Mathematics
Summative Assessment
2016 Paper-Pencil Test Administration Manual
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PART 1: INTRODUCTION

This manual provides an overview of the Summative Assessment paper test administration and supplements the Online Test Administration Manual. Use this document to familiarize yourself with what your students will experience in participating in the assessment, how to prepare for the assessment, and general rules for testing. Test Administrators (TAs) should become familiar with this document well in advance of the test administration date so materials for distribution to students are prepared and made available prior to the administration of the test.

In addition to the Summative Test Administration Manual, guidance regarding accessibility resources—universal tools, designated supports, and accommodations—is provided in the Usability, Accessibility, and Accommodations Guidelines available on your state assessment portal. These guidelines define considerations for test administration in terms of universal tools, designated supports, and accommodations available during test administration. While the online test administration offers more flexibility, the static paper-pencil assessment administration is more limited than the current online test and future paper-pencil test options. Appendix A of this document provides guidance regarding specific accessibility resources available for this administration and should be reviewed in advance of the test administration sessions.

ENSURING TEST SECURITY

The security of the summative assessment instruments and the confidentiality of student information are vital to maintaining the validity, reliability, and fairness of the results.

All test items and test materials are secure and must be appropriately handled. Secure handling protects the integrity, validity, and confidentiality of summative assessment items, prompts, and student information. Any deviation in test administration must be reported as a test security incident to ensure the validity of the summative assessment results.

Establishing Appropriate Testing Conditions

School Test Coordinators (SCs) and Test Administrators (TAs) will need to work together to determine the most appropriate testing option(s) and testing environment based on the number of students in each testing grade and the estimated time needed to complete each test. Testing students in classroom-sized groups is preferable. Establishing classroom-sized groups reduces test fear and anxiety for the students and facilitates monitoring and control for the TA.

The test administration should be conducted in a secure environment. Establish procedures to maintain a quiet testing environment throughout the test session, recognizing that some students will finish more quickly than others. If students are allowed to leave the testing room when they finish, explain the procedures for leaving without disrupting others and where they are expected to report once they leave. If students are expected to remain in the testing room until the end of the session, instruct them on what activities they may engage in after they finish the test.

Table 1 describes security requirements for the test environment during various stages of testing. The test environment refers to all aspects of the testing situation while
students are testing and includes what a student can see, hear, or access (including access via technology).

