (D)defensive. \_\_\_\_\_
80. Which word is most similar in meaning to period?  
(A)year (B)season (C)month (D)era. \_\_\_\_\_
81. What happens when there is a financial crisis? (A)a  
new president is elected (B)prices are lowered (C)there  
is a war (D)there is a period of prosperity. \_\_\_\_\_
82. What is a veto? (A)a compromise (B)a political party  
(C)a demand for funds (D)a refusal by the president. \_\_\_\_\_
83. What is the tax put upon things brought into a country?  
(A)bonus (B)duty (C)discount (D)income. \_\_\_\_\_
84. Which word refers to things done by soldiers? (A)military  
(B)naval (C)civil (D)aeronautical. \_\_\_\_\_
85. What is the act of calling out troops called? (A)mobiliza-  
tion (B)confirmation (C)indictment (D)recantation. \_\_\_\_\_
86. Which is a written law? (A)a negotiation (B)a statute  
(C)a publication (D)a veto. \_\_\_\_\_
87. If you and someone else both want to be elected President,  
what do you call the other person? (A)opponent (B)ally  
(C)vice-president (D)democrat. \_\_\_\_\_
88. Which is the largest group of people living under the  
same government? (A)city (B)nation (C)country  
(D)province. \_\_\_\_\_
89. What is the result of a restriction? (A)you refuse to  
do something (B)you are prevented from doing something  
(C)you are encouraged to break a law (D)you are put in  
jail. \_\_\_\_\_
90. What name is given to the misuse of patronage? (A)civil  
service (B)spoils system (C)factory system (D)secret  
service. \_\_\_\_\_
91. What do we call the point of view of a person strongly  
in favor of one side of an argument? (A)insane  
(B)dominating (C)victorious (D)partisan. \_\_\_\_\_
92. Which word implies the opposite of primitive? (A)early  
(B)civilized (C)ancient (D)original. \_\_\_\_\_
93. What is given by a railroad to certain companies so  
they can send things more cheaply than other companies?  
(A)resolution (B)rebate (C)ballot (D)competition. \_\_\_\_\_
94. What does a broker buy in the "market"? (A)banks  
(B)stocks (C)merchandise (D)labor. \_\_\_\_\_
95. Which of the following words applies to the practice of  
lowering of prices by one company so as to get business  
away from another? (A)rebellion (B)emigration (C)out-  
put (D)competition. \_\_\_\_\_
96. Which word means to send goods out of the country in  
which they are produced? (A)retail (B)export (C)sell  
at wholesale (D)import. \_\_\_\_\_

TEST #2 -- Continued.

97. What is the exclusive right or privilege of engaging in a particular business called? (A)competition (B)monopoly (C)capital (D)research. \_\_\_\_\_
98. What is a method by which a government raises money? (A)rebates (B)diplomacy (C)taxes (D)salaries. \_\_\_\_\_
99. Who of the following go to foreign lands to teach religion? (A)converts (B)missionaries (C)ambassadors (D)bishops. \_\_\_\_\_
100. Which is a commodity? (A)wheat (B)people (C)scenery (D)education. \_\_\_\_\_



ANSWER KEY TO PRELIMINARY TEST #2.

PAGE 1

1	B
2	B
3	D
4	C
5	D
6	C
7	D
8	C
9	A
10	A
11	C
12	D
13	C
14	A
15	B
16	A
17	D
18	A
19	B
20	C
21	B
22	A
23	D
24	D
25	C
26	B
27	B
28	C
29	A
30	D
31	A
32	A
33	D

PAGE 2

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35	A
36	B
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38	C
39	D
40	C
41	C
42	C
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44	C
45	A
46	C
47	A
48	D
49	D
50	C
51	A
52	C
53	D
54	C
55	C
56	D
57	D
58	C
59	C
60	B
61	A
62	B
63	D
64	A
65	B
66	D

PAGE 3

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68	C
69	C
70	A
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72	D
73	B
74	D
75	B
76	D
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79	D
80	D
81	B
82	D
83	B
84	A
85	A
86	B
87	A
88	B
89	B
90	B
91	D
92	B
93	B
94	B
95	D
96	B
97	B
98	C
99	B
100	A

TEST #3 OF SOCIAL STUDY CONCEPTS.

NAME OF STUDENT \_\_\_\_\_ PRESENT GRADE \_\_\_\_\_  
 ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_  
 WHAT TWO SUBJECTS DO YOU LIKE BEST? \_\_\_\_\_

OCCUPATION OF PARENT \_\_\_\_\_ AGE \_\_\_\_\_ YEARS+ \_\_\_\_\_ MONTHS  
 BOY OR GIRL \_\_\_\_\_

Example 1. What official in Canada represents the king of England?  
 (A) the premier (B) the governor-general (C) attorney general (D) Mr. King. B

2. Which is a race? (A) American (B) Negro (C) Methodist (D) Quaker. B

INSTRUCTIONS:

Attempt or guess at all answers. There is no penalty for a wrong answer. Put your letter on the line in the right hand margin as shown in the foregoing examples. Do your best. Your results will be returned to you.

QUESTIONS.

1. What name is given to a person who gives testimony before a court? (A) witness (B) lawyer (C) judge (D) juror. \_\_\_\_\_
2. To what places does Pan-American refer? (A) U. S. and Canada (B) America and Europe (C) North and South America (D) the U. S. and its possessions. \_\_\_\_\_
3. Which word means any commercial or industrial undertaking? (A) banking (B) business (C) exchange (D) contract. \_\_\_\_\_
4. What is the condition when there is no government? (A) slavery (B) freedom (C) expansion (D) anarchy. \_\_\_\_\_
5. Which word means that a country has taken over control of a smaller country without the latter's consent? (A) imperialism (B) democracy (C) anarchy (D) patriotism. \_\_\_\_\_
6. Which is a diplomatic agent? (A) a president (B) a jury (C) a minister (D) a priest. \_\_\_\_\_
7. What is a group of ships under one command called? (A) fleet (B) caravan (C) frigate (D) army. \_\_\_\_\_
8. Which word describes any country in which a person is not a citizen? (A) foreign (B) native (C) domestic (D) continental. \_\_\_\_\_
9. What name was given to large areas before they became states? (A) cities (B) factories (C) territories (D) jungles. \_\_\_\_\_
10. What is a budget? (A) a cash account (B) a list of names (C) an estimate of expenditure (D) a payroll. \_\_\_\_\_
11. What is the name of a formal agreement between two or more countries? (A) a treaty (B) an edict (C) a resolution (D) a statute. \_\_\_\_\_
12. Which is a journey on the ocean? (A) a caravan (B) conspiracy (C) voyage (D) treason. \_\_\_\_\_
13. What happens when a law is put into effect? (A) it is legislated (B) it is decreed (C) it is sanctioned (D) it is enforced. \_\_\_\_\_
14. Which boat can travel under the water? (A) cruisers (B) dreadnaught (C) ironclad (D) submarine. \_\_\_\_\_
15. Who are the "soldiers of the sea"? (A) sailors (B) militia (C) marines (D) population. \_\_\_\_\_

TEST #3 -- Continued.

16. Which word means some dishonest act? (A)abdication (B) prohibition (C)suffrage (D)fraud.
17. Which is a war of aggression? (A)lockout (B)an invasion (C)retreat (D)a battle.
18. Which adjective refers to the country in which one is born? (A)alien (B)foreign (C)adopted (D)native.
19. Which is a public statement? (A)proclamation (B)imperialism (C)exposition (D)assembly.
20. Which word means to give approval? (A)repeal (B)sanction (C)rule (D)revolt.
21. What is meant by democracy? (A)government by a king (B)government by a dictator (C)government by the people (D)government by the nobility.
22. When an army has lost a war what does it do? (A)it dies (B)it surrenders (C)it conquers (D)it manoeuvres.
23. What group of people ranks itself highest in society? (A)middlemen (B)aristocrats (C)pioneers (D)democrats.
24. What does a census usually count? (A)resources (B)capital (C)expenditures (D)people.
25. What does migration mean? (A)a primitive society (B) a kind of law (C)a journeying from place to place (D) a form of industry.
26. Which term may refer to a division within a department of the government? (A)bureau (B)court (C)congress (D)cabinet.
27. What is a plan for a series of battles called? (A)siege (B)navy (C)campaign (D)expansion.
28. When a government tries to improve conditions, what is it called? (A)referendum (B)initiative (C)reform (D)campaign.
29. What must you have in order to borrow money? (A)bills (B)credit (C)lawyers (D)corporation.
30. Which of the following is a method of communication? (A)investment (B)telephone (C)production (D)politics.
31. Which of the following statements best describes a bankrupt country? (A)it has too many people in it (B)it has no agriculture (C)it cannot pay its debts (D)it has lost its colonies.
32. Which of the following is a legislative assembly? (A)empire (B)parliament (C)world court (D)bureau of education.
33. How do laborers most often attempt to force an employer to raise their wages? (A)by going to war (B)by going to another factory (C)by going to a foreign country (D) by going on strike.
34. What does it mean to be naturalized? (A)to go to another country (B)to hold an office in a government (C)to become a citizen of a foreign country (D)to become a very wealthy country.
35. What name is given to a small organized group of persons with a certain work to do? (A)a committee (B)an assemblage (C)a parliament (D)a congress.

TEST #3 -- Continued.

36. What name is given to the money used for financing industry?  
(A)tax (B)treasury (C)regime (D)capital.
37. What is money paid out by the government called? (A)expen-  
ditures (B)taxes (C)tariffs (D)assessments.
38. To what expression does the term coinage refer? (A)the  
weaving of cloth (B)the raising of wheat (C)the mining of  
metals (D)the making of pieces of money.
39. What is the money called which the loser of a war pays as  
damages to the winner? (A)loan (B)appropriation (C)mortgage  
(D)indemnity.
40. What are munitions? (A)soldiers (B)uniforms (C)transports  
(D)shells.
41. What is a political platform? (A)a list of candidates (B)a  
statement of principles (C)a religious creed (D)a political  
slogan.
42. What is a petition? (A)refusal (B)a reply (C)a repeal (D)a  
request.
43. In what period were battles carried on by knights in armor?  
(A)the colonial period (B)the pre-historic period (C)the  
mediaeval period (D)the revolutionary period.
44. What term explains the position of a country which does  
not take sides in a war between two other countries?  
(A)democratic (B)honest (C)partial (D)neutral.
45. Which are members of the House (of Commons)? (A)delegates  
(B)senators (C)mayors (D)representatives.
46. Which word is used to describe some important problem that  
needs to be settled? (A)an issue (B)a decision (C)an edict  
(D)a sanction.
47. What is the opposite of conservative? (A)social (B)radi-  
cal (C)political (D)illegal.
48. Which of the following adjectives best describes a law  
that is based not on any good reasons but on personal likes  
or dislikes? (A)democratic (B)illegal (C)foreign (D)arbi-  
trary.
49. When a legislature has voted for something what is it called?  
(A)an idea (B)an act (C)a crime (D)a proposal.
50. What does violation mean? (A)breaking a law (B)signing a  
treaty (C)selecting a candidate (D)declaring a war.
51. Which usually has the smallest number of people in it?  
(A)nation (B)state (C)city (D)town.
52. Which word means the killing of a large number of people?  
(A)an encounter (B)an economy (C)a decree (D)a massacre.
53. Which word describes a condition in which people have more  
money than usual? (A)poverty (B)prosperity (C)prohibition  
(D)protection.
54. To what does the word "greenback" refer? (A)a division of  
an army (B)a kind of ship (C)a kind of money (D)a depart-  
ment of the treasury.
55. What is the user of goods called? (A)the consumer (B)the  
reformer (C)the traitor (D)the producer.

TEST #3 -- Continued.

56. Which are contraband during war? (A)houses (B)guns (C)battles (D)islands.
57. What do nations do when they disagree, but want to find some friendly way out of their difficulties? (A)declare war (B)hold a conference (C)get out propaganda (D)elect new officials.
58. Which is a representative of the government in a foreign country? (A)consul (B)sovereign (C)vice-president (D)banker.
59. How did the early Americans state their independence from England? (A)by a riot (B)by a treaty (C)by a political party (D)by a declaration.
60. In Canadian and American history what name was usually given to a part of the country before it became a province or state? (A)republic (B)territory (C)statute (D)nation.
61. What is Canada called? (A)a frontier (B)a dominion (C)a despotism (D)an empire.
62. What name is given to the giving up of armies and navies? (A)compromise (B)caucus (C)speculation (D)disarmament.
63. When a fort is especially well placed what is it called? (A)strategic (B)colonial (C)conservative (D)patriotic.
64. By whom are examinations held for the filling of many positions in the government? (A)party politics (B)public opinion (C)League of Nations (D)civil service.
65. Which word means to give in to some other person's ideas? (A)enforce (B>nullify (C)concede (D)veto.
66. What name is given to the movement of people from the eastern parts of the United States to the western? (A)secession (B)expansion (C)conservation (D)precedent.
67. What do you do when you pass a resolution? (A)vote (B)nullify (C)annex (D)veto.
68. Which is the name of the houses lived in by some of the early settlers in the Middle West? (A)hotels (B)homesteads (C)plantations (D)bungalows.
69. When a group of people get very angry and excited and want to show how they feel, what sometimes takes place? (A)an appropriation (B)a riot (C)a campaign (D)monopoly.
70. Which word refers to some certain period of time in history? (A)politics (B)neutrality (C)regime (D)massacre.
71. Which word indicates the government's attitude on some important question? (A)policy (B)issue (C)patronage (D)crisis.
72. What exists when one group of people are unfair and cruel to another group? (A)independence (B)tolerance (C)treason (D)oppression.
73. For what have people been persecuted by the church? (A)migration (B)war (C)heresy (D)contraband.
74. In United States which party is at present opposed to the Republicans? (A)Democratic (B)Federalist (C)Liberal (D)Abolitionist.
75. Which term refers to the process of making things in an industry? (A)production (B)raw material (C)wages (D)resources.

TEST #3 -- Continued.

76. Which word means something to be voted on? (A)bill (B)credit (C)diplomacy (D)proclamation. (E)act. \_\_\_\_\_
77. Which word refers to the conditions in the place where you live? (A)religious (B)universal (C)national (D)local. \_\_\_\_\_
78. Which term is applied to a person who holds a position of authority in the government? (A)principal (B)lawyer (C)official (D)servant. \_\_\_\_\_
79. When a government wishes to punish people, what does it often do with their property? (A)defends it (B)confiscates it (C)subordinates it (D)makes it into forts. \_\_\_\_\_
80. Which word means the breaking of the law? (A)strike (B)war (C)crime (D)wealth. \_\_\_\_\_
81. What is an assembly? (A)the allies in a war (B)a group of people (C)a high tariff (D)a set of laws. \_\_\_\_\_
82. Which word means the constituted authorities of a nation? (A)the banks (B)the president (C)the government (D)the supreme court. \_\_\_\_\_
83. Which is a "continental"country? (A)Africa (B)Mexico (C)Canada (D)France. \_\_\_\_\_
84. A battle ship is a kind of: (A)passenger liner (B)rowboat (C)schooner (D)war boat (E)yacht. \_\_\_\_\_
85. Policemen are: (A)aggressive men (B)brave men (C)large men (D)officials in large cities (E)officers of the law. \_\_\_\_\_
86. In modern times most countries agree that the money for operating schools should be raised by (A)philanthropy (B)the tariff (C)the church (D)taxes (E)the trustees. \_\_\_\_\_
87. The whole series of developments connected with the change from hand labor to machine production is known as: (A)mass production (B)large scale wage system (C)the industrial revolution (D)trade unionism (E)mechanical evolution. \_\_\_\_\_
88. The practice of enrolling all able-bodied men for military service is called: (A)militarism (B)Junkerism (C)conscription (D)imperialism (E)engrossment. \_\_\_\_\_
89. Asiatic peoples might be correctly termed: (A)illiterate (B)Occidental (C)aggressive (D)non-progressive (E)Oriental. \_\_\_\_\_
90. The owner who leaves an estate to be managed by hired overseers or superintendents while he resides at a distance is known as: (A)a man without a country (B)a journeyman (C)an absentee landlord (D)a gentleman farmer (E)a peasant proprietor. \_\_\_\_\_
91. A government in which the king's powers are defined or limited by fundamental laws is called: (A)an absolute monarchy (B)a constitutional monarchy (C)a dual monarchy (D)an empire (E)a dictatorship. \_\_\_\_\_
92. A country like Japan, where the population is largely of the same race, has the same general customs and traditions, and speaks the same language, is said to be: (A)heterogeneous (B)ingenious (C)reactionary (D)versatile (E)homogeneous. \_\_\_\_\_
93. A man who lives on a small daily wage is said to be a member of the: (A)proletariat (B)peasantry (C)bourgeoise (D)Bolsheviki (E)Capitalist class. \_\_\_\_\_

TEST #3 -- Continued.

94. A man who is strongly opposed to war is called: (A)militarist (B)an aggressor (C)a humanist (D)a pacifist (E)an ambassador.
95. A coup d'etat is: (A)a discovery of vast mineral resources (B)the exclusive publication of astounding news (C)the sudden overthrow of the existing form of government (D)a slump in the French stock market (E)a corner on the wheat market.
96. Any material, true or false, used to influence opinion is called: (A)oratory (B)a platform (C)sermonizing (D)pragmatism (E)propaganda.
97. Belief in the Church of England as the best form of religious government is called: (A)Catholicism (B)Anglicanism (C)Calvinism (D)Protestantism (E)Humanitarianism.
98. The right to vote is called: (A)election (B)civic duty (C)license (D)ballot (E)franchise.
99. The father of modern socialism was (A)Metternich (B)Rousseau (C)Adam Smith (D)Karl Marx (E)Louis Blanc.
100. Which nation is considered an elder nation? (A)one in which there are more men than ladies (B)one in which there are more ladies than men (C)one in which there are more people over 60 years of age than under 20 years of age.

ANSWER KEY TO PRELIMINARY TEST #3.

PAGE 1

1	A
2	C
3	B
4	D
5	A
6	C
7	A
8	A
9	C
10	C
11	A
12	C
13	D
14	D
15	C
16	D
17	B
18	D
19	A
20	B
21	C
22	B
23	B
24	D
25	C
26	A
27	C
28	C
29	B
30	B
31	C
32	B
33	D

PAGE 2

34	C
35	A
36	D
37	A
38	D
39	D
40	D
41	B
42	D
43	C
44	D
45	D
46	A
47	B
48	D
49	B
50	A
51	D
52	D
53	B
54	C
55	A
56	B
57	B
58	A
59	D
60	B
61	B
62	D
63	A
64	D
65	C
66	B

PAGE 3

67	A
68	B
69	B
70	C
71	A
72	D
73	C
74	A
75	A
76	A
77	D
78	C
79	B
80	C
81	B
82	C
83	A
84	D
85	E
86	D
87	C
88	C
89	E
90	C
91	B
92	B
93	A
94	D
95	C
96	E
97	B
98	E
99	D
100	B



TEST #4 OF SOCIAL STUDY CONCEPTS.

NAME OF STUDENT \_\_\_\_\_ PRESENT GRADE \_\_\_\_\_  
ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_  
WHAT TWO SUBJECTS DO YOU LIKE BEST? \_\_\_\_\_  
OCCUPATION OF PARENT \_\_\_\_\_ AGE \_\_\_\_\_ YEARS + \_\_\_\_\_ MONTHS  
BOY OR GIRL \_\_\_\_\_

- EXAMPLE 1. What is a college? (A) a place where sick people are cared for (B) a place to obtain an education (C) a place where automobiles are made. \_\_\_\_\_
2. What is a janitor? (A) a man who sweeps and cleans buildings (B) a man who drives a taxicab (C) a man who takes tickets on the train. \_\_\_\_\_

INSTRUCTIONS: Attempt all questions or guess at all answers. There is no penalty for a wrong answer. Put the capital letter on the line in the right-hand margin as shown in the foregoing examples. Do your best. Your results will be returned to you.

QUESTIONS

1. How is the fire department paid for? (A) out of municipal tax money (B) by the fire insurance companies (C) by people whose houses have been saved. \_\_\_\_\_
2. What is a plain-clothes man? (A) a man who buys and sells old clothes (B) a tailor who makes men's suits and coats (C) a police-man who does not wear a uniform. \_\_\_\_\_
3. Who makes laws for the city? (A) the council (B) the judges and the courts (C) the mayor and a special committee. \_\_\_\_\_
4. What is a city ordinance? (A) a city officer (B) a city law (C) a city map. \_\_\_\_\_
5. What is a precinct? (A) a kind of city law (B) a kind of city officer (C) a kind of division of the city. \_\_\_\_\_
6. What is the legislature? (A) a body of men who make the provincial laws (B) a body of men who keep the records (C) a body of men who manage the courts. \_\_\_\_\_
7. People of what races can be made citizens of Canada? (A) only the white races, negroes, and Indians (B) only people of the white races (C) people of any race who have good characters. \_\_\_\_\_
8. With what is the word federal associated today? (A) a foreign government (B) the city government (C) the national government (D) the provincial government. \_\_\_\_\_
9. What is graft? (A) money stolen or received dishonestly (B) money used to pay officers with (C) money used to pay for city parks and boulevards. \_\_\_\_\_
10. What is meant by naturalization? (A) it is one way of selecting candidates to run for office (B) it is the process by which a foreigner is made a citizen (C) it is another name for joining the army or navy. \_\_\_\_\_
11. What is a tariff? (A) a tax on goods made in this country (B) a tax on goods shipped into this country (C) a tax on houses and land. \_\_\_\_\_
12. What is an income tax? (A) it is a tax on theatre tickets, movies and ice-cream sodas (B) it is a tax on goods coming into this country (C) it is a tax on wages, salaries or money one receives. \_\_\_\_\_

TEST # 4 -- Continued.

13. What is a consumer? (A)a person who manufactures goods of any kind (B)a person who uses goods of any kind (C)a person who stores goods of any kind.
14. What does it mean to say that a man is bankrupt? (A)that he has a great deal of money in the bank (B)that he has not enough money to pay his debts (C)that he owns stock in the bank.
15. What is a wholesale merchant? (A)one who stores large quantities of goods and sells to smaller stores (B)one who has many customers and sells many goods (C)one who has many big bargain sales every year.
16. What is a chain store? (A)one which sells automobile supplies (B)one with many small departments in it, all in one building (C)one which belongs to a group of stores which are all alike.
17. What is profiteering? (A)taking far more profit than is honest or fair (B)dividing up profits among those owning the business (C)giving profit coupons to customers.
18. What is a charge account? (A)an arrangement with a store so that customers can take goods without paying for them until the end of the month (B)an arrangement with a store so that goods can be saved for the customer until he is able to pay for them (C)an arrangement so that goods need not be paid for until delivered.
19. What is a postal savings bank? (A)a post-office department which will send money through the mail for you (B)a post-office department where you can leave money for safe keeping (C)a post-office department which is just like a regular bank.
20. What is meant by making a deposit at the bank? (A)cashing a cheque at the bank (B)taking money out of the bank (C)putting money into the bank.
21. What do people do when they make investments? (A)put their money into the bank where it will be safe (B)use their money to try to make more money (C)waste their money through making mistakes.
22. What is a speculator? (A)a man who buys only the best and safest stocks and bonds (B)a merchant who shares the profits with his customers (C)a man who tries to make much money quickly by buying and selling.
23. What kind of work does a financier do? (A)helps run banks and manage money matters (B)helps run courts and manage trials with the lawyers (C)helps run colleges and plan educational matters.
24. What is a postal money order? (A)it is an order paying you for packages lost in the mail (B)an order used to send money by mail (C)an order to take money out of the postal savings bank.
25. Which is the best way to send valuable things by mail? (A)registered mail (B)special delivery (C)parcel post.
26. What is a middle man? (A)a man who handles goods between freight yards and the stores (B)a man who handles goods between the maker and the user (C)a man who stores goods between seasons until they are needed. (D)a man who is moderate in politics.
27. Why do people put mortgages on their property? (A)to prove they own it (B)so they will not have to pay such high taxes (C)so they can borrow money on it.

TEST # 4 -- Continued.

28. What does a deed to property show? (A)how much it is worth  
(B)who owns it (C)who rents it and what they pay. \_\_\_\_\_
29. What is a divorce? (A)a court order breaking up a marriage  
(B)a court order requiring a husband to care for his family  
better (C)a court order punishing husbands and wives who do not  
take good care of their children. \_\_\_\_\_
30. What is a budget? (A)a statement of how one's money is to be  
spent (B)a kind of tax on money, stocks, and valuables (C)an  
amount of money given to charity. \_\_\_\_\_
31. What are slums? (A)parts of the city where factories and freight  
yards are built (B)parts of the city where there are many vacant  
lots and poor streets (C)a dirty unhealthy part of the city  
where many poor people live. \_\_\_\_\_
32. What is an urban population? (A)a population living in the coun-  
try (B)a population living in the cities (C)a population living  
in a foreign country. \_\_\_\_\_
33. Where are the rural districts? (A)out in the country (B)in the  
business district (C)in the factory district. \_\_\_\_\_
34. Where are suburbs to be found? (A)in the business section of the  
city (B)out in the country on the farms (C)near the edges of  
the city. \_\_\_\_\_
35. What is a pauper? (A)a man who is very sick (B)a man who is not  
very clever (C)a man who has no money. \_\_\_\_\_
36. What is an immigrant? (A)a person who comes to this country  
from some other country (B)a person who is ignorant, dirty, and  
a poor worker (C)a person who commits crime and is dangerous. \_\_\_\_\_
37. What is an illiterate person? (A)a person who can read and write  
(B)a person who cannot read and write (C)a person who can  
speak more than one language. \_\_\_\_\_
38. What does race hatred mean? (A)the dislike races feel for one  
another during war only (B)the dislike of any race for another  
for any reason (C)dislikes between groups of the same race for  
any reason. \_\_\_\_\_
39. Why do employers wish many immigrants to come to America?  
(A)because this makes wages lower (B)because the immigrants are  
skilful workers (C)because they are easy to manage. \_\_\_\_\_
40. What is Canadianization? (A)putting red, white, and blue labels  
on anything (B)putting Canadian government over Newfoundland,  
Labrador, Greenland etc (C)educating the immigrants to become  
good citizens. \_\_\_\_\_
41. What is a felony? (A)a crime which is very serious (B)a crime  
which is not very serious (C)a crime for which you are fined but  
not put in jail. \_\_\_\_\_
42. Are most criminals well educated or not? (A)most of them are  
educated, but find it easier to steal than to work (B)most of  
them are uneducated and do not know any better (C)most of them  
are well educated and use their brains to plan crimes. \_\_\_\_\_
43. What is propaganda? (A)saying and writing things which are  
strictly truthful (B)telling news and current events as in  
newspapers (C)saying and writing things to get people to believe  
your way. \_\_\_\_\_

TEST # 4 -- Continued.

44. What is a juvenile court? (A)a court which handles serious crimes only (B)a court which handles children's cases only (C)a court in small towns in the country. \_\_\_\_\_
45. What is bail money? (A)money used to get votes dishonestly (B)money used to get a man out of jail until his trial (C)money used to pay a lawyer to defend you in court. \_\_\_\_\_
46. What is a subpoena? (A)an order for a man's arrest when he is guilty (B)an order to appear in court at a certain time (C)an order freeing a man from jail when he is not guilty. \_\_\_\_\_
47. What is a search warrant? (A)an order allowing a policeman to search a man's pockets (B)an order to policemen to search for an escaped criminal (C)an order allowing a policeman to search a house. \_\_\_\_\_
48. What is a candidate? (A)a man who holds a government office (B)a man trying to get elected to an office (C)a man who helps count votes after an election. \_\_\_\_\_
49. What is a polling place? (A)where citizens pay their taxes (B)where election disputes are settled (C)where citizens vote. \_\_\_\_\_
50. What are politics concerned with? (A)the policemen and managing the police department (B)elections, voting, and running the government (C)lawyers, judges, and managing the courts. \_\_\_\_\_
51. What are political parties? (A)organizations of voters who believe in the same things (B)parades, meetings, etc. held just before an election (C)parties given to celebrate winning an election. \_\_\_\_\_
52. What is a ballot? (A)a piece of paper on which to vote (B)a committee which counts votes (C)a place where voting is done. \_\_\_\_\_
53. What is a political boss? (A)a man who sees that voters vote as he tells them (B)a man who sees that votes are counted honestly (C)a man who sees that voters are orderly while voting. \_\_\_\_\_
54. What is a political platform? (A)the stand from which the speakers make their speeches (B)the statement of what the party believes in (C)a list of men who are running for office. \_\_\_\_\_
55. What is a political machine? (A)an automobile used to get voters to the voting place (B)a group of men who run political affairs to suit themselves (C)a box into which votes are put to be counted. \_\_\_\_\_
56. What is a political convention? (A)a meeting held to decide election disputes (B)a meeting held to discuss plans for making laws (C)a meeting held to select a candidate for an election. \_\_\_\_\_
57. What does the ticket of a political party show you? (A)what men are running for office (B)whether you can vote or not (C)a list of the voting places. \_\_\_\_\_
58. What is a primary election? (A)the very first election of the year (B)an election to select candidates for a later election (C)an election which decides important things. \_\_\_\_\_
59. What is meant by buying on the instalment plan? (A)paying so much a month for goods (B)borrowing money to pay for goods (C)paying cash for goods when you buy them. \_\_\_\_\_
60. What is a labor union? (A)an organization of all workmen in any line to secure their rights (B)an organization of workmen to secure an equal division of money (C)an organization of workmen to help each other secure jobs. \_\_\_\_\_

TEST # 4 -- Continued.

61. What is an employee? (A)a man who is hired to work by another man (B)a man who hires other men to work for him (C)a man who is out of work and looking for it.
62. What is a sweat shop? (A)one in which people suffer from the heat (B)one in which people do hard work under poor conditions (C)one in which hard work makes people get overheated.
63. What is a seasonal trade? (A)one which runs during all parts of the year (B)one which runs without paying any attention to the weather (C)one which runs only during certain parts of the year.
64. What is an injunction? (A)a court order making people do, or stop doing a certain thing (B)a place where several railroads come together (C)a breakdown of machinery which stops work in a factory.
65. What is a strike-breaker? (A)a man who refuses to quit his job and strike (B)a man who takes the job of a man who is on strike (C)a man who quits striking and goes back to his job.
66. What is a boycott? (A)a form of taxation used in foreign countries (B)something like a reform school for bad boys (C)a refusal to do business with certain people.
67. What is a strike? (A)workmen quit and refuse to work (B)workmen ask for a job (C)workmen fight and create a disturbance.
68. Why are good roads and streets being built everywhere? (A)THEY are easier and nicer to ride and drive over (B)they look better and are not so dirty (C)they reduce the cost of transportation and help business.
69. Which is correct? (A)Transportation by water costs more than transportation by railroad (B)Transportation by water costs less than transportation by railroad (C)Transportation by water costs just the same as by railroad.
70. Which is correct? (A)Sending goods by freight is faster than by express (B)Sending goods by freight is just as fast as by express (C)Sending goods by freight is slower than by express.
71. Are telephones, telegraphs, and post-offices very important in business? (A)they are helpful, but not really very important (B)they are of very great importance (C)they are important, but not really worth all the money they cost to run.
72. What is conservation? (A)saving such things as food, clothing, supplies etc (B)saving such things as coal and iron mines, water power etc (C)saving food by preserving it for next year.
73. What are a country's natural resources? (A)its armies and navies which protect it (B)its mines, forests, rivers etc (C)its railroads, factories, cities etc.
74. What is an epidemic? (A)a condition in which many people are sick of the same disease (B)a condition in which many people are sick of different diseases (C)a way to stop disease by vaccination.
75. Why are sick people put in quarantine? (A)so they will not give other people the disease (B)so they will get well more quickly and more easily (C)because it is the kindest way to care for them.

TEST # 4 -- Continued.

76. Why does the law require markets, bakeries, restaurants, to be inspected? (A)to see that the prices are fair and honest (B)to see that the food is clean and healthful (C)to see that careful workmen are employed.
77. What is a contagious disease? (A)one you can get by eating something (B)one you get from other people (C)one which is quite serious.
78. Why should we have schools for blind, deaf, and crippled children? (A)that is the easiest and kindest way to care for them (B)so they will be able to support themselves later on (C)so they will have something to do and not get into trouble.
79. What is the chief reason why schools are run? (A)because we have enough money to run them (B)because the law says children must go to school (C)because all children should have an education.
80. Which is correct? (A)Lawyers and doctors need much more education than salesmen and merchants (B)Lawyers and doctors need just the same education as salesmen and merchants (C)Lawyers and doctors do not need as much education as salesmen and merchants.
81. What kind of education is vocational education? (A)one kind of musical education for singing and playing (B)one which prepares boys and girls for some trade or business (C)one kind of higher education that prepares you for college.
82. What does the compulsory school law do? (A)it makes people pay taxes to support schools (B)it makes the school run during certain months (C)it makes pupils stay in school until a certain age.
83. What is meant by recreation? (A)keeping the parks clean to play in (B)playing, resting, having a good time (C)teaching people to be better and happier.
84. What does poverty mean? (A)that money is saved and put into the bank (B)that there is not enough money to buy necessary things (C)that there is plenty of money to buy necessary things.
85. Do we have a national church in Canada? (A)The government has not made any church the national church (B)The government has made one church the national church (C)The government favors one church but has no law about it.
86. Which of the following are the most important in good morals? (A)being kind, happy and cheerful (B)being generous and helpful (C)being honest and truthful.
87. Which is a blind alley job? (A)one which is likely to be hard on the eyes (B)one in a small factory on a narrow, dark street (C)one which does not train for better jobs.
88. What is the census? (A)a report the chief of police makes about the work of his department (B)a report showing the number of people in the country and many facts about them (C)a report showing how many votes were cast and how much elections cost.
89. What are aliens? (A)foreigners who cannot read and write English very well (B)foreigners who live in this country and who are not citizens (C)foreigners who cause trouble and get into trouble with the police.

TEST # 4 -- Continued.

90. Columbus made his first voyage across the Atlantic because --  
(A)he believed he could discover a new continent (B)he believed  
the earth was round and he could find a shorter route to  
India (C)he wanted to secure the Indian trade for his native  
city, Genoa.
91. What does S. O. S. stand for? (A)send out ships (B)signal of stress (C)save our souls.
92. Eli Whitney is noted for his invention of the (A)spinning jenny (B)cotton gin (C)telegraph.
93. What is the purpose of an electric motor in an electric refrigerator? (A)it cools the air compartment by blowing air through it (B)it compresses a gas and cools it with air currents until the gas is liquified (C)it makes a liquid evaporate by blowing air over it.
94. Who invented the telephone? (A)Morse (B)Marconi (C)Bell.
95. Cornwallis surrendered at: (A)Valley Forge (B)Yorktown (C)Gettysburg.
96. Why did so many explorers sail westward from Europe during the Renaissance period? (A)they were seeking a northwest passage to the East (B)they were seeking only gold (C)They were restless and desired adventure.
97. Which adjective best describes Columbus (A)cowardly (B)proud (C)courageous.
98. What is a stockade? (A)a part of a gun (B)a barrier for defense (C)a public punishment.
99. When is a foreigner naturalized? (A)when he can speak English (B)when he enters a country (C)when he is admitted to citizenship.
100. What is a dynasty? (A)a ruling family (B)a league of nations (C)an electrical appliance.



ANSWER KEY TO PRELIMINARY TEST #4

PAGE 1

1 A  
2 C  
3 A  
4 B  
5 C  
6 C  
7 C  
8 C  
9 A  
10 B  
11 B  
12 C  
13 B  
14 B  
15 A  
16 C  
17 A  
18 A  
19 C  
20 C  
21 B  
22 C  
23 A  
24 B  
25 A  
26 B  
27 C

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28 B  
29 A  
30 A  
31 C  
32 B  
33 A  
34 C  
35 C  
36 A  
37 B  
38 B  
39 A  
40 C  
41 A  
42 B  
43 C  
44 B  
45 B  
46 B  
47 C  
48 B  
49 C  
50 B  
51 A  
52 A  
53 A  
54 B  
55 B  
56 C

PAGE 3

57 A  
58 B  
59 A  
60 A  
61 A  
62 B  
63 C  
64 A  
65 B  
66 C  
67 A  
68 C  
69 B  
70 C  
71 B  
72 B  
73 B  
74 A  
75 A  
76 B  
77 B  
78 B  
79 C  
80 A  
81 B  
82 C  
83 B

PAGE 4

84 B  
85 A  
86 C  
87 C  
88 B  
89 B  
90 B  
91 C  
92 B  
93 B  
94 C  
95 B  
96 A  
97 C  
98 B  
99 C  
100 A



APPENDIX B

VALIDATION OF FOUR PRELIMINARY TESTS

VALIDATION OF TEST #1

No.	Upper group	Lower group	Ratio of Discriminating Value	Remarks	Used in Validated Test
1.	30	25	30/25 = 1.2	Little discriminating value	
2.	30	28	30/28 = 1.07	Little " "	
3.	30	29	30/29 = 1.03	Little " "	
4.	30	30	30/30 = 1	No " "	
5.	30	28	30/28 = 1.07	Little " "	
6.	22	8	22/ 8 = 2.75	Good " "	Yes #1.
7.	30	29	30/29 = 1.03	Little " "	
8.	21	7	21/ 7 = 3	Good " "	Yes #2.
9.	30	27	30/27 = 1.1	Little " "	
10.	15	9	15/ 9 = 1.6	Some " "	
11.	20	2	20/ 2 = 10	Excellent " "	Yes #3.
12.	30	22	30/22 = 1.37	Little " "	
13.	21	7	21/ 7 = 3	Good " "	Yes #4.
14.	30	28	30/28 = 1.07	Little " "	
15.	29	15	29/15 = 1.93	Good " "	Yes #5.
16.	24	14	24/14 = 1.71	Some " "	
17.	30	21	30/21 = 1.43	Some " "	
18.	28	19	28/19 = 1.49	Some " "	
19.	25	21	25/21 = 1.2	Little " "	
20.	30	18	30/18 = 1.6	Some " "	
21.	25	11	25/11 = 2.27	Good " "	Yes #6.
22.	30	26	30/26 = 1.15	Little " "	
23.	28	11	28/11 = 2.54	Good " "	Yes #7.
24.	11	7	11/ 7 = 1.57	Some " "	
25.	28	12	28/12 = 2.3	Good " "	Yes #8.
26.	23	9	23/ 9 = 2.5	Good " "	Yes #9.
27.	26	12	26/12 = 2.16	Good " "	Yes #10.
28.	30	27	30/27 = 1.1	Little " "	
29.	30	25	30/25 = 1.2	Little " "	
30.	21	15	21/15 = 1.4	Some " "	
31.	29	24	29/24 = 1.2	Little " "	
32.	30	30	30/30 = 1	No " "	
33.	28	26	28/26 = 1.08	Little " "	
34.	30	27	30/27 = 1.1	Little " "	
35.	30	23	30/23 = 1.3	Little " "	
36.	29	18	29/18 = 1.61	Some " "	
37.	30	30	30/30 = 1	No " "	
38.	29	24	29/24 = 1.21	Little " "	
39.	19	9	19/ 9 = 2.1	Good " "	Yes #11.
40.	28	22	28/22 = 1.27	Little " "	
41.	30	28	30/28 = 1.07	Little " "	
42.	30	27	30/27 = 1.1	Little " "	

VALIDATION OF TEST #1 --Continued.

No.	Upper group	Lower group	Ratio of Discriminating Value	Remarks	Used in Validated Test
43.	24	17	24/17 = 1.41	Some discriminating value	
44.	30	30	30/30 = 1.	No " "	
45.	30	30	30/30 = 1.	No " "	
46.	30	25	30/25 = 1.2	Little " "	
47.	11	5	11/ 5 = 2.2	Good " "	Yes #12.
48.	30	23	30/23 = 1.3	Little " "	
49.	30	29	30/29 = 1.03	Little " "	
50.	30	27	30/27 = 1.1	Little " "	
51.	26	12	26/12 = 2.16	Good " "	Yes #13.
52.	15	15	15/15 = 1	No " "	
53.	27	25	27/25 = 1.08	Little " "	Yes #14.
54.				Experimental - a check	
54.	27	14	27/14 = 1.93	Good " "	Yes #15.
55.	30	28	30/28 = 1.07	Little " "	
56.	29	16	29/16 = 1.81	Fairly good" "	
57.	30	28	30/28 = 1.07	Little " "	
58.	23	9	23/ 9 = 2.5	Good " "	Yes #16.
59.	28	21	28/21 = 1.3	Little " "	
60.	16	6	16/ 6 = 2.6	Good " "	Yes #17.
61.	24	8	24/ 8 = 3.	Good " "	Yes #18.
62.	30	18	30/18 = 1.67	Some " "	
63.	30	26	30/26 = 1.15	Little " "	
64.	28	17	28/17 = 1.65	Some " "	
65.	30	28	30/28 = 1.07	Little " "	
66.	28	22	28/22 = 1.27	Little " "	
67.	29	22	29/22 = 1.32	Little " "	
68.	29	28	29/28 = 1.04	Little " "	
69.	24	14	24/14 = 1.71	Some " "	
70.	30	28	30/28 = 1.07	Little " "	
71.	28	18	28/18 = 1.5	Some " "	
72.	30	28	30/28 = 1.07	Little " "	
73.	24	17	24/17 = 1.41	Some " "	
74.	30	22	30/22 = 1.37	Little " "	
75.	14	5	14/ 5 = 2.8	Good " "	Yes #19.
76.	30	28	30/28 = 1.07	Little " "	
77.	30	28	30/28 = 1.07	Little " "	
78.	30	24	30/24 = 1.25	Little " "	
79.	30	26	30/26 = 1.15	Little " "	
80.	14	2	14/ 2 = 7	Superior " "	Yes #20.
81.	20	5	20/ 5 = 4	Excellent " "	Yes #21.
82.	28	21	28/21 = 1.3	Little " "	
83.	28	21	28/21 = 1.3	Little " "	
84.	23	9	23/ 9 = 2.5	Good " "	Yes #22.
85.	26	11	26/11 = 2.36	Good " "	Yes #23.
86.	30	21	30/21 = 1.43	Some " "	
87.	13	2	13/ 2 = 6.5	Excellent " "	Yes #24.

VALIDATION OF TEST #1 -- Continued.

No.	Upper group	Lower group	Ratio of Discriminating Value	Remarks	Used in Validated Test
88.	27	14	27/14 = 1.93	Good discriminating value	Yes #25.
89.	27	20	27/20 = 1.35	Little " "	
90.	29	15	29/15 = 1.93	Good " "	Yes #26.
91.	28	22	28/22 = 1.3	Little " "	
92.	5	5	5/5 = 1	No " "	
93.	30	24	30/24 = 1.25	Little " "	
94.	26	9	26/9 = 2.8	Good " "	Yes #27.
95.	29	17	29/17 = 1.7	Some " "	
96.	28	16	28/16 = 1.75	Some " "	
97.	29	25	29/25 = 1.16	Little " "	
98.	26	5	26/5 = 5.2	Excellent " "	Yes #28.
99.	15	4	15/4 = 3.75	Excellent " "	Yes #29.
100.	22	11	22/11 = 2	Good " "	Yes #30.

VALIDATION OF TEST #2

No.	Upper group	Lower group	Ratio of Discriminating Value	Remarks	Used in Validated Test
1.	32	30	32/30 = 1.07	Little discriminating value	
2.	30	30	30/30 = 1	No	" "
3.	32	29	32/29 = 1.10	Little	" "
4.	28	19	28/19 = 1.49	Some	" "
5.	30	17	30/17 = 1.77	Some	" "
6.	31	31	31/31 = 1	No	" "
7.	28	21	28/21 = 1.3	Little	" "
8.	31	25	31/25 = 1.24	Little	" "
9.	32	31	32/31 = 1.03	Little	" "
10.	28	21	28/21 = 1.3	Little	" "
11.	32	30	32/30 = 1.07	Little	" "
12.	31	14	31/14 = 2.21	Good	" "
13.	31	12	31/12 = 2.6	Good	" "
14.	32	30	32/30 = 1.07	Little	" "
15.	23	21	23/21 = 1.6	Some	" "
16.	31	22	31/22 = 1.4	Some	" "
17.	32	27	32/27 = 1.2	Little	" "
18.	32	27	32/27 = 1.2	Little	" "
19.	32	25	32/25 = 1.3	Little	" "
20.	14	1	14/1 = 14	Very superior	" "
21.	32	29	32/29 = 1.1	Little	" "
22.	26	13	26/13 = 2	Good	" "
23.	29	18	29/18 = 1.6	Some	" "
24.	24	11	24/11 = 2.2	Good	" "
25.	20	17	20/17 = 1.18	Little	" "
26.	32	29	32/29 = 1.10	Little	" "
27.	32	31	32/31 = 1.03	Little	" "
28.	32	31	32/31 = 1.03	Little	" "
29.	21	2	21/2 = 10.5	Superior	" "
30.	32	30	32/30 = 1.07	Little	" "
31.	31	32	31/32 = .9	Negative	" "
32.	32	31	32/31 = 1.03	Little	" "
33.	28	23	28/23 = 1.22	Little	" "
34.	29	17	29/17 = 1.80	Fairly good	" "
35.	32	28	32/28 = 1.14	Little	" "
36.	32	31	32/31 = 1.03	Little	" "
37.	31	27	31/27 = 1.15	Little	" "
38.	30	26	30/26 = 1.15	Little	" "
39.	32	31	32/31 = 1.03	Little	" "
40.	32	24	32/24 = 1.4	Some	" "
41.	32	29	32/29 = 1.10	Little	" "
42.	30	30	30/30 = 1	No	" "
43.	28	20	28/20 = 1.4	Some	" "
44.	32	23	32/23 = 1.4	Some	" "
45.	25	1	25/1 = 25	Very superior	" "

Yes #31.  
Yes #32.

Yes #33.

Yes #34.

Yes #35.

Yes #36.

Yes #37.

VALIDATION OF TEST #2 -- Continued.

No.	Upper group	Lower group	Ratio of Discriminating Value	Remarks	Used in Validated Test
46.	30	29	30/29 = 1.03	Little discriminating value	
47.	27	19	27/19 = 1.4	Some	"
48.	32	29	32/29 = 1.10	Little	"
49.	31	25	31/25 = 1.24	Little	"
50.	32	14	32/14 = 2.29	Good	"
51.	23	11	23/11 = 2.09	Good	"
52.	32	13	32/13 = 2.5	Good	"
53.	32	16	32/16 = 2	Good	"
54.	32	27	32/27 = 1.2	Little	"
55.	32	31	32/31 = 1.03	Little	"
56.	32	30	32/30 = 1.07	Little	"
57.	32	14	32/14 = 2.3	Good	"
58.	30	30	30/30 = 1	No	"
59.	32	29	32/29 = 1.10	No	"
60.	23	11	23/11 = 2.09	Good	"
61.	31	17	31/17 = 1.82	Fairly good	"
62.	26	3	26/ 3 = 8.6	77 Superior	"
63.	23	16	23/16 = 1.5	Little	"
64.	31	16	31/16 = 1.94	Good	"
65.	32	30	32/30 = 1.07	Little	"
66.	32	26	32/26 = 1.2	Little	"
67.	32	26	32/26 = 1.2	Little	"
68.	28	6	28/ 6 = 4.6	Excellent	"
69.	27	1	27/ 1 = 27	Very superior	"
70.	29	7	29/ 7 = 4.14	Excellent	"
71.	29	13	29/13 = 2.23	Good	"
72.	32	23	32/23 = 1.4	Some	"
73.	32	24	32/24 = 1.3	Little	"
74.	32	29	32/29 = 1.10	Little	"
75.	32	27	32/27 = 1.2	Little	"
76.	32	19	32/19 = 1.7	Some	"
77.	32	25	32/25 = 1.3	Little	"
78.	29	8	29/ 8 = 3.62	Good	"
79.	32	32	32/32 = 1	No	"
80.	31	19	31/19 = 1.6	Some	"
81.	30	18	30/18 = 1.6	Some	"
82.	22	8	22/ 8 = 2.75	Good	"
83.	32	29	32/29 = 1.10	Little	"
84.	32	28	32/28 = 1.14	Little	"
85.	31	27	31/27 = 1.14	Little	"
86.	29	10	29/10 = 2.9	Good	"
87.	30	28	30/28 = 1.07	Little	"
88.	30	27	30/27 = 1.1	Little	"
89.	32	26	32/26 = 1.2	Little	"
90.	27	10	27/10 = 2.7	Good	"

Yes #38.

Yes #39.

Yes #40.

Yes #41.

Yes #42.

Yes #43.

Yes #44.

Yes #45.

Yes #46.

Yes #47.

Yes #48.

Yes #49.

Yes #50.

Yes #51.

Yes #52.

Yes #53.

VALIDATION OF TEST #2 -- Continued.

No.	Upper group	Lower group	Ratio of Discriminating Value	Remarks	Used in Validated Test
				discriminating value	
91.	18	20	18/20 = .9	Negative " "	Yes #54.
92.	30	18	30/18 = 1.6	Some " "	
93.	24	11	24/11 = 2.2	Good " "	
94.	29	26	29/26 = 1.11	Little " "	
95.	30	16	30/16 = 1.875	Fairly good " "	
96.	32	29	32/29 = 1.10	Little " "	Yes #55.
97.	31	22	31/22 = 1.4	Some " "	
98.	32	31	32/31 = 1.03	Little " "	
99.	32	30	32/30 = 1.07	Little " "	
100.	29	11	29/11 = 2.64	Good " "	

VALIDATION OF TEST #3

No.	Upper group	Lower group	Ratio of Discriminating Value	Remarks	Used in Validated Test
1.	31	22	32/22 = 1.4	Some discriminating value	
2.	26	17	26/17 = 1.5	Some " "	
3.	23	14	23/14 = 1.6	Some " "	
4.	26	15	26/15 = 1.6	Some " "	
5.	20	18	20/18 = 1.1	Little " "	
6.	21	12	21/12 = 1.75	Some " "	
7.	31	31	31/31 = 1	No " "	
8.	30	27	30/27 = 1.1	Little " "	
9.	31	28	31/28 = 1.11	Little " "	
10.	29	17	29/17 = 1.7	Some " "	
11.	30	24	30/24 = 1.25	Little " "	
12.	31	30	31/30 = 1.03	Little " "	
13.	28	27	28/27 = 1.04	Little " "	
14.	31	30	31/30 = 1.03	Little " "	
15.	26	14	26/14 = 1.857	Fairly good " "	
16.	31	19	31/19 = 1.6	Some " "	
17.	30	7	30/7 = 4.3	Excellent " "	Yes #56.
18.	31	23	31/23 = 1.4	Some " "	
19.	31	21	31/21 = 1.5	Some " "	
20.	27	17	27/17 = 1.6	Some " "	
21.	31	24	31/24 = 1.3	Little " "	
22.	31	30	31/30 = 1.03	Little " "	
23.	31	21	31/21 = 1.5	Some " "	
24.	30	16	30/16 = 1.875	Fairly good " "	Yes #57.
25.	31	20	31/20 = 1.55	Some " "	
26.	22	5	22/5 = 4.4	Excellent " "	Yes #58.
27.	28	14	28/14 = 2	Good " "	Yes #59.
28.	30	12	30/12 = 2.5	Good " "	Yes #60.
29.	30	24	30/24 = 1.25	Little " "	
30.	31	30	31/30 = 1.03	Little " "	
31.	31	29	31/29 = 1.07	Little " "	
32.	31	25	31/25 = 1.24	Little " "	
33.	31	30	31/30 = 1.03	Little " "	
34.	31	26	31/26 = 1.2	Little " "	
35.	31	28	31/28 = 1.1	Little " "	
36.	29	11	29/11 = 2.63	Good " "	Yes #61.
37.	26	8	26/8 = 3.25	Good " "	Yes #62.
38.	31	28	31/28 = 1.1	Little " "	
39.	25	11	25/11 = 2.3	Good " "	Yes #63.
40.	30	30	30/30 = 1	No " "	
41.	21	7	21/7 = 3	Good " "	Yes #64.
42.	30	18	30/18 = 1.6	Some " "	
43.	31	18	31/18 = 1.7	Some " "	
44.	31	31	31/31 = 1	No " "	

VALIDATION OF TEST #3 -- Continued.

No.	Upper group	Lower group	Ratio of Discriminating Value	Remarks	Used in Validated Test
45.	19	10	19/10 = 1.9	Good discriminating value	Yes #65.
46.	24	5	24/ 5 = 4.8	Excellent "	Yes #66.
47.	28	16	28/16 = 1.8	Fairly good"	
48.	27	17	27/17 = 1.6	Some "	
49.	24	20	24/20 = 1.2	Little "	
50.	31	28	31/28 = 1.1	Little "	
51.	31	30	31/30 = 1.03	Little "	
52.	31	31	31/31 = 1	No "	
53.	30	26	30/26 = 1.16	Little "	
54.	29	20	29/20 = 1.45	Some "	
55.	31	24	31/24 = 1.3	Little "	
56.	26	9	26/ 9 = 2.9	Good "	Yes #67.
57.	31	27	31/27 = 1.14	Little "	
58.	31	21	31/21 = 1.5	Some "	
59.	30	22	30/22 = 1.4	Some "	
60.	31	22	31/22 = 1.4	Some "	
61.	31	31	31/31 = 1	No "	
62.	31	26	31/26 = 1.2	Little "	
63.	31	28	31/28 = 1.1	Little "	
64.	21	7	21/ 7 = 3	Good "	Yes #68.
65.	28	18	28/18 = 1.6	Some "	
66.	26	16	26/16 = 1.6	Some "	
67.	26	16	26/16 = 1.6	Some "	
68.	30	25	30/25 = 1.2	Little "	
69.	31	30	31/30 = 1.02	Little "	
70.	28	17	28/17 = 1.6	Some "	
71.	27	12	27/12 = 2.25	Good "	Yes #69.
72.	31	10	31/10 = 3.1	Good "	Yes #70.
73.	28	12	28/12 = 2.3	Good "	Yes #71.
74.	27	9	27/ 9 = 3	Good "	Yes #72.
75.	31	24	31/24 = 1.3	Little "	
76.	30	20	30/20 = 1.5	Some "	
77.	30	26	30/26 = 1.16	Little "	
78.	31	24	31/24 = 1.3	Little "	
79.	30	24	30/24 = 1.25	Little "	
80.	30	28	30/28 = 1.07	Little "	
81.	31	27	31/27 = 1.15	Little "	
82.	24	8	24/ 8 = 3	Good "	Yes #73.
83.	22	15	22/15 = 1.5	Some "	
84.	31	29	31/29 = 1.07	Little "	
85.	31	27	31/27 = 1.25	Little "	
86.	30	22	30/22 = 1.4	Some "	
87.	26	7	26/ 7 = 3.71	Excellent "	Yes #74.
88.	31	24	31/24 = 1.3	Little "	
89.	25	19	25/19 = 1.3	Little "	



VALIDATION OF TEST #3 -- Continued.

No.	Upper group	Lower group	Ratio of Discriminating Value	Remarks	Used in Validated Test
90.	28	23	$28/23 = 1.2$	Little discriminating value	
91.	23	5	$23/5 = 4.6$	Excellent	Yes #75.
92.	15	8	$15/8 = 1.875$	Fairly good	Yes #76.
93.	6	6	$6/6 = 1$	No	
94.	26	8	$26/8 = 3.25$	Good	Yes #77.
95.	15	4	$15/4 = 3.75$	Excellent	Yes #78.
96.	31	23	$31/23 = 1.4$	Some	
97.	29	20	$29/20 = 1.45$	Some	
98.	28	6	$28/6 = 4.6$	Excellent	Yes #79.
99.	12	0	$12/0 =$ (or 12)	Superior	Yes #80.
100.	2	0	$2/0 =$ (or 2)	Good	No *

\* The writer decided, in spite of the 2 validation, not to use this concept "an elder nation" for two reasons: first--it is a purely factual question; second--it had not previously been validated as had all other questions.

VALIDATION OF TEST #4.

No.	Upper group	Lower group	Ratio of Discriminating Value	Remarks	Used in Validated Test
1.	29	19	29/19 = 1.5	Some discriminating value	
2.	28	24	28/24 = 1.2	Little	
3.	25	12	25/12 = 2.1	Good	Yes #81.
4.	17	12	17/12 = 1.42	Some	
5.	26	18	26/18 = 1.5	Some	
6.	29	24	29/24 = 1.2	Little	
7.	29	26	29/26 = 1.1	Little	
8.	29	17	29/17 = 1.7	Some	
9.	25	13	25/13 = 1.923	Good	Yes #82.
10.	29	23	29/23 = 1.3	Little	
11.	26	20	26/20 = 1.3	Little	
12.	29	27	29/27 = 1.1	Little	
13.	28	13	28/13 = 2.15	Good	Yes #83.
14.	28	28	28/28 = 1	No	
15.	29	22	29/22 = 1.3	Little	
16.	29	26	29/26 = 1.1	Little	
17.	27	15	27/15 = 1.8	Fairly good	
18.	29	29	29/29 = 1	No	
19.	19	9	19/9 = 2.1	Good	Yes #84.
20.	29	26	29/26 = 1.1	Little	
21.	28	17	28/17 = 1.7	Some	
22.	22	8	22/8 = 2.75	Good	Yes #85.
23.	29	23	29/23 = 1.3	Little	
24.	29	27	29/27 = 1.1	Little	
25.	27	21	27/21 = 1.3	Little	
26.	23	15	23/15 = 1.5	Some	
27.	28	17	28/17 = 1.7	Some	
28.	28	17	28/17 = 1.7	Some	
29.	29	29	29/29 = 1	No	
30.	29	29	29/29 = 1	No	
31.	29	28	29/28 = .9	Negative	
32.	27	8	27/8 = 3.4	Good	Yes #86.
33.	28	22	28/22 = 1.3	Little	
34.	28	28	28/28 = 1	No	
35.	29	25	29/25 = 1.16	Little	
36.	29	28	29/28 = 1.04	Little	
37.	27	15	27/15 = 1.8	Fairly good	
38.	24	13	24/13 = 1.846	Fairly good	
39.	15	7	15/7 = 2.14	Good	Yes #87.
40.	24	20	24/20 = 1.2	Little	
41.	15	4	15/4 = 3.75	Excellent	Yes #88.
42.	18	9	18/9 = 2	Good	Yes #89.
43.	29	26	29/26 = 1.1	Little	
44.	29	26	29/26 = 1.1	Little	
45.	29	23	29/23 = 1.3	Little	

VALIDATION OF TEST #4 -- Continued

No.	Upper group	Lower group	Ratio of Discriminating Value	Remarks	Used in Validated Test
46.	22	8	22/8 = 2.75	Good discriminating value	Yes #90.
47.	28	16	28/16 = 1.75	Some	"
48.	28	24	28/24 = 1.2	Little	"
49.	29	27	29/27 = 1.1	Little	"
50.	29	26	29/26 = 1.1	Little	"
51.	27	17	27/17 = 1.6	Some	"
52.	29	25	29/25 = 1.2	Little	"
53.	23	3	23/3 = 7.7	Superior	Yes #91.
54.	18	7	18/7 = 2.57	Good	Yes #92.
55.	29	9	29/9 = 3.2	Good	Yes #93.
56.	23	18	23/18 = 1.3	Little	"
57.	28	19	28/19 = 1.5	Some	"
58.	27	14	27/14 = 1.93	Good	Yes #94.
59.	29	27	29/27 = 1.1	Little	"
60.	28	15	28/15 = 1.86	Fairly good	"
61.	26	25	26/25 = 1.04	Little	"
62.	28	18	28/18 = 1.6	Some	"
63.	29	16	29/16 = 1.8	Fairly good	"
64.	24	7	24/7 = 3.43	Good	Yes #95.
65.	5	5	5/5 = 1	No	"
66.	27	9	27/9 = 3	Good	Yes #96.
67.	29	26	29/26 = 1.1	Little	"
68.	25	23	25/23 = 1.1	Little	"
69.	19	10	19/10 = 1.9	Good	Yes #97.
70.	26	15	26/15 = 1.73	Some	"
71.	29	28	29/28 = 1.04	Little	"
72.	13	7	13/7 = 1.857	Fairly good	"
73.	29	26	29/26 = 1.1	Little	"
74.	29	26	29/26 = 1.1	Little	"
75.	29	28	29/28 = 1.04	Little	"
76.	28	22	28/22 = 1.3	Little	"
77.	29	26	29/26 = 1.1	Little	"
78.	26	21	26/21 = 1.2	Little	"
79.	29	22	29/22 = 1.3	Little	"
80.	27	21	27/21 = 1.3	Little	"
81.	13	7	13/7 = 1.857	Fairly good	"
82.	29	18	29/18 = 1.6	Some	"
83.	28	26	28/26 = 1.1	Little	"
84.	28	23	28/23 = 1.2	Little	"
85.	27	20	27/20 = 1.35	Little	"
86.	21	12	21/12 = 1.75	Some	"
87.	28	18	28/18 = 1.6	Some	"

VALIDATION OF TEST #4 -- Continued.

No.	Upper group	Lower group	Ratio of Discriminating Value	Remarks	Used in Validated Test
88.	29	17	$29/17 = 1.7$	Some discriminating value	
89.	26	21	$26/21 = 1.2$	Little " "	
90.	28	27	$28/27 = 1.04$	Little " "	
91.	16	15	$16/15 = 1.07$	Little " "	
92.	23	12	$23/12 = 1.92$	Good " "	Yes #98.
93.	24	13	$24/13 = 1.85$	Fairly good " "	
94.	29	26	$29/26 = 1.1$	Little " "	
95.	23	10	$23/10 = 2.3$	Good " "	Yes #99.
96.	23	23	$23/23 = 1$	No " "	
97.	28	27	$28/27 = 1.04$	Little " "	
98.	29	25	$29/25 = 1.2$	Little " "	
99.	29	27	$29/27 = 1.1$	Little " "	
100.	26	4	$26/4 = 6.5$	Excellent " "	Yes #100.

NOTE. Key Used to Describe Ratio of Discrimination.

.99	or less	=	Negative discrimination.	
1.		=	No	"
1.03	to 1.39	=	Little	"
1.4	to 1.79	=	Some	"
1.80	to 1.89	=	Fairly good	"
1.9	to 3.40	=	Good	"
3.41	to 6.99	=	Excellent	"
7.	to 12.9	=	Superior	"
13	or more	=	Very superior	"

APPENDIX C

INSTRUCTIONS, VALIDATED TEST, AND KEY

Instructions to be read to the class by the Examiner Prior  
to the Administration of the Social Concepts Test

1. The time required for this test is from twenty to forty minutes.
2. The time will be written on the blackboard, but take all the time you require working steadily. When you have completed the test mark on page 1, in the space provided, the number of minutes used. The time element is not important.
3. Do you understand the given examples? (Examiner to explain them)
4. Write the answer to each question in a capital letter (block style) on the line to the right of the question.
5. Please use ink.
6. Answer all questions; do not omit any; guess if you do not know the answer. You should try to make as logical or shrewd a guess as possible. There is no penalty for an incorrect answer as only correct answers are counted.
7. You will notice that the questions are for Grades VI to XI, so if you are in Grade VI, VIII or IX you may find the questions rather difficult but if you are in Grade XI you will find some of them quite easy. Simply do your best.
8. Fill in all lines on the top of page one, especially "occupation of parent" and "two subjects you like best".
9. Your marks will be returned to you.

THE VALIDATED TEST  
CANADIAN SOCIAL STUDY CONCEPTS

For Grades VI to XI

NAME OF STUDENT _____	PRESENT GRADE _____
ADDRESS _____	BOY OR GIRL _____
SCHOOL _____	AGE _____ YEARS + _____ MONTHS
OCCUPATION OF PARENT _____	TIME REQUIRED _____
WHAT TWO SUBJECTS DO YOU LIKE BEST? _____	

- EXAMPLE: 1. What name is given to the land next to the sea? (A)the mountains (B)the valleys (C)the plains (D)the coast. D
2. What official in Canada represents the king of England? (A)the premier (B)the governor-general (C)attorney-general (D)Mr. King. B

INSTRUCTIONS: Attempt all questions or guess at all answers. There is no penalty for a wrong answer. Put the capital letter on the line in the right hand margin as shown in the foregoing examples. Do your best. Your results will be returned to you.

QUESTIONS.

1. What name is given to additions to the constitution? (A)doctrines (B)amendments (C)assemblies (D)declarations. \_\_\_\_\_
2. What term is used in referring to the entire system of courts? (A)legislative (B)administrative (C)supervision (D)judicial. \_\_\_\_\_
3. Which word refers to affairs relating to one's own country? (A)foreign (B)international (C)domestic (D)diplomatic. \_\_\_\_\_
4. What does suffrage mean? (A)to suffer punishment (B)to endure suffocation (C)the right to vote (D)a method of appointment \_\_\_\_\_
5. What happens when the value of money is inflated? (A)it will buy more (B)it is not possible to invest it (C)it can be used to pay international debts (D)it will buy less. \_\_\_\_\_
6. What is the purpose of diplomacy? (A)to carry on affairs within a country (B)to elect governmental officers (C)to conduct relations between countries (D)to increase industrial output. \_\_\_\_\_
7. What does religious tolerance mean? (A)making all people belong to one church (B)believing everything in the Bible (C)believing in science instead of the church (D)allowing people to believe what they will. \_\_\_\_\_
8. What were the people called who wished to do away with slavery? (A) prohibitionists (B)suffragists (C)abolitionists (D)monarchists \_\_\_\_\_
9. What is meant by legislation? (A)the passing of laws (B)the convicting of criminals (C)the collecting of money (D)the enforcing of laws. \_\_\_\_\_
10. What happens when a law is nullified? (A)it is enacted (B)it is ratified (C)it is no longer in force (D)it becomes a decree. \_\_\_\_\_
11. Which word means a stopping of war long enough to discuss peace? (A)disarmament (B)insurrection (C)treaty (D)armistice. \_\_\_\_\_
12. What does a person do when he exploits others? (A)he is a diplomat (B)he charges too much for what he sells (C)he leads a riot (D)he hires others to work for him. \_\_\_\_\_

THE VALIDATED TEST -- Continued.

13. What does "jurisdiction" mean? (A)to obey (B)to refuse loyalty to  
(C)to defend (D)to have power over. \_\_\_\_\_
14. Which of the following may be described as an event? (A)interest  
in education (B)movement toward stricter law enforcement  
(C)development of an industry (D)declaration of war. \_\_\_\_\_
15. What is the money which the government collects for public use  
called? (A)revenue (B)appropriation (C)currency (D)allotment. \_\_\_\_\_
16. Which action closes ports to navigation? (A)naval battle  
(B)embargo (C)civil war (D)aviation. \_\_\_\_\_
17. Which is a citizen-army called out in time of emergency?  
(A)volunteers (B)militia (C)brigade (D)police. \_\_\_\_\_
18. Which political party is opposed to private ownership?  
(A)Anti-Saloon League (B)revolutionist (C)loyalist (D)socialist \_\_\_\_\_
19. What does secession mean? (A)to combine (B)to cooperate  
(C)to withdraw (D)to capture. \_\_\_\_\_
20. Which of the following is a process by which the people may  
express themselves directly on some question? (A)bureaucracy  
(B)paternalism (C)referendum (D)propaganda. \_\_\_\_\_
21. What action is taken on a treaty if those voting approve it?  
(A)it is consumed (B)it is dissolved (C)it is ratified  
(D)it is annexed. \_\_\_\_\_
22. Who are belligerents? (A)the neutral countries (B)the countries  
that are defeated (C)the countries that win (D)the countries that  
are fighting. \_\_\_\_\_
23. Which word means freedom from slavery? (A)pardon (B)agitation  
(C)emancipation (D)exemption. \_\_\_\_\_
24. Who may be impeached? (A)a business man (B)a criminal  
(C)a reporter (D)a President. \_\_\_\_\_
25. Which are called clergy? (A)ministers (B)statesmen (C)governors  
(D)judges. \_\_\_\_\_
26. Which is a way of filling certain public offices? (A)application  
(B)resignation (C)endorsement (D)appointment. \_\_\_\_\_
27. Which word refers to political corruption? (A)graft (B)lynching  
(C)revolt (D)mutiny. \_\_\_\_\_
28. What is a confederacy? (A)a decree (B)a league (C)a treaty  
(D)a petition. \_\_\_\_\_
29. What is repudiated? (A)debts (B)governors (C)mortgages (D)land \_\_\_\_\_
30. What is a caucus for? (A)to elect a candidate (B)to defeat a  
candidate (C)to decide upon a candidate (D)to punish an unwilling  
candidate. \_\_\_\_\_
31. What name is given to the money or goods paid by one country to  
another as settlement for damage done during a war? (A)tariff  
(B)currency (C)reparations (D)loan. \_\_\_\_\_
32. What name is given to the President's term of office? (A)decade  
(B)panic (C)campaign (D)administration. \_\_\_\_\_
33. What is the outer edge of a civilized area called? (A)metropolis  
(B)suburbs (C)frontier (D)seacoast. \_\_\_\_\_
34. When is an injunction most often used? (A)during a strike  
(B)during a battle (C)during an exploration (D)during a voyage \_\_\_\_\_
35. What is the opposite of "urban"? (A)foreign (B)metropolitan  
(C)illiterate (D)rural. \_\_\_\_\_
36. Which is a form of conspiracy against one's country? (A)sedition  
(B)opposition (C)criticism (D)immigration. \_\_\_\_\_

THE VALIDATED TEST -- Continued.

37. What term may be used to describe the peaceful settlement of disagreements? (A)arbitration (B)annexation (C>nullification (D)proclamation.
38. What people abdicate? (A)traitors (B)employees (C)kings (D)slaves.
39. Which is a denomination? (A)Baptist (B)Jew (C)German (D)Negro.
40. What do two nations have to do if they want quite different things but do not want to go to war about their differences? (A)repeal (B)ratify (C)compromise (D)mobilize.
41. What are the dealings of one country with another called? (A)amendments (B)documents (C)restorations (D)negotiations.
42. Toward which is the conservation movement directed? (A)toward political corruption (B)toward business reform (C)toward religious disputes (D)toward preserving forests.
43. How does the navy get money to build a new ship? (A)by annulment (B)by appropriation (C)by acquisition (D)by invention.
44. Which group does the important work at a conflagration? (A)ministers (B)firemen (C)statesmen (D)soldiers.
45. Where are customs officers found? (A)in cities of entry (B)in provincial capitals (C)in sweat shops (D)in the ten largest cities.
46. Which is annexed? (A)Revolt (B)credits (C)land (D)neutrality.
47. What does the government sometimes appoint when it wants some matter investigated? (A)a company (B)an embassy (C)a commission (D)a delegate.
48. What gives the people the "fundamental law" by which they are governed? (A)constitution (B)manifesto (C)assembly (D)parliament.
49. Which is a law? (A)a petition (B)a dispatch (C)a cession (D)a decree.
50. What are the strongest nations in the world often called? (A)empires (B)league of nations (C)powers (D)democrats.
51. What is a veto? (A)a compromise (B)a political party (C)a demand for funds (D)a refusal by the President.
52. Which is a written law? (A)a negotiation (B)a statute (C)a publication (D)a veto.
53. What name is given to the misuse of patronage? (A)civil service (B)spoils system (C)factory system (D)secret service.
54. What is given by a railroad to certain companies so they can send things more cheaply than other companies? (A)resolution (B)rebate (C)ballot (D)competition.
55. Which is a commodity? (A)wheat (B)people (C)scenery (D)education.
56. Which is a war of aggression? (A)lockout (B)an invasion (C)retreat (D)a battle.
57. What does a census usually count? (A)resources (B)capital (C)expenditures (D)people.
58. Which term may refer to a division within a department of the government? (A)bureau (B)court (C)congress (D)cabinet.
59. What is a plan for a series of battles called? (A)siege (B)navy (C)campaign (D)expansion.
60. When a government tries to improve conditions, what is its policy called? (A)referendum (B)initiative (C)reform (D)campaign.
61. What name is given to the money used for financing industry? (A)tax (B)treasury (C)regime (D)capital.



THE VALIDATED TEST -- Continued.

62. What is money paid out by the government called? (A) expenditures (B) taxes (C) tariffs (D) assessments.
63. What is the money called which the loser of a war pays as damages to the winner? (A) loan (B) appropriation (C) mortgage (D) indemnity.
64. What is a political platform? (A) a list of candidates (B) a statement of principles (C) a religious creed (D) a political slogan.
65. Which are members of the House of Commons? (A) delegates (B) senators (C) mayors (D) representatives.
66. Which word is used to describe some important problem that needs to be settled? (A) an issue (B) a decision (C) an edict (D) a sanction.
67. Which are contraband during war? (A) houses (B) guns (C) battles (D) islands.
68. By whom are examinations held for the filling of many positions in the government? (A) party politics (B) public opinion (C) League of Nations (D) civil service.
69. Which word indicates the government's attitude on some important question? (A) policy (B) issue (C) patronage (D) crisis.
70. What exists when one group of people is unfair and cruel to another group? (A) independence (B) tolerance (C) treason (D) oppression.
71. For what have people been persecuted by the church? (A) migration (B) war (C) heresy (D) contraband.
72. In United States which party is at present opposed to the Republicans? (A) Democratic (B) Federalist (C) Liberal (D) Abolitionist.
73. Which word means the constituted authorities of a nation? (A) the banks (B) the president (C) the government (D) the supreme court.
74. The whole series of developments connected with the change from hand labor to machine production is known as: (A) mass production (B) large scale wage system (C) the industrial revolution (D) trade unionism (E) mechanical evolution.
75. A government in which the king's powers are defined or limited by fundamental laws is called: (A) an absolute monarchy (B) a constitutional monarchy (C) a dual monarchy (D) an empire (E) a dictatorship.
76. A country like Japan, where the population is largely of the same race, has the same general customs and traditions, and speaks the same language, is said to be: (A) heterogeneous (B) ingenious (C) reactionary (D) versatile (E) homogeneous.
77. A man who is strongly opposed to war is called: (A) militarist (B) an aggressor (C) a humanist (D) a pacifist (E) an ambassador.
78. A coup d'etat is: (A) a discovery of vast mineral resources (B) the exclusive publication of astounding news (C) the sudden overthrow of the existing form of government (D) a slump in the French stock market (E) a corner on the wheat market.
79. The right to vote is called: (A) election (B) civic duty (C) license (D) ballot (E) franchise.
80. The father of modern socialism was (A) Metternich (B) Rousseau (C) Adam Smith (D) Karl Marx (E) Louis Blanc.
81. Who makes laws for the city? (A) the council (B) the judges and the courts (C) the mayor and a special committee.

THE VALIDATED TEST -- Continued.

82. What is graft? (A) money stolen or received dishonestly (B) money used to pay officers with (C) money used to pay for city parks and boulevards.
83. What is a consumer? (A) a person who manufactures goods of any kind (B) a person who uses goods of any kind (C) a person who stores goods of any kind.
84. What is a postal savings bank? (A) a post-office department which will send money for you through the mail (B) a post-office department where you can leave money for safe keeping (C) a post-office department which is just like a regular bank.
85. What is a speculator? (A) a man who buys only the best and safest stocks and bonds (B) a merchant who shares the profits with his customers (C) a man who tries to make much money quickly by buying and selling.
86. What is an urban population? (A) a population living in the country (B) a population living in the cities (C) a population living in a foreign country.
87. Why do employers wish many immigrants to come to America? (A) because this makes wages lower (B) because the immigrants are skilful workers (C) because they are easy to manage.
88. What is a felony? (A) a crime which is very serious (B) a crime which is not very serious (C) a crime for which you are fined but not put in jail.
89. Are most criminals well educated or not? (A) most of them are educated but find it easier to steal than to work (B) most of them are uneducated and do not know any better (C) most of them are well educated and use their brains to plan crimes.
90. What is a subpoena? (A) an order for a man's arrest when he is guilty (B) an order to appear in court at a certain time (C) an order freeing a man from jail when he is not guilty.
91. What is a ballot? (A) a piece of paper on which to vote (B) a committee which counts votes (C) a place where voting is done.
92. What is a political platform? (A) the stand from which the speakers make their speeches (B) the statement of what the party believes in (C) a list of men who are running for office.
93. What is a political machine? (A) an automobile used to get voters to the voting place (B) a group of men who run political affairs to suit themselves (C) a box into which votes are put to be counted.
94. What is a primary election? (A) the very first election of the year (B) an election to select candidates for a later election (C) an election which decided important things.
95. What is an injunction? (A) a court order making people do, or stop doing a certain thing (B) a place where several railroads come together (C) a breakdown of machinery which stops work in a factory.
96. What is a boycott? (A) a form of taxation used in foreign countries (B) something like a reform school for bad boys (C) a refusal to do business with certain people.
97. Which is correct? (A) Transportation by water costs more than transportation by railroad (B) Transportation by water costs less than transportation by railroad (C) Transportation by water costs just the same as by railroad.

THE VALIDATED TEST -- Continued.

98. Eli Whitney is noted for his invention of the (A)spinning jenny (B)cotton gin (C)telegraph.
99. Cornwallis surrendered at: (A)Valley Forge (B)Yorktown (C)Gettysburg.
100. What is a dynasty? (A)as a ruling family (B)a league of nations (C)an electrical appliance.

- NOTE: 1. Be sure you have answered all questions.
2. Have you written your name and school on each page?
3. Have you marked in (at top of first page)the time required?

ANSWER KEY TO THE VALIDATED TEST.

PAGE 1

1	B
2	D
3	C
4	C
5	D
6	C
7	D
8	C
9	A
10	C
11	D
12	B
13	D
14	D
15	A
16	B
17	B
18	D
19	C
20	C
21	C
22	D
23	C
24	D
25	A
26	D
27	A
28	B
29	A
30	C
31	D
32	C
33	C

PAGE 2

34	A
35	D
36	A
37	A
38	C
39	A
40	C
41	D
42	D
43	B
44	B
45	A
46	C
47	C
48	A
49	D
50	C
51	D
52	B
53	B
54	B
55	A
56	B
57	B
58	A
59	C
60	C
61	D
62	A
63	D
64	B
65	D
66	A

PAGE 3

67	B
68	D
69	A
70	D
71	C
72	A
73	C
74	C
75	B
76	B
77	D
78	C
79	E
80	D
81	A
82	A
83	B
84	B
85	C
86	B
87	A
88	A
89	B
90	B
91	A
92	B
93	B
94	B
95	A
96	C
97	B
98	B
99	B
100	A

# APPENDIX D

## SIMILAR PUPIL DIFFICULTY ON FOUR PRELIMINARY TESTS

No.	Name	Sex	Class A, B or C	Marks For Four Tests			
				#1	#2	#3	#4
1	D G	Boy	A	94	- 94	- 95	- 96
2	R W	Boy	A	95	- 98	- 96	- 96
3	J F	Boy	A	94	- 93	- 93	- 93
4	V N	Girl	A	86	- 88	- 85	- 84
5	H D	Boy	C	76	- 80	- 76	- 80
6	V B	Girl	B	Ab.	75	- 74	- 72
7	E J	Girl	B	69	- 72	- 69	- 72
8	N C	Girl	B	68	- 69	- 69	- 67
9	J N	Girl	B	Ab.	70	- 71	- 72
10	V P	Girl	A	Ab.	93	- 92	- 88
11	G M	Girl	B	Ab.	Ab.	81	- 79
12	N G	Girl	A	82	- 86	- 86	- 84
13	S H	Girl	A	79	- 83	- 79	- 82
14	J M	Girl	A	85	- 86	- 84	- 80
15	D R	Girl	A	78	- 76	- 76	- 77
16	M R	Girl	A	84	- 90	- 83	- 87
17	M T	Girl	A	70	- 70	- 66	- 70
18	L S	Girl	A	81	- 83	- 83	- 84
19	J B	Boy	A	77	- 76	- 79	- 80
20	G C	Boy	A	89	- 91	- 89	- 90
21	W M	Boy	B	77	- 75	- 78	- 79
22	L I	Boy	A	75	- 73	- 75	- 76

The results shown here were chosen at random to illustrate similarity of marks by any one student. They indicate that although the questions did not all come from the same source, the net result is that the standard of pupil difficulty in each test is almost constant. The differences in marks are very slight and these could be due to the different measures of physical well-being of the student at the various times.

The following page on the other hand, consists of examples of greatest variation in the scores obtained.

APPENDIX D (cont'd)

GREATEST DIFFERENCES IN INDIVIDUAL'S MARKS ON THE FOUR TESTS

No.	Name	Sex	Class A, B or C	Marks For Four Tests			
				#1	#2	#3	#4
1	B M	Boy	B	68	- 79	- 69	- 80
2	J N	Boy	B	66	- 80	- 65	- 78
3	P R	Boy	B	65	- 66	- 59	- 70
4	W G	Boy	B	55	- 66	- 62	- 69
5	R F	Boy	B	62	- 78	- 66	- 67
6	T F	Boy	B	57	- 72	- 63	- 74
7	R S	Boy	A	74	- 82	- 71	- 76
8	K H	Boy	A	79	- 82	- 73	- 82
9	R J	Boy	C	71	- 61	- 62	- 67
10	R A	Boy	C	63	- 88	- 83	- 76
11	T H	Boy	C	67	- 69	- 75	- 79
12	H C	Boy	C	57	- 69	- 56	- 57
13	D G	Girl	A	68	- 78	- 77	- 72
14	H E	Girl	A	62	- 73	- 71	- 72
15	K H	Girl	B	57	- 57	- 49	- 67
16	H C	Girl	B	72	- 84	- 86	- 86
17	C R	Girl	B	Ab.	64	- 69	- 54
18	P S	Girl	B	63	- Ab.	74	- 67
19	N L	Girl	B	68	- Ab.	76	- 64
20	R J	Girl	B	59	- 70	- 61	- 70

These marks were chosen to show the greatest variation in the marks of any one student, and they also indicate that the pupil difficulty of the four preliminary tests varies only slightly.

APPENDIX E

# LAYCOCK MENTAL ABILITY TEST

For Grades 4 to 10

Prepared by S. R. Laycock, University of Saskatchewan,  
Saskatoon, Saskatchewan

SCALE A—FORM 1.

Name.....  
(first name) (last name)

Boy or Girl..... Grade.....

Age last birthday.....Date of birthday.....19.....  
(years) (month) (day) (year)

Name of city, town, village, or nearest post office.....

Name of school.....

Name of teacher.....

Date of this examination.....19.....  
(month) (day) (year)

**Do not turn this page until you are told to do so.**

Test	Score
1	
2	
3	
4	
5	
6	
7	
Total	

M. A. ....  
(years) (months)

C. A. ....  
(years) (months)

I. Q.

## TEST 1—CLASSIFICATION

### SAMPLES:

1. Chair, piano, violin, drum.
2. Razor, saw, fork, knife.

In each row draw a line under the word that is most unlike the other three.

### DO THEM ALL LIKE THE SAMPLES—

- 
- 
1. plate, saucer, cup, pie.
  2. sword, gun, pen, revolver.
  3. wool, gold, copper, silver.
  4. needle, dish, thread, thimble.
  5. car, aeroplane, barn, train.
  6. speak, say, tell, think.
  7. south, north, eastern, west.
  8. strawberry, peach, apple, pear.
  9. sheet, pillow, coverlet, blanket.
  10. butter, milk, tea, coffee.
  11. length, width, height, area.
  12. basket, trunk, suitcase, clubbag.
  13. permit, let, allow, deny.
  14. crooked, straight, bent, misshapen.
  15. wells, cellars, dungeons, mounds.
  16. one, second, third, fourth.
  17. Tom, Jim, Mary, Arthur.
  18. destroy, make, crush, break.
  19. good, run, happy, bad.
  20. enormous, huge, tiny, gigantic.
  21. postpone, hasten, delay, wait.
  22. never, ever, soon, here.
  23. 7, 5, 4, 9.
  24. want, have, wish, expect.
  25. hail, sleet, snow, rain.
  26. pitfall, covert, sanctuary, refuge.
  27. efface, erase, commemorate, obliterate.
  28. disgusting, repulsive, loathsome, hateful.
  29. appease, reconcile, mollify, assuage.
  30. disfavor, disapprobation, condemnation, dishonor.



## TEST 2—ANALOGIES

### SAMPLES:

1. Day is to night as yes is to—perhaps, no, maybe, if.
2. Ship is to ocean as automobile is to—land, desert, forest, lake.

---

### DO THEM ALL LIKE THE SAMPLES—

---

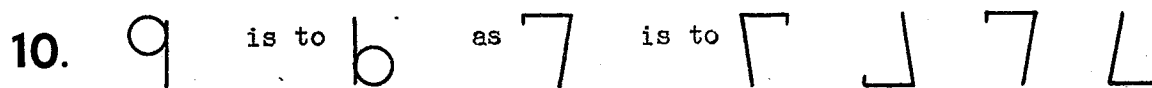
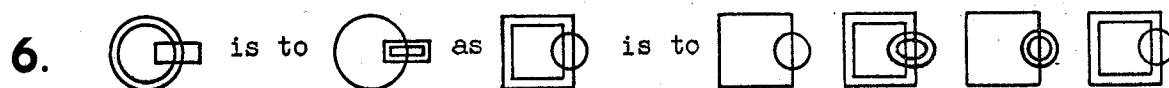
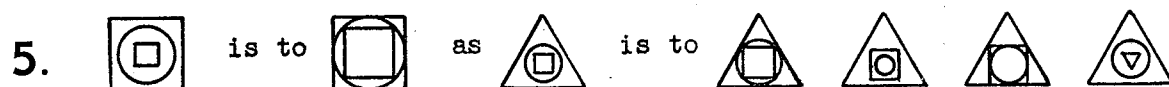
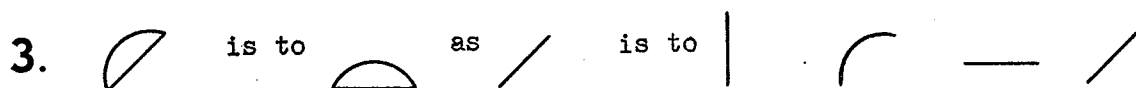
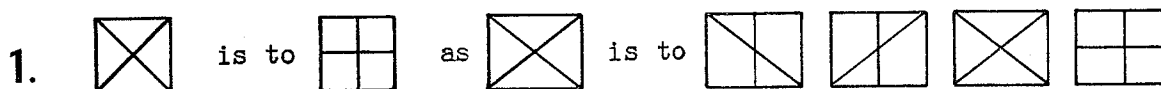
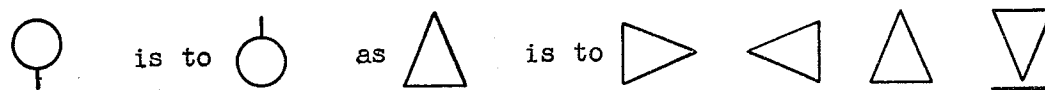
1. Dog is to pup as cat is to—mouse, rat, dog, kitten.
2. Sheep are to flock as cattle are to—herd, pack, bunch, flock.
3. Head is to hat as foot is to—toe, hair, shoe, knee.
4. Dry is to wet as heavy is to—light, hard, soft, firm.
5. Handle is to hammer as knob is to—lock, key, door, brass.
6. Sugar is to pound as milk is to—cream, quart, sweet, barrel.
7. Table is to furniture as apple is to—fruit, cherry, seed, leaf.
8. Wash is to face as sweep is to—broom, nail, floor, straw.
9. Book is to pages as forest is to—wood, trees, leaves, rabbits.
10. Chat is to flat as must is to—how, cow, shop, dust.
11. Eye is to blind as ear is to—hear, deaf, wax, hearing.
12. Man is to blood as trees are to—leaves, branches, sap, food.
13. Die is to dead as finish is to—finishing, finishes, will finish, finished.
14. 8 is to 64 as 9 is to—54, 81, 90, 45.
15. Picture is to painter as book is to—author, artist, school, library.
16. Neck is to collar as wrist is to—hand, cuff, coat, elbow.
17. Peach is to pit as apple is to—peeling, red, tree, seed.
18. Fish is to trout as bird is to—sing, nest, sparrow, tree.
19. Trial is to judge as meeting is to—rules, speakers, chairman, hall.
20. 3 is to 12 as 12 is to—24, 36, 60, 48.
21. Promise is to break as secret is to—betray, keep, guess, trust.
22. Lake is to shore as plate is to—horizon, beach, rim, ford.
23. Doctor is to patient as lawyer is to—judge, trial, prisoner, client.
24. Honesty is to virtue as stealing is to—vice, lying, criminal, trial.
25. H is to C as Q is to—P, M, L, N.
26. Monday is to Saturday as Friday is to—  
Tuesday, Sunday, Wednesday, Thursday.
27. Success is to ambition as failure is to—loss, defeat, energy, laziness.
28. Discover is to invent as exist is to—find, create, know, remove.
29. Point is to line as line is to—surface, curve, dot, solid.
30. Evolution is to revolution as crawl is to—baby, stand, run, creep.

# TEST 3—ANALOGIES—DRAWINGS

## DIRECTIONS:

This test is the same as Test 2, except that there are drawings instead of words. Underline the one of the last four drawings which is the correct one. Do them all like the sample.

## SAMPLE:



## TEST 4—OPPOSITES

### SAMPLES:

1. Long is most nearly the opposite of—big, short, high, thin.
2. Hot is most nearly the opposite of—heat, funny, cold, wet.

### DIRECTIONS:

In each of the items of this test draw a line under the word that is most nearly the opposite of the first word in the sentence.

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### DO THEM ALL LIKE THE SAMPLES—

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1. Fat is most nearly the opposite of—tall, thin, big, high.
2. Play is most nearly the opposite of—fun, time, games, work.
3. Before is most nearly the opposite of—now, after, tomorrow, early.
4. Give is most nearly the opposite of—take, lend, send, hand over.
5. Many is most nearly the opposite of—some, few, several, all.
6. Near is most nearly the opposite of—close, adjacent, distant, nigh.
7. Northeast is most nearly the opposite of—  
southwest, northwest, southeast, northeast.
8. Never is most nearly the opposite of—where, quickly, always, here.
9. Proud is most nearly the opposite of—lofty, humble, haughty, disdainful.
10. Abrupt is most nearly the opposite of—sudden, gradual, steep, violent.
11. A keeper is most nearly the opposite of—a jailer, a guard, a warden, a prisoner.
12. Witty is most nearly the opposite of—smart, humorous, dull, jocular.
13. Liberate is most nearly the opposite of—set free, restrain, let loose, untie.
14. Ancient is most nearly the opposite of—old, antique, recent, venerable.
15. Abuse is most nearly the opposite of—misuse, ill-treat, deceive, treat kindly.
16. Assent is most nearly the opposite of—give, protest, yield, agree.
17. Top is most nearly the opposite of—base, tip, crest, peak.
18. To boom is most nearly the opposite of—to peal, to clang, to tinkle, to roar.
19. Labor is most nearly the opposite of—work, repose, toil, exertion.
20. To inform is most nearly the opposite of—  
to conceal, to tell, to acquaint, to enlighten.
21. Oppose is most nearly the opposite of—hinder, resist, withstand, co-operate.
22. Vertical is most nearly the opposite of—  
upright, perpendicular, horizontal, erect.
23. Piety is most nearly the opposite of—  
sanctimony, devotion, consecration, hypocrisy.
24. Commendation is most nearly the opposite of—  
approbation, disparagement, appreciation, eulogy.
25. Perspicuity is most nearly the opposite of—  
explicitness, lucidness, intelligibility, obscurity.
26. However is most nearly the opposite of—  
moreover, nevertheless, whether, even.
27. Repudiation is most nearly the opposite of—  
retraction, avowal, prohibition, publication.
28. Unless is most nearly the opposite of—and, therefore, if, also.

## TEST 5—INFERENCES

### DIRECTIONS:

Underline the word that correctly answers the question as shown in the samples.

### SAMPLES:

1. John's mother is my aunt.  
What relation is John to me? Brother, cousin, uncle, son.
2. I am taller than Mary, and Mary is taller than Jane.  
Who is the tallest? Jane, Mary, I, no one.

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### DO THEM ALL LIKE THE SAMPLES—

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1. A farmer grows less wheat than oats and more barley than oats.  
Which does he grow the most of? Barley, none, wheat, oats.
2. If Jim's father is Tom's uncle, what relation is Jim to Tom?  
Brother, cousin, uncle, grandfather.
3. Bill lives farther from the school than John who is not so near as Dave. Tom lives just the same distance away as John. Who lives nearest the school?  
Bill, John, Tom, Dave.
4. Bill's father gave him a quarter. He spent 12 cents for gum, 10 cents for candy, and then his uncle gave him 15 cents. How much money did he have then? 17 cents, 20 cents, 35 cents, 18 cents.
5. I am nine years old. My oldest brother is three years less than twice as old as I. How old is he? 18, 17, 15, 16.
6. The Commonwealth Flour Company offered prizes for the first twenty boys who could find all the letters of their first names in "Commonwealth Flour." Which one of these boys could get the prize? Charles, Walter, Thomas, Harold.
7. Helen is taller than May who is taller than Margaret. Dorothy is taller than Helen. Who is the shortest? Margaret, May, Helen, Dorothy.
8. Jean is twenty years younger than her mother and her mother is just five times as old as Jean. How old is Jean? 10 years, 5 years, 6 years, 8 years.
9. Bill's watch is eight minutes slower than Harry's and Harry's is 3 minutes faster than the town clock across from the school. The town clock is 7 minutes faster than the school clock. Bill arrives at the school at exactly nine o'clock by his own watch. Is he—  
2 minutes late, 10 minutes late, 2 minutes early, 5 minutes early.
10. Three years after John is twice as old as he is now he will be 21 and be able to vote. How old is he now? 9, 8, 10, 12.
11. How many minutes to ten is it if thirty minutes ago it was twice as many minutes past nine? Twenty, fifteen, five, ten.
12. Harry Smith and George Brown are my first cousins but they are not related to each other. My mother was Miss Brown before she was married. My father had no brothers. Harry's mother's name before she was married was Bell. What is most likely to be my name? Brown, Smith, Bell, none of these.

# TEST 6—NUMBER SERIES

## SAMPLES:

(1)	5,	10,	15,	20,	25,	30,	<u>35,</u>	<u>40.</u>
(2)	30,	28,	26,	24,	22,	20,	<u>18,</u>	<u>16.</u>
(3)	10,	10,	9,	9,	8,	8,	<u>7,</u>	<u>7.</u>
(4)	4,	5,	7,	10,	14,	19,	<u>25,</u>	<u>32.</u>

## DIRECTIONS:

Try to find out how the numbers in each row are made up and then write on the blank lines at the end of each row the two numbers that should come next as shown in the samples.

## DO THEM ALL LIKE THE SAMPLES—

(1)	3,	6,	9,	12,	15,	18,	—,	—.
(2)	20,	18,	16,	14,	12,	10,	—,	—.
(3)	57,	60,	63,	66,	69,	72,	—,	—.
(4)	40,	35,	30,	25,	20,	15,	—,	—.
(5)	56,	49,	42,	35,	28,	21,	—,	—.
(6)	88,	77,	66,	55,	44,	33,	—,	—.
(7)	30,	45,	60,	75,	90,	105,	—,	—.
(8)	70,	9,	60,	8,	50,	7,	—,	—.
(9)	1,	7,	2,	7,	3,	7,	—,	—.
(10)	6,	6,	12,	12,	18,	18,	—,	—.
(11)	3,	5,	4,	6,	5,	7,	—,	—.
(12)	16,	16,	13,	13,	10,	10,	—,	—.
(13)	9,	8,	9,	7,	9,	6,	—,	—.
(14)	20,	1,	16,	1,	12,	1,	—,	—.
(15)	27,	4,	22,	4,	17,	4,	—,	—.
(16)	2,	4,	3,	6,	4,	8,	—,	—.
(17)	8,	9,	11,	14,	18,	23,	—,	—.
(18)	3,	6,	12,	24,	48,	96,	—,	—.
(19)	65,	65,	50,	50,	35,	35,	—,	—.
(20)	2,	4,	8,	16,	32,	64,	—,	—.
(21)	21,	17,	20,	16,	19,	15,	—,	—.
(22)	1,	2,	5,	6,	9,	10,	—,	—.
(23)	17,	2,	19,	3,	22,	4,	—,	—.
(24)	16,	8,	4,	2,	1,	$\frac{1}{2}$ ,	—,	—.
(25)	81,	27,	9,	3,	1,	$\frac{1}{3}$ ,	—,	—.
(26)	1,	2,	2,	4,	4,	8,	—,	—.
(27)	2,	4,	3,	9,	4,	16,	—,	—.
(28)	21,	22,	20,	21,	19,	20,	—,	—.
(29)	1,	3,	7,	15,	31,	63,	—,	—.
(30)	2,	5,	3,	7,	4,	9,	—,	—.

# TEST 7—COMPLETION

## DIRECTIONS:

Draw a line under the word that best completes the sentence as shown in the samples.

## SAMPLES:

1. Heat turns ice into—ink, water, beer, cream.
2. When her mother would not let her go to the party, Marie burst into—tears, shouts, song, whispers.

## DO THEM ALL LIKE THE SAMPLES—

- 
- 
1. The boy could not reach the top shelf because he was too—tall, short, big, old.
  2. He went into the factory to find the—workmen, soldiers, farmer, merchants.
  3. Tom wanted to go to the show but was not—sent, permitted, gone, arrived.
  4. Although alone in the house, she did not feel—tired, well, sick, lonesome.
  5. She was late for the office so she walked—quickly, slowly, quietly, softly.
  6. He went to visit his friend, because he knew he would be—tired, welcome, sick, late.
  7. Mrs. Smith believed the report at once without stopping to—impede, eat, investigate, run.
  8. Because the shadows were beginning to lengthen he thought it was near—noon, evening, midnight, morning.
  9. People who have plenty of money may be—unhappy, poor, penniless, impoverished.
  10. Henry felt that his friend was making a mistake but he did not want to—suspect, interfere, pay, talk.
  11. She knew that Mrs. Brown was not her friend because she was so—affectionate, kind, gentle, hostile.
  12. The king was distrusted because he was—suspicious, good, treacherous, wise.
  13. People who seldom laugh are usually called—solemn, gay, wise, noisy.
  14. The letter was written so badly that it was not—good, pleasant, legible, easy.
  15. When people eat or drink too much they are not—temperate, sick, tired, happy.
  16. Since the line was neither perpendicular nor horizontal, it probably was—crooked, oblique, curved, long.
  17. His car crashed so violently that his death was—instantaneous, lingering, uncertain, remote.
  18. The wife of the criminal begged for his—death, condemnation, conviction, acquittal.
  19. People who are sorry when they have done wrong are said to be—relentless, forgiving, penitent, joyous.
  20. He was so excited that he spoke with much—calm, vehemence, restraint, composure.
  21. Dave worked hard to win his father's—approbation, censure, condemnation, reproof.
  22. An alleged fact needs—verification, disapproval, commendation, condemnation.
  23. The eccentric man is usually considered to be—social, modest, odd, happy.
  24. Since the letter he received was not signed, it was—scandalous, anonymous, disgusting, illegible.
  25. As the decision was tentative, it was not—good, final, just, changeable.
  26. A sudden change in attitude often lacks—permanence, durability, preservation, conversion.
  27. Intrinsic values are usually—inherent, adventitious, fortuitous, extraneous.
  28. Subservient people are apt to be—aristocratic, conceited, proud, deferential.