



EXAMINER'S MANUAL



CANADIAN TEST CENTRE
EDUCATIONAL ASSESSMENT SERVICES

LEVEL 1

CONTENTS

PART 1 DESCRIPTION	1
Test Content	1
Test Development	1
Standardization	2
Practice Test	2
Support Publications	3
PART 2 PREPARATION	4
Guidelines for the Examiner	4
Guidelines for the Proctors	5
Preparing Students for Testing	5
General Guidelines and Testing Cautions	5
Planning and Scheduling	6
Timing the Tests	6
Test Materials	7
Materials Checklist	7
PART 3 GENERAL DIRECTIONS	9
Guidelines for Ensuring Standard Testing Conditions	9
Practice Test	9
Completing Student Information Grids	10
PART 4 ADMINISTERING THE TESTS	12
Specific Directions	12
Memory Learning Section	13
Sample Memory Items	14
Memory Learning Pairs	15
Test 1 Sequences	16
Test 2 Memory	18
Test 3 Analogies	20
Test 4 Verbal Reasoning	22
PART 5 PROCESSING COMPLETED TESTS	25
Hand-Scored Tests	25
Machine-Scored Tests	25
Table 1 Suggested Testing Schedule for Level 1	8
Figure 1 Student Information Grid	11

Part 1

Description

The Canadian Test of Cognitive Skills

(*Canadian TCS*) is comprised of four mental ability tests designed to assess the academic aptitude of students in Grades 2 through 12. Most cognitive abilities cannot be measured directly, but are inferred by assessing behaviours that reflect those abilities. *Canadian TCS* is not intended to measure all aspects of cognitive functioning, nor does it include only those aptitudes and skills that are functions of formal school training. The tests included in *Canadian TCS* are intended to measure selected cognitive abilities of a relatively abstract nature that are important to success in an educational program. Items have been developed to sample abilities such as understanding verbal and nonverbal concepts and comprehending relationships among ideas presented in a variety of forms.

There are five levels of *Canadian TCS*. Each test booklet is identified by its level. The test levels are related to grade ranges as follows:

Level 1	Grades 2—3
Level 2	Grades 4—5
Level 3	Grades 6—7
Level 4	Grades 8—9
Level 5	Grades 10—12+

Test Content

Each test level includes four tests. There are 20 items in each test. Brief descriptions of the tests follow.

Test 1, Sequences. This test measures the student's ability to comprehend a rule or principle implicit in a sequence of figures, letters, or numbers. The student must analyze the pattern established in a row of figures, letters, or numbers and then select the answer choice that would continue or complete the sequence.

Test 2, Memory. This test is an auditory-visual task which measures the student's ability to recall previously presented picture pairs. The Memory Test is administered in two parts. The memory learning section, containing 20 picture pairs, is

administered at the beginning of the testing session. After an interval of about 15 minutes, 20 Memory Test items require the student to recall the previously presented picture pairs.

Test 3, Analogies. This test measures the student's ability to discern various types of relationships among picture pairs, and then to infer those relationships to incomplete picture pairs. The analogies items require the student to perceive the nature of a relationship between two pictures, and then, given a third picture, choose a fourth picture that is related to the third picture in the same way that the first two are related.

Test 4, Verbal Reasoning. This test measures the student's ability to solve verbal problems by reasoning deductively, analyzing category attributes, and discerning relationships and patterns. Some of the items require the student to identify essential elements of objects or concepts. Other items require the student to classify according to common attributes. Another item type requires the student to infer relationships between separate but related sets of words. A final item type requires the student to draw logical conclusions from information given in short passages.

Test Development

The Canadian Test of Cognitive Skills

(*Canadian TCS*) is a Canadian adaptation of the *Test of Cognitive Skills, Second Edition (TCS/2)*, published by CTB Macmillan/McGraw-Hill in 1992. The *Canadian TCS* maintains the basic structure of both editions of the TCS, consisting of four tests—Sequences, Analogies, Memory, and Verbal Reasoning.

To ensure a thorough Canadian adaptation, the *Canadian TCS* followed an item selection procedure based on ten years of research on the use of the original TCS in Canada. As a result, *Canadian TCS* items reflect Canadian and not American item difficulties. Also, as with TCS/2, *Canadian TCS* has introduced two important changes to the original TCS item format. First, in the Levels 2 through 5

Memory Test, nonsense words have been used instead of obscure real words. Use of nonsense words makes the Memory Test a better measure of recall ability, eliminating the possibility that some items might be answered correctly through semantic associations independent of exposure to the definitions intended for memorization.

Second, in order to facilitate the administration of the *Canadian TCS* Memory Test for both students and teachers, procedures have been modified to allow incorporation of test components into one test booklet instead of two test booklets used previously.

A staff of professional item writers, all experienced educators, wrote items which went into *Canadian TCS*. To provide a large pool of items for the final test selection, the writers created three times as many items as would be needed. Professional editors carefully reviewed all items and test directions for content and accuracy. In addition, a team of educational and cognitive psychologists was invited to review all items before the Norming Study was conducted. For each item, they examined the nature of the reasoning involved, the appropriateness of the answer choices, and the difficulty level of the items. As a result of their review, items that were not optimum measures of the cognitive abilities being measured were identified and either eliminated or revised.

Vocabulary difficulty was controlled by referring to *Basic Reading Vocabularies*¹ and *The Living Word Vocabulary*². Close adherence to these vocabulary guidelines assured that all words used were appropriate for the target grades at each test level.

During test development, careful attention was given to questions of ethnic, age, and gender bias. All items were reviewed to ensure conformity to sound editorial guidelines as defined in *Guidelines for Bias-Free Publishing*³. In addition, all tryout materials were reviewed by women and men who represent various ethnic groups and who hold responsible positions in the educational community. The reviewers identified items they considered to

reflect possible bias in language, subject matter, or representation of people. Comments and suggestions from the reviewers were carefully considered during the selection of items, and any items that appeared to be biased from a content standpoint were eliminated or revised. Statistical evidence of bias was also included in the item selection criteria.

Standardization

Testing for the standardization of *Canadian TCS* was conducted in the spring of 1992. The tests were administered to a representative Canada-wide sample of over 36,000 students in Grades 2 through 12. The sample was stratified by geographic region (West, Central, East) and community type (large urban, small urban, rural).

Normative data for *Canadian TCS* are provided for grade groups and chronological age groups. The standardization and norming procedures are described in the *Handbook and Technical Bulletin*.

Practice Test

The Practice Test for Level 1 has been designed to acquaint students with the different item formats used in the *Canadian TCS*, the method of marking answers, and the general mechanics of taking tests. Sample items are also included before each test to demonstrate different item types and procedures.

The Practice Test should be administered to all students writing *Canadian TCS* Level 1. The Practice Test should be administered and reviewed at least a day prior to the actual testing session. A copy of the Practice Test Directions is enclosed with your Practice Tests.

¹Albert J. Harris and Milton D. Jacobson, *Basic Reading Vocabularies*, New York: Macmillan Publishing Co., 1982.

²Edgar Dale and Joseph O'Rourke, *The Living Word Vocabulary*, Chicago: World Book—Childcraft International, Inc., 1976.

³*Guidelines for Bias-Free Publishing*, New York: McGraw-Hill Book Company, 1982.

Support Publications

Two publications are available to provide detailed information for coordinating, using, and interpreting *Canadian TCS*.

- The *Canadian TCS Norms Book* provides information for hand-scoring the tests. Also, it presents tables for converting number-correct scores to scale scores from which other normative scores are derived, including the Cognitive Skills Index.
- The *Canadian TCS Handbook and Technical Bulletin* is a guide for coordinating an efficient testing program and interpreting the test results. It provides information about norming and equating procedures and the research studies that support those procedures.

Part 2

Preparation

Canadian TCS was standardized under carefully controlled conditions. To obtain the most valid test results, it is important to simulate the standardization conditions as closely as possible when administering the tests.

Guidelines for the Examiner

Before you administer the tests, become thoroughly familiar with the testing schedule, the test content, and the directions for administration. Study the information and share it with proctors or other individuals who may be helping you with the testing. These guidelines and procedures are suggested to help you plan and conduct the testing sessions.

Before Testing Begins

- Check through the materials, organize them, and be sure that you have all components needed to administer both the Practice Test and the *Canadian TCS*.
- Administer the Practice Test at least one day prior to the actual testing session. Check Practice Tests to make sure students understand directions and are marking answers correctly.
- Read through this *Examiner's Manual*, noting the directions for completing the Student Information Grid, marking answers, and administering the tests.
- Fill in the Student Information Grid for each student. Directions for filling in the grid are found on Page 10 of this manual. Proctors may assist in this task.
- If possible, become familiar with the test content by taking each test and rehearsing its administration. Pay particular attention to the sample items before each test section.
- Try to anticipate difficulties and questions that might arise during testing.

- Have all materials assembled for quick distribution.

At the Beginning of the Testing Session

- Distribute test materials.
- Make sure that the students understand what they are to do before beginning. Allow time for questions.

During the Testing Session

- Follow the specific directions for administering each test. Be precise.
- Monitor student work to be sure that students are marking answers properly. They should mark only one response for each item and should erase completely any unintended response.
- Observe time limits for each test section. If all students have completed a section before the specified working time has elapsed, you may call time and proceed to the next section. Do not allow students to work longer than the specified working time.

After the Testing Session

- When you have completed testing, prepare your test materials for return to your Test Coordinator or CTC Scoring Service. Follow the procedures specified in Part 5 of this manual for collecting materials and processing completed tests.

Guidelines for the Proctors

If possible, proctors or assistants should be used during testing, particularly with large classes. The number of proctors needed also depends upon the maturity and test-taking experience of the students. As a general rule, one examiner and one proctor are sufficient to monitor up to 30 students. One proctor is recommended for each additional 15 students.

These guidelines are suggested to help proctors facilitate the testing process.

Before Testing Begins

- Help prepare the room for testing.
- Assist in completing Student Information Grids.
- Help prepare all necessary materials for distribution.

At the Beginning of the Testing Session

- Help distribute test materials.
- Locate students you will be monitoring.

During the Testing Session

- Make certain that each student is working in the correct section of the test.
- Check that students are marking answers in the correct manner.
- Notify the examiner if a student is having difficulty understanding the task of marking answer choices, or finding the place in the test booklet. The examiner should try to resolve these problems during the Practice Test or on the sample items. After such problems have been resolved and testing has begun, the only assistance given should be in the mechanics of taking the test.
- Do not show or suggest the correct answer to students. If a student asks, "Is this right?" give a neutral response, such as, "You choose the one you think is right and go on."
- Discourage talking or sharing of answers.
- Inform the examiner if any unusual problems arise.

At the End of the Testing Session

- Assist the examiner in collecting test materials.

Preparing Students for Testing

It is important that students anticipate the tests with interest rather than with anxiety. Prepare your students for testing and establish a relaxed atmosphere by conveying the following ideas.

- Indicate that the tests require no special preparation, and that the tests will not affect their school marks.
- Explain that the tests measure thinking and reasoning skills used in everyday experiences.
- Point out that some of the material may be unfamiliar and some items may be more difficult than others; they are not expected to know all of the answers.
- Reassure students that they will be given time to do their best.

General Guidelines and Testing Cautions

Administration Constraints. *Canadian TCS* cannot be administered to mixed-level classrooms. Since each level of *Canadian TCS* involves a unique set of orally administered Memory Learning stimuli, and there is a standardized time period between the presentation of the stimuli and the Memory Test items, simultaneously administering different levels of *Canadian TCS* in one classroom is not feasible.

Coaching. Make sure that all students understand the directions for taking each test. The examiner or proctor may assist the students with mechanical acts such as helping the student find the correct place in the booklet. However, they should not provide assistance that will inadvertently indicate an answer. Remember that this is a test, not a learning activity. Do not indicate the correct response to any item except sample items.

Guessing. Encourage students to attempt all items, even those dealing with content that is unfamiliar. Students should be encouraged to make a careful choice for each item and then go on. Avoid using the term *guessing* as this may encourage random marking.

Random Marking. Students should not mark answers randomly. Random marking indicates that the student has no understanding of the item or is misusing the test. If you determine that a student has marked answers randomly in one of the tests, treat that test as "nonvalid."

"Nonvalid" Tests. A nonvalid test results when a student loses time during a part of the test or marks answers randomly. For example, if time was lost because of illness or some other unavoidable interruption, that particular test is nonvalid. Of course, if a student was given adequate time and tried to participate but was able to answer only a few questions, that test is considered valid.

During administration of the Memory Test, if a student looks back at the Memory Learning Pairs on Pages 4 and 5 in order to correctly answer the memory items, treat the Memory Test as nonvalid for that student.

To ensure that a test is not scored, but reported as a nonvalid test, the examiner should erase all answers or mark a second response for each marked answer in the nonvalid test only.

Problems During Testing. Any test administration may be marred by unforeseen problems that may render an individual or group performance nonvalid. Make a note of any irregularities involving individual students, such as marking multiple responses to test items, marking responses at random, experiencing sudden illness, or having to leave the room. In addition, identify any student with a language difficulty or a severe physical handicap that might in some way affect his or her performance on the test. Also note any unusual interruptions or distractions that affected the entire group. You may make these notations for your own reference when interpreting test results.

Planning and Scheduling

Plan and schedule the testing in a way that will help all students do their best. Here are some points to remember:

- Allow time to administer the Practice Test at least one day before the actual testing session.
- Avoid testing on days just before or after vacations or important school functions.
- Avoid testing just after the students have had strenuous physical activity.

- Schedule the testing so that there will be sufficient time to complete the tests by the end of the session.
- Schedule the Memory Learning Pairs Section and Test 2 Memory in the same test session with an interval of approximately 15 minutes between them.
- Plan a break between Test 2 and Test 3 if students seem restless during the testing. Do not schedule a break at any other time during the testing.
- Eliminate distractions such as bells or telephones.
- Use a DO NOT DISTURB sign on the door of the testing room.

Timing the Tests

Accurate timing of the tests is important to ensure reliability of the results. While *Canadian TCS* is not primarily a speed test, the time limits on some sections may mean that some students will not complete all of the items. The time limits give students ample opportunity to demonstrate the effective range of their abilities, and most students will finish within the times specified.

Time limits for the tests are given in Table 1 on Page 8 of this manual. Please note that time limits pertain to the actual working time for each test section. Begin timing when you are sure that all students understand how to mark their answers, and make sure that all students start the tests at the same time.

For each timed section, space is provided to enter the starting time and then to calculate and enter the stopping time.

Students should begin working when you give the signal to begin. They should continue to work according to the instructions within the test section. They should stop working when they reach a stop sign, or when time is called. Students may go back over any items within a timed test section before time is called. They may not go on to the next test section or back to any previous test section.

Test Materials

Examiner's Manual. This *Examiner's Manual* provides important information about *Canadian TCS* Level 1 test content, directions for administration, and timing. The directions for returning your used and unused test materials are given in Part 5, Processing Completed Tests. A separate *Examiner's Manual* is used for administering *Canadian TCS* Levels 2 through 5.

Practice Tests. The Practice Test should be administered and checked at least one day before the actual testing is scheduled. A copy of the Practice Test Directions is enclosed with your Practice Tests.

Test Booklets. The Level 1 test booklets are administered in machine-scorable format. Students mark their answers directly in the test booklets. All identifying data should be filled in completely and accurately on the outside front cover before testing begins. During testing, be sure that students do not draw, colour, or mark anywhere inside the test booklet. A Scoring Key is available to those who are hand-scoring the test.

Group Information Sheet. A Group Information Sheet is provided for schools using CTC's Scoring Service. The Group Information Sheet should be returned with the completed test materials.

Materials Checklist

It is important to make sure that the following materials are assembled and available before testing.

For each student:

- ☐ Level 1 Practice Test
- ☐ Level 1 Test Booklet
- ☐ No. 2 (or softer) pencil and eraser
- ☐ Scratch paper (for use in Tests 1, 3, and 4 only)

For the examiner:

- ☐ Level 1 *Examiner's Manual*
- ☐ Practice Test Directions
- ☐ Extra copies of the Practice Test
- ☐ Extra test booklets
- ☐ Extra pencils
- ☐ Extra scratch paper
- ☐ DO NOT DISTURB sign
- ☐ Group Information Sheet
- ☐ Watch or clock with second hand

Table 1**Suggested Testing Schedule for Level 1**

Test Unit	Number of Items	Approximate Instruction Time*	Working Time*	Approximate Total Time*
Practice Test	12	—	—	20
Memory Learning Pairs	—	—	—	10**
Test 1 Sequences	20	3	10	13
Test 2 Memory	20	—	—	6**
SUBTOTAL, TESTS 1-2	—	—	—	29
OPTIONAL BREAK				
Test 3 Analogies	20	2	7	9
Test 4 Verbal Reasoning	20	4	10	14
SUBTOTAL, TESTS 3-4	—	—	—	23
TOTAL, TESTS 1-4	80	—	—	52

† NOTE: The Memory Learning Pairs and Test 2 Memory must be administered in the same test session, with an interval of about 15 minutes between the two parts.

* Time in minutes

** Test read by the examiner; therefore, times shown are approximate.

Part 3

General Directions

Guidelines for Ensuring Standard Testing Conditions

As the examiner, your primary responsibility is to lead the group through the testing process; you cannot be expected to monitor the activities of all students. Where possible, have proctors or assistants available to assume that function. We recommend that you plan to have one proctor for the first 30 students and one for each additional 15 students. This will allow you to concentrate on explaining the procedures, reading the directions, and presenting the items.

One way to help students stay attentive to the testing task is to administer the tests at a reasonably steady pace. If the pace is too slow, some students may become inattentive. If all students complete a section before the specified time has elapsed, you may call time and proceed to the next section. At the same time, it is important to maintain an unhurried, nonthreatening atmosphere and to respond to the students' questions and concerns.

As a general rule, directions should be read exactly as they are written. However, if you think a particular word in the directions would not be familiar to the students, you might substitute it with a word they are accustomed to using. The important thing is to be sure that the students understand the task and respond to the items in a purposeful way.

You should administer the Practice Test at least one day before the actual testing session. This will allow time to check each student's performance and to work with students who did not understand the mechanics of taking tests. You are encouraged to repeat the Practice Test or give further explanation for any part of it if additional practice seems necessary. The Practice Test takes about 15-20 minutes to administer.

A copy of the Practice Test Directions is enclosed with your Practice Tests.

Practice Test

The Practice Test, designed to give students experience in the tasks required for taking *Canadian TCS*, is strongly recommended. The Practice Test acquaints students with some of the item formats used in the test, the method of marking answers, and the general mechanics of taking tests.

Completing Student Information Grids

A Student Information Grid is printed on the cover of the Level 1 test booklet. For Grades 2 and 3, complete the grid for each student before testing begins. Proctors may assist in this task. Under special circumstances, Grade 4 students who are assigned the Level 1 test may be able to complete their own grid by following the directions below. However, you will want to check the accuracy of this information.

Figure 1 on Page 11 shows an example of a completed Student Information Grid.

Follow these steps to complete the grid:

- 1 Starting at the left, fill in the row of boxes labelled **FIRST OR GIVEN NAME** and **LAST NAME**. If the student's name has more letters than there are boxes, print only as many letters of the name as there are boxes.
- 2 Each box has a column of circles below it. In the first column, fill in the circle that has the same letter as the first letter of the student's name. Repeat the process for each of the other letters in the student's name. Mark only one circle in each column.
- 3 Print the name of the school in the space labelled **SCHOOL**. Print the name of the teacher in the space labelled **TEACHER**. Print the grade in the space labelled **GRADE**.
- 4 Write the month, day, and last two numerals of the year of the student's birth date in the appropriate spaces, and fill in the corresponding circles below them.
- 5 Fill in the appropriate circle for **FEMALE** or **MALE**.

[illegible]

Part 4

Administering the Tests

Specific Directions

This section contains specific directions for administering the test sections of the *Canadian TCS*. Before the actual testing session begins, be sure you have: (1) administered and checked Practice Tests, making sure each student understands the mechanics of taking the tests, (2) printed each student's name on the front cover of his or her test booklet, and (3) completed the Student Information Grid on the outside cover of each student's test booklet.

At the beginning of the testing session, distribute to each student his or her own copy of the Level 1 Test Booklet and a pencil and an eraser. Check to be sure that students receive their own test booklets.

To ensure reliable results, the directions for the items should be followed exactly. Material to be read aloud to the students is in **bold print** and is preceded by the word "Say." All other information is for the examiner and is not to be read to the students.

Memory Learning Section

It is essential that the Memory Learning Pairs be administered at the beginning of the testing session to allow the appropriate time interval between the Memory Learning Pairs and the Memory Test (Test 2) later in the testing session.

Distribute to each student his or her own copy of the Level 1 Test Booklet. Be sure that each student has a pencil and an eraser.

Say Please make sure that your name is on the front of your test booklet.

When you are sure that each student has his or her own test booklet,

Say Today we are going to take a special kind of test. There will be several different things to do in this test. Before each part of the test, we will go over the directions and practice some items together so that you will know just what to do.

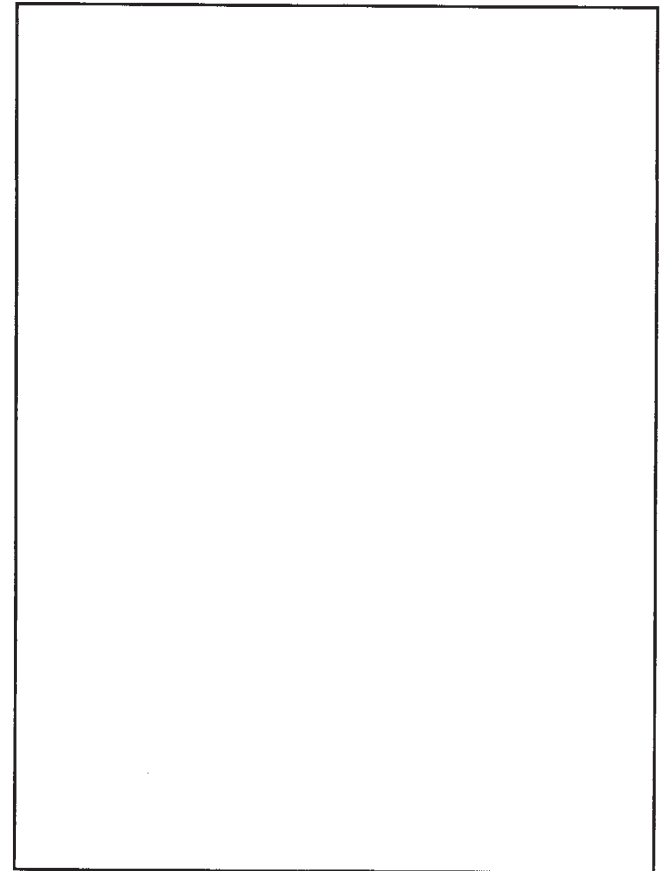
Sample Memory Items

Say In the first part of the test, you will see how well you can remember different picture pairs. First we will look at some practice pairs so that you can understand just what to do. Turn to Page 1 of your test booklet and find Number 1 at the top of the page. Listen carefully as I name the pictures, and try to remember which pictures are together.

Make sure that all students have found Number 1.

ITEM 1

Say Look at Number 1. The chair is with the pencil. Remember that the chair is with the pencil.



ITEM 2

Say Find Number 2. The flag is with the basket. Remember, the flag is with the basket.

ITEM 3

Say Number 3. The fork is with the coat. Remember, the fork is with the coat.

ITEM 4

Say Find Number 4 at the top of the second column.

Make sure that all students have found Number 4.

Say Number 4. The saw is with the acorn. Remember, the saw is with the acorn.

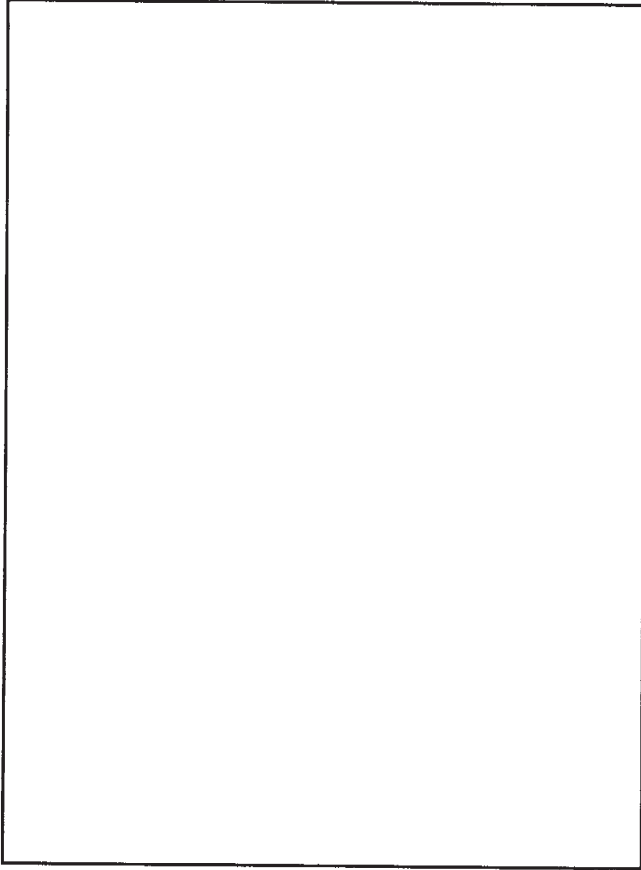
ITEM 5

Say Number 5. The pillow is with the crayon. Remember, the pillow is with the crayon.

Soon we will study some more pictures like these. But now let's see how well you can remember which pictures were together.

Find Memory Sample A on Page 2.

Demonstrate. Make sure that all students have found Memory Sample A on Page 2.



Say Look at the saw. Now look at the other pictures: coat, acorn, crayon, basket, pencil. Try to remember what was with the saw. Fill in the circle under the picture that was with the saw. Be sure to fill in the circle completely and make your mark dark.

Pause to allow students to do Memory Sample A. Be sure that students do not look back at Page 1.

When all students have completed Sample A,

Say You should have filled in the circle under the acorn because the saw was with the acorn.

Make sure that all students have marked the answer correctly.

Say Find Memory Sample B.

Make sure that all students have found Memory Sample B.

SAMPLE B

Say Look at the flag. Now look at the other pictures: pencil, coat, basket, acorn, crayon. Try to remember what was with the flag. Fill in the circle under the picture that was with the flag.

Pause to allow students to do Memory Sample B. Be sure that students do not look back at Page 1. When all students have completed Sample B,

Say You should have filled in the circle under the basket because the flag was with the basket. Do you understand what to do?

Pause for questions. When you are sure that the students understand what to do,

Say Now that we have finished these sample items, we will start the test. We are going to study some more pairs of pictures. I will name the pictures that are together. Listen very carefully because when we finish, you may not look back at the picture pairs. Later in the test I will ask you to try to remember which pictures were together. Listen carefully because this time we will be studying many more pictures, and you will have to remember them for a longer time. Do you understand what you are to do?

Now turn to Page 4 in your test booklet.

Memory Learning Pairs

The administration of the Memory Learning Pairs takes approximately 10 minutes.

Make sure that all students are on Page 4.

Say Look at the pictures as I name them.
Try to remember which pictures are together.
Find Number 1 at the top of the first column.

Make sure that all students have found Number 1.

Say Number 1. The bat is with the ladder.

Find Number 2. The cow is with the tiger.

Number 3. The tree is with the bicycle.

Number 4. The pail is with the cactus.

Number 5. The drum is with the clock.

Find Number 6 at the top of the second column.

Make sure that all students have found Number 6.

Say Number 6. The penguin is with the spider.

Number 7. The doll is with the rocket.

Number 8. The bus is with the hammer.

Number 9. The rock is with the clown.

Number 10. The horse is with the owl.

We will go over these pictures again. Look at Number 1. Listen carefully and try to remember which pictures are together.

Repeat Items 1 through 10. After you have repeated Items 1 through 10,

Say Now find Number 11 at the top of Page 5. Look at the pictures as I name them and try to remember which pictures are together.

Make sure that all students have found Number 11 at the top of Page 5.

Say Number 11. The ribbon is with the faucet.

Number 12. The pants are with the ruler.

Number 13. The goat is with the dinosaur.

Number 14. The blanket is with the necklace.

Number 15. The suitcase is with the pitcher.

Find Number 16 at the top of the second column.

Make sure that all students have found Number 16.

Say Number 16. The piano is with the shovel.

Number 17. The stool is with the hose.

Number 18. The nail is with the towel.

Number 19. The wagon is with the belt.

Number 20. The bee is with the fox.

We will go over these pictures again. Look back at Number 11. Listen carefully and try to remember which pictures are together.

Repeat Items 11 through 20. After you have repeated Items 11 through 20,

Say Try to remember the pictures that were together. After we have finished the next part of the test, I will ask you to remember which pictures were together.

Now turn to Page 6 for Test 1 Sequences.

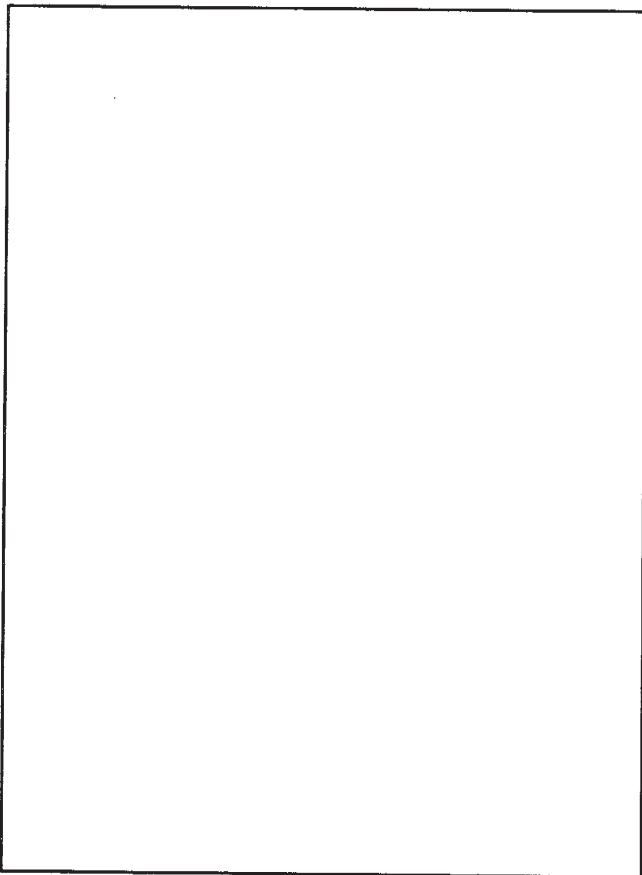
Test 1 Sequences

Make sure that all students are on Page 6.
Test 1 takes approximately 12 minutes.

Say This test will show how well you can recognize a pattern in a series of figures. When you mark an answer, fill in the circle that goes with the answer you choose. Fill in the circle completely and make your mark dark. If you want to change your answer, erase the mark you made and fill in a new circle. Do not make any other marks in your booklet.

Say Find Sample A on Page 6.

Demonstrate. Make sure that all students have found Sample A.



Say Look at the top row of boxes. The boxes in the top row are arranged in a certain order, a pattern. Try to see what the pattern is in this row of boxes. Then look at the four answer choices in the bottom row. Find the one that would come next in the pattern. Fill in the circle that goes with the answer you choose and then stop.

Pause to allow students to do Sample A.

Say You should have filled in the circle under the third answer choice, the box with three shaded parts, because that box would come next in the pattern. The pattern is an empty box, a box with one shaded part, a box with two shaded parts, then a box with three shaded parts.

Make sure that all students have marked the answer correctly. Then,

Say Find Sample B.

Demonstrate. Make sure that all students have found Sample B.

SAMPLE B

Say Look at the first two figures in the top row. They go together in some way. Now look at the third figure, the one that comes after the thin line. Find the answer choice that goes with the third figure the way the first two figures go together. Fill in the circle that goes with the answer you choose and then stop.

Pause to allow students to do Sample B.

Say You should have filled in the circle under the first answer choice, the downward pointing triangle. The downward pointing triangle goes with the downward pointing arrow, just as the upward pointing triangle goes with the upward pointing arrow.

Make sure that all students have marked the answer correctly.

Say Find Sample C.

Demonstrate. Make sure that all students have found Sample C.

SAMPLE C

Say Look at the top row of figures. They are alike in some way. Now look at the four answer choices in the bottom row. Find the answer choice that goes best with the top row of figures. Fill in the circle that goes with the answer you choose and then stop.

Pause to allow students to do Sample C.

Say You should have filled in the circle under the fourth answer choice, the square, because the square is completely shaded, just like the first three figures in the top row.

Make sure that all students have marked the answer correctly. Then,

Say Now you are going to do some more items just as you did these. For each item in this section, see what the pattern is. Then look at each of the answer choices to find the one that would come next in the pattern. There are different kinds of patterns, so if you cannot find an answer choice that fits, look at the top row again and try to think of another pattern.

When you see the arrow at the bottom of a page, go right on to the next page. When you come to the stop sign, you have finished this part of the test. When you finish, you may check your answers in this test section only. Then sit quietly until the others have finished. Do not go on to any other part of the test. Are there any questions?

When you are sure that all students understand the directions,

Say Find Number 1 in the middle of Page 6. You may begin.

Record the starting time on this line: _____

Add 10 minutes, _____ + 10

and record the stopping time on this line: _____

At the stopping time,

Say Stop. This is the end of Test 1. Make sure that all your marks are dark and that you have completely erased any marks that you do not want.

Pause.

Say Now turn to Page 10 for Test 2 Memory.

Test 2 Memory

Make sure that all students are on Page 10. Test 2 takes approximately 6 minutes.

Say This test will show how well you remember the picture pairs that you studied at the beginning of the test session. Don't worry if you can't remember all of the pictures; just do your best and try to remember as many of them as you can. Do not look back in your test booklet.

Number 1. Look at the nail. Now look at the other pictures: towel, ruler, clock, clown, hammer. Try to remember what was with the nail. Mark the circle under the picture that was with the nail. Remember to fill in the circle completely and make your mark dark.

Number 2. Look at the cow. Look at the other pictures: owl, tiger, spider, dinosaur, fox. Mark the picture that was with the cow.

Number 3. Look at the bat. Look at the other pictures: ladder, clown, rocket, towel, cactus. Mark the picture that was with the bat.

Number 4. Find the picture that was with the pants: shovel, ladder, ruler, hose, necklace. Mark the picture that was with the pants.

Number 5. Find the picture that was with the rock: clock, pitcher, rocket, ladder, clown. Mark the picture that was with the rock.

Look at the top of the next page. Find Number 6.

Make sure that all students have found Number 6.

Say Number 6. Find the picture that was with the blanket: clown, necklace, towel, belt, pitcher. Mark the picture that was with the blanket.

Number 7. Find the picture that was with the drum: ruler, bicycle, clock, cactus, rocket. Mark the picture that was with the drum.

Number 8. Find the picture that was with the stool: belt, hammer, bicycle, clown, hose. Mark the picture that was with the stool.

Number 9. Find the picture that was with the penguin: fox, dinosaur, tiger, spider, owl. Mark the picture that was with the penguin.

Number 10. Find the picture that was with the bee: fox, owl, dinosaur, tiger, spider. Mark the picture that was with the bee.

Turn to Page 12. Find Number 11.

Make sure that all students have found Number 11.

Say Number 11. Find the picture that was with the doll: faucet, rocket, hose, cactus, pitcher. Mark the picture that was with the doll.

Number 12. Find the picture that was with the pail: rocket, towel, cactus, hammer, clock. Mark the picture that was with the pail.

Number 13. Find the picture that was with the goat: tiger, spider, fox, owl, dinosaur. Mark the picture that was with the goat.

Number 14. Find the picture that was with the ribbon: necklace, clock, ruler, shovel, faucet. Mark the picture that was with the ribbon.

Number 15. Find the picture that was with the bus: hammer, faucet, belt, pitcher, bicycle. Mark the picture that was with the bus.

Look at the top of the next page. Find Number 16.

Make sure that all students have found Number 16.

Say Look at Number 16. Find the picture that was with the piano: cactus, ladder, shovel, ruler, towel. Mark the picture that was with the piano.

Number 17. Find the picture that was with the suitcase: bicycle, shovel, ladder, pitcher, hose. Mark the picture that was with the suitcase.

Number 18. Find the picture that was with the tree: bicycle, belt, hose, necklace, faucet. Mark the picture that was with the tree.

Number 19. Find the picture that was with the wagon: shovel, necklace, faucet, belt, hammer. Mark the picture that was with the wagon.

Number 20. Find the picture that was with the horse: dinosaur, fox, spider, owl, tiger. Mark the picture that was with the horse.

This is the end of this part of our work. Make sure that all your marks are dark and that you have completely erased any marks that you do not want.

If students seem restless or inattentive, a five- or ten-minute break may be given at this time. If you choose to take a break, have the students close their booklets and leave them on their desks. Do not discuss the test with the students. At the end of the break, continue with the directions for the remainder of the test.

Test 3 Analogies

Test 3 takes approximately 9 minutes.

Say **Turn to Page 14 for Test 3 Analogies.**

Demonstrate. Make sure that all students are on Page 14.

Say **This test will show how well you can find pictures that go together in a certain way. When you mark an answer, fill in the circle that goes with the answer you choose. Fill in the circle completely and make your mark dark. If you want to change your answer, erase the mark you made and make a new mark. Do not make any other marks in your booklet.**

Find Sample A.

Demonstrate. Make sure that all students have found Sample A.

Say **Look at the woman and the girl in the top two boxes. These two pictures go together in a certain way. Now look at the man in the first box of the bottom row. Think about what would go in the empty box. Find the picture that goes with the man in the same way that the girl goes with the woman. Fill in the circle that goes with the answer you choose and then stop.**

Pause to allow students to do Sample A.

Say **You should have filled in the circle under the boy because a boy goes with a man, just as a girl goes with a woman. The girl is a very young woman, and the boy is a very young man.**

Make sure that all students have marked the answer correctly. Then,

Say **Find Sample B.**

Demonstrate. Make sure that all students have found Sample B.

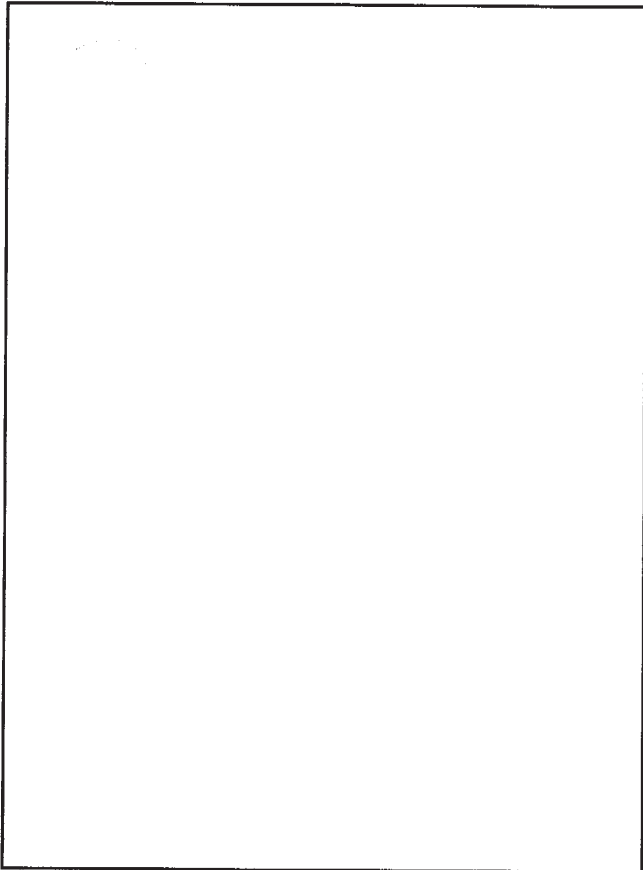
SAMPLE B

Say **Look at the circle and the tire in the top two boxes. These two things go together in a certain way. Now look at the triangle in the first box of the bottom row. Think about what would go in the empty box. Find the picture that goes with the triangle in the same way that the tire goes with the circle. Fill in the space that goes with the answer you choose and then stop.**

Pause to allow students to do Sample B.

Say **You should have filled in the circle under the clown's hat because the clown's hat has the same shape as the triangle, just as the tire has the same shape as the circle.**

Make sure that all students have marked the answer correctly. Then,



Say Now you are going to do some more items just as you did these. Look at the first two pictures and think how they go together. Then find a picture that goes with the third one in the same way that the first two pictures go together. If you cannot find a picture that belongs in the empty box, look again at the first two pictures and try to think of another way that they go together.

When you see the arrow at the bottom of a page, go right on to the next page. When you come to the stop sign, you have finished this part of the test. When you finish, you may check your answers in this test section only. Then sit quietly until the other students have finished. Do not go on to any other part of the test. Do you understand what you are to do?

When you are sure that all students understand the directions,

Say Find Number 1 at the top of the next page. You may begin.

Record the starting time on this line: _____

Add 7 minutes, + 7

and record the stopping time on this line: _____

At the stopping time,

Say Stop. This is the end of this part of our work. Make sure that all your marks are dark and that you have completely erased any marks that you do not want.

Pause.

Say Now turn to Page 22 for Test 4 Verbal Reasoning.

Test 4 Verbal Reasoning

Make sure that all students are on Page 22. Test 4 takes approximately 13 minutes.

Say This test will show how well you can do different kinds of word problems. The test is divided into different sections. We will go over the directions and a sample item for each section so that you will know what to do. When you see the stop sign, do not go on to the next part of the test. Wait until I give you more directions.

Find Sample A on Page 22.

Demonstrate. Make sure that all students have found Sample A.

Say You should have filled in the circle that goes with word "seed" because apples always grow with seeds inside them. Lunches and pies can have apples in them. An orange is like an apple because it is a fruit. But only the seed is a necessary part of an apple.

Make sure that all students have marked the answer correctly. Then,

Say Now you are going to do some more items just as you did this one. Remember that in each item, you are to find the answer choice that is a necessary part of the underlined word.

When you come to the stop sign after Number 6, you have finished this part of the test. You may check your answers in this part of the test only. Then sit quietly until the other students have finished. Do not go on to any other part of the test until I give you more directions. Do you understand what you are to do?

When you are sure that all students understand the directions,

Say Find Number 1. You may begin.

Allow students approximately 2 minutes to do Items 1 through 6. Make sure that all students are working on these items. At the stopping time,

Say Stop. This is the end of this part of our work. Find Sample B at the top of the next page.

Demonstrate. Make sure that all students have found Sample B.

SAMPLE B

Say Look at the underlined words: desk, chair, bed. These three things go together in some way. Now look at the words below the underlined words: wall, table, door, window. Find the word that fits best with the three underlined words. Fill in the circle that goes with the answer you choose and then stop.

Pause to allow students to do Sample B. Do not read the item aloud.

Say Look at the underlined word, apple. Then look at the words below it: pie, orange, seed, lunch. Find the word that must be part of an apple. Fill in the circle that goes with the answer you choose and then stop.

Pause to allow students to do Sample A. Do not read the item aloud.

Say You should have filled in the circle that goes with the word "table" because a table is a piece of furniture, just as a desk, a chair, and a bed are pieces of furniture. Walls, doors, and windows are parts of a house, not pieces of furniture.

Make sure that all students have marked the answer correctly. Then,

Say Now you are going to do some more items just as you did this one. Remember that in each item, you are to find the answer choice that fits best with the three underlined words.

When you come to the stop sign after Number 11, you have finished this part of the test. You may check your answers in this part of the test only. Then sit quietly until the other students have finished. Do not go on to any other part of the test until I give you more directions. Do you understand what to do?

When you are sure that all students understand the directions,

Say Find Number 7. You may begin.

Allow students approximately 2 minutes to do Items 7 through 11. Make sure that all students are working on these items. At the stopping time,

Say Stop. This is the end of this part of our work. Turn to Page 24. Find Sample C.

SAMPLE C

Demonstrate. Make sure that all students have found Sample C.

Say Look at these four words: food, knife, fork, spoon. Three of the words in this group belong together. Find the word that does not belong. Fill in the circle that goes with the answer you choose and then stop.

Pause to allow students to do Sample C. Do not read the item aloud.

Say You should have filled in the circle that goes with the word "food" because food is not a tool used for eating. A knife, a fork, and a spoon are tools used for eating.

Make sure that all students have marked the answer correctly. Then,

Say Now you are going to do some more items just as you did this one. Remember that in each item, you are to find the word that does not belong with the other three words.

When you come to the stop sign after Number 15, you have finished this part of the test. You may check your answers in this part of the test only. Then sit quietly until the other students have finished. Do not go on to any other part of the test until I give you more directions. Do you understand what to do?

When you are sure that all students understand the directions,

Say Find Number 12. You may begin.

Allow students approximately 2 minutes to do Items 12 through 15. Make sure that all students are working on these items. At the stopping time,

Say Stop. This is the end of this part of our work. Find Sample D at the top of the next page.

Demonstrate. Make sure that all students have found Sample D.

SAMPLE D

Say The three words in the top row—first, second, third—go together in a certain way. The words in the bottom row go together in the same way. Decide how the words go together, then find the word that completes the bottom row of words. Fill in the circle that goes with the answer you choose and then stop.

Pause to allow students to do Sample D. Do not read the item aloud.

Say You should have filled in the circle that goes with the word "evening" because evening comes after morning and afternoon, just as third comes after first and second.

Make sure that all students have marked the answer correctly. Then,

Say Now you are going to do three more items just as you did this one. Remember that in each item, you are to decide how the words in the top row go together and then find the word that best completes the bottom row.

When you come to the stop sign after Number 18, you have finished this part of the test. You may check your answers in this part of the test only. Then sit quietly until the other students have finished. Do not go on to any other part of the test until I give you more directions. Do you understand what to do?

When you are sure that all students understand the directions,

Say Find Number 16. You may begin.

Allow students approximately 2 minutes to do Items 16 through 18. Make sure that all students are working on these items. At the stopping time,

Say Stop. This is the end of this part of our work. Find Sample E.

Demonstrate. Make sure that all students have found Sample E.

SAMPLE E

Say Read the first two sentences. Then find the answer choice that must be true because of the facts given in the first two sentences. Fill in the circle that goes with the answer you choose and then stop.

Pause to allow students to do Sample E. Do not read the item aloud.

Say You should have filled in the circle that goes with the sentence "Don is in the kitchen." You know that Don must be in the kitchen because the chair Don is sitting on is in the kitchen.

Make sure that all students have marked the answer correctly. Then,

Say Now you are going to do two more items just as you did this one. Remember that in each item, you are to read the sentences above the answer choices and then find the answer choice that must be true because of the facts you are given.

When you come to the stop sign after Number 20, you have finished this part of the test. You may check your answers in this part of the test only. Then sit quietly until the others have finished. Do you understand what to do?

When you are sure that all students understand the directions,

Say Find Number 19. You may begin.

Allow students approximately 2 minutes to do Items 19 and 20. Make sure that all students are working on these items. At the stopping time,

Say Stop. This is the end of Test 4. Make sure that your marks are dark and that you have completely erased any marks that you do not want.

Pause.

Say Close your test booklets.

This is the end of the testing session. Collect all test materials and follow the directions in Part 5, Processing Completed Tests.

Part 5

Processing Completed Tests

When testing has been completed, prepare test booklets for scoring. All used and unused materials should be sorted and stored according to the instructions of your test coordinator.

Hand-Scored Tests

If tests are to be scored by hand, check the materials carefully for completeness and accuracy. Be sure that all answers are marked correctly and that all identifying information on test booklet covers has been filled in accurately. When materials have been checked and are ready to score, follow the scoring procedures outlined in the *Norms Tables*.

Machine-Scored Tests

To prepare tests to be scored by CTC Scoring Service, please complete the following steps.

- 1 Check the Student Information Grids on the front covers of the test booklets to be sure that they are completed accurately.
- 2 Check answer spaces to be sure that all marks are dark and solid. If an answer has been changed, make sure that it is completely erased and that the new answer is properly marked. An answer is not valid if more than one answer space is marked.
- 3 A test is not valid if a student has lost time during testing or if the student has marked answers randomly. Determine which tests, if any, are not valid. To ensure that a test is not scored, but reported as a nonvalid test, the examiner should erase all answers or mark a second response for each marked answer in the nonvalid test only.
- 4 Separate the machine-scorable test booklets from all other test materials.
- 5 Complete the Group Information Sheet (GIS) for each grade in your class. Follow the instructions on the reverse side of the GIS. Complete **TEACHER NAME, GRADE, SCHOOL NUMBER, SCHOOL NAME, TEST ADMINISTERED TO THIS GROUP, TEST DATE, and NUMBER OF STUDENTS TESTED**. Band together the stack of machine-scorable materials with the GIS on top.
- 6 Return completed test booklets to the CTC Scoring Service. Keep in a safe place all reusable and unused materials.