**Table 1: Requirements of the Test Environment**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BEFORE TESTING</strong></td>
<td></td>
</tr>
<tr>
<td>Instructional materials removed or covered</td>
<td>Instructional materials <strong>must be removed or covered, including, but not limited to</strong> information that might assist students in answering questions that is displayed on bulletin boards, chalkboards or dry-erase boards, or on charts (e.g., wall charts that contain literary definitions, maps, mathematics formulas, etc.).</td>
</tr>
<tr>
<td>Student seating</td>
<td>Students must be seated so there is enough space between them to minimize opportunities to turn to each other’s work, or they should be provided with table-top partitions.</td>
</tr>
<tr>
<td>Signage</td>
<td>If helpful, place a “TESTING—DO NOT DISTURB” sign on the door or post signs in halls and entrances rerouting hallway traffic in order to promote optimum testing conditions.</td>
</tr>
<tr>
<td><strong>DURING TESTING</strong></td>
<td></td>
</tr>
<tr>
<td>Quiet environment</td>
<td>Provide a quiet environment void of talking or other distractions that might interfere with a student's ability to concentrate or might compromise the testing situation.</td>
</tr>
<tr>
<td>Student supervision</td>
<td>Students are actively supervised and are prohibited from access to unauthorized electronic devices that allow availability to outside information, communication among students, or photographing or copying test content. This includes any device with cellular, messaging, or wireless capabilities, but is not limited to cell phones, personal digital assistants (PDAs), iPods, cameras, and electronic translation devices.</td>
</tr>
<tr>
<td>Access to allowable resources only</td>
<td>Students must only have access to and use of those allowable resources identified by Smarter Balanced that are permitted for each specific test (or portion of a test).</td>
</tr>
<tr>
<td>Access to assessments</td>
<td>Unauthorized staff or other adults must not be in the room during testing. Only students who are testing can view items. Students who are not being tested must not have access to secure testing materials including test items. Based on the item type (i.e., performance tasks), trained Test Administrators (TAs) may also have limited exposure to items in the course of properly administering the assessments; however, even TAs and other trained staff may not actively review or analyze any test items.</td>
</tr>
</tbody>
</table>
**DURING AND AFTER TESTING**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No answer key development</td>
<td>No form or type of answer key may be developed for test items.</td>
</tr>
<tr>
<td>No access to responses</td>
<td>District Test Coordinators (DCs), School Test Coordinators (SCs), TAs, and other staff are not permitted to review student responses.</td>
</tr>
<tr>
<td>No copies of test materials</td>
<td>No copies of the test items, stimuli, performance task materials, or classroom activity (if applicable) may be made or otherwise retained.</td>
</tr>
<tr>
<td>No access to digital, electronic, or manual devices</td>
<td>No digital, electronic, or manual device may be used to record or retain test items, or writing prompts. Similarly, these materials must not be discussed with or released to anyone via any media, including fax, email, social media websites, etc.</td>
</tr>
<tr>
<td>No retaining, discussing, or releasing test materials</td>
<td>Descriptions of test items, stimuli, or writing prompts must not be retained, discussed, or released to anyone.</td>
</tr>
<tr>
<td>No reviewing, discussing, or analyzing test materials</td>
<td>DCs, SCs, TAs, and other staff may not review, discuss, or analyze test items, stimuli, or writing prompts at any time, including before, during, or after testing. Student interaction during a test is limited to what is necessary for the purpose of a performance task.</td>
</tr>
<tr>
<td>All test materials must remain secure at all times</td>
<td>Test booklets and answer booklets, graph paper, scratch paper, and documents with student information must be kept in a securely locked room or locked cabinet that can be opened only with a key or keycard by staff responsible for test administration.</td>
</tr>
</tbody>
</table>

**AFTER TESTING**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No test materials used for instruction</td>
<td>Test items, stimuli, reading passages, or writing prompts must not be used for instruction.</td>
</tr>
<tr>
<td>Destroy test materials securely</td>
<td>All scratch paper must be collected and inventoried and then immediately shredded upon a student's completion of the test. See the Test Administration Manual, section 3.2 Secure Handling of Printed Materials, for details.</td>
</tr>
</tbody>
</table>
VERIFYING STUDENT INFORMATION

TAs should verify student information upon completion of the summative assessment. However, it is important for anyone with access to this information to remember that students’ personal information is confidential. If materials containing student names are distributed to students, these materials must be collected before the students leave the testing room and must be either securely stored to be used in a subsequent test session or shredded. Personal information includes any information that could potentially identify a student, including student name, state student identification number, birthdate, etc.
PART 2: GENERAL TEST ADMINISTRATION
INFORMATION

This section provides an overview of the paper-pencil testing environment and guidelines for test administration. Use this section to become familiar with what students will experience in taking the assessments, how to prepare for the assessments, and to review general rules for paper-pencil testing. Information about the Practice items is also included in this section. Test Administrators (TAs) should become familiar with this section well in advance of the start of testing.

STUDENT PARTICIPATION

Participation of Students with Disabilities and/or English Language Learners

Consistent with the Smarter Balanced testing plan, all students, including students with disabilities, English Language Learners (ELLs), and ELLs with disabilities, should have equal opportunity to participate in the Smarter Balanced Summative Assessments.

PREPARATION FOR THE ASSESSMENT

Before administering the assessment, make sure that you have the following materials available for students:

- A test booklet for each student
- An answer booklet for each student
- At least two sharpened No. 2 pencils for each student
- Blank scratch paper for each student
- Graph paper (Grades 6, 7, 8, and HS)
- Calculator (Grades 6, 7, 8, and HS—see calculator guidelines on page 10)

All students enrolled in grades 3–8 and high school are required to participate in the Smarter Balanced Mathematics Summative Assessment except:

- Students with the most significant cognitive disabilities who meet the criteria for a state-selected or state-developed mathematics alternate assessment based on alternate achievement standards (approximately one percent or fewer of the student population).

GENERAL RULES FOR THE PAPER-PENCIL ASSESSMENT

This section provides a brief overview of the general test administration rules for different portions of the assessment.

Test items and performance tasks will be presented as separate sessions. For example, grades 6 through high school mathematics tests include a session in which students may use calculators and other sessions where calculators are not allowed. Students may not return to a test session once it has been completed.
The student test booklets, answer booklets, and this manual are secure. Maintaining the security of all test materials is crucial to obtaining valid and reliable results. Therefore, test materials must be kept in locked storage, except during actual test administration. It is the responsibility of all individuals who administer the test to follow security procedures.

ALLOWABLE CALCULATORS BY GRADE

Students in grades 6, 7, 8, and High School are able to use calculators for Sessions 2 and 3. Allowable calculator types include four-function, scientific, and graphing. Students in grades 3, 4, and 5 are not permitted to use any calculators.

For Sessions 2 and 3, calculators with the following maximum functionality are acceptable for use.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Calculator Type</th>
<th>Calculator Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades 3–5 Mathematics</td>
<td>NO CALCULATORS PERMITTED</td>
<td></td>
</tr>
<tr>
<td>Grade 6 Mathematics</td>
<td>Four-function Calculator</td>
<td>Four-function with square root and percentage functions</td>
</tr>
<tr>
<td>Grades 7 and 8 Mathematics</td>
<td>Scientific Calculator</td>
<td>A scientific calculator with exponents, trigonometry, and logarithmic functionalities</td>
</tr>
<tr>
<td>HS Mathematics</td>
<td>Graphing Calculator</td>
<td>A graphing calculator with similar functionalities to a TI-84</td>
</tr>
</tbody>
</table>

Calculator Use Guidelines

- Grades 3, 4 and 5: **NO** calculator may be used for any portion of the test.
- Grades 6, 7, 8, and High School: The first session of each test is a non-calculator session. Be sure that no calculators are available until students begin working on Session 2.
- Items are placed in the non-calculator section when students are expected to be able to perform the skill without a calculator or if a particular calculator would provide an unfair advantage for a student.
- Test Administrators are responsible for ensuring and verifying that calculators that have the ability to store functions and equations, e.g., a graphing or a scientific calculator, have the memory cleared before and after each mathematics assessment.
• Calculators cannot have Internet connectivity, or be able to connect to anyone inside or outside the classroom during testing.

• Students cannot use a calculator on a laptop or other portable computer, pocket organizer, cell phone, device with a typewriter-style keyboard, electronic writing pad, or pen-input device unless a particular assistive device is required for a student and is specified on his or her IEP.

• No calculators with QWERTY keyboards are allowed.

TESTING TIMES
Table 3 contains the estimated times it will take most students to complete the Smarter Balanced Paper-Pencil Test. This information is for scheduling purposes only, as the assessments are not timed.

Table 3: Assessment Sequence—Mathematics

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>Session 1</th>
<th>Session 2</th>
<th>Classroom Activity (If Applicable)</th>
<th>Session 3 (PT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number and Duration of Sessions</td>
<td>Recommendations: • Administered in one session • Approximate session duration: 15–90 minutes</td>
<td>Recommendations: • Administered in one session • Approximate session duration: 15–90 minutes</td>
<td>Recommendations: • Administered in one session • Approximate session duration: 30 minutes • Should occur as close to the PT as is feasible, and no more than three days prior to the PT • MAY occur on the same day as the PT</td>
<td>Recommendations: • Administered in one session • Approximate session duration: 15–90 minutes</td>
</tr>
<tr>
<td>Breaks within Sessions</td>
<td>A student may be provided breaks within a test session as needed.</td>
<td>A student may be provided breaks within a test session as needed.</td>
<td>NA</td>
<td>A student may be provided breaks within a test session as needed.</td>
</tr>
<tr>
<td>Total Duration</td>
<td>15–90 minutes</td>
<td>15–90 minutes</td>
<td>Less than 30 minutes</td>
<td>Recommendation: • Student completes the PT in one day.</td>
</tr>
</tbody>
</table>
CLASSROOM ACTIVITY (IF APPLICABLE)

Important Note: The use of Classroom Activities for the 2016 Summative administration is a state-specific decision. Refer to your state’s Online Test Administration Manual for more details.

When developing a testing schedule, use the estimated testing times to calculate the number of days and the amount of time it will take to complete an assessment in each content area and grade level.

There are many scheduling options for testing. States may suggest examples of how schools/districts can schedule different portions of the assessment and session times.

Recommended Order of Test Administration

The assessments are comprised of three sessions for mathematics. All PTs must be preceded by the administration of a Classroom Activity.

Smarter Balanced recommends that students take the non-PT portions of the test (Sessions 1 and 2) and PT portion of the test on separate days. For mathematics, the order of administration should be Session 1 and Session 2, followed by the Classroom Activity, and then the PT. Districts/Schools may opt to administer in a different order if needed; however, the Classroom Activity, which is designed to introduce the PT, must occur prior to the PT.

Classroom Activity

The purpose of the Classroom Activity is to introduce students to the context of a performance task so they are not disadvantaged in demonstrating the skills the task intends to assess. Classroom Activities do not address content information; instead, they focus on vocabulary and key contextual topics. The Classroom Activity is designed to be an introduction and not an assessment. See Appendix H for the paper-pencil Classroom Activities.

Guidelines for administering the Classroom Activity for mathematics are as follows:

- Classroom Activities should be administered by a teacher. It is preferable—but not essential—that the teacher or TA administering the Classroom Activity has content knowledge in the area of assessment.
- The teacher/TA should be able to record information—including any tables, graphics, formulas, or other information contained in the Classroom Activity materials—for students to see, such as on a chalkboard or dry-erase board. Computers, projectors, and other technology are allowed but not required for the Classroom Activity. Recorded information should not be available when students participate in the PT. When the PT is being administered, content from the Classroom Activity should not be available (i.e., do not put any content from the Classroom Activity on the board, in handouts, etc.).
- Students may take notes during the Classroom Activity, but the notes may not be used during the administration of the PT. Notes must be collected before proceeding to the PT and stored in a secure location until securely shredded.
• There should be no more than a **three-day lapse** between the Classroom Activity and the PT administration. Inadvertently administering the PT before or without the Classroom Activity constitutes a testing irregularity.

• The Classroom Activity should only be administered to students once and is designed to be completed in approximately 30 minutes or less.

• The Classroom Activity is nonsecure; however, it should not be supplemented with any other content that the administrator may think is helpful. Supplementing the Classroom Activity may detract from the intended purpose of the Classroom Activity and is not advised. Providing students with additional information that isn’t displayed in the prompt impacts the validity of results and could invalidate student tests.

• Consider the appropriate accommodations that should be provided to students in the class that would normally be provided during instruction. **Appendix G: Accessibility Guidelines for Classroom Activities of the Online Test Administration Manual** contains information on those student resources that can be provided during the Classroom Activity.

• In the event a student is absent during the Classroom Activity, a make-up session must be scheduled. The Classroom Activity may be recorded; however, the make-up session should provide students with an experience similar to that of his or her peers. To the greatest extent possible, the make-up session should provide students an opportunity to interact with the teacher or TA and his or her peers.

**PRE-ID LABELS AND BLANK PRINT-ON-DEMAND LABELS TO BE USED WITH TIDE**

You will receive a combination of Pre-ID and/or blank print-on-demand labels with your testing materials.

Pre-ID labels should be affixed to student answer booklets just prior to the time of testing. Blank print-on-demand labels can be used in conjunction with TIDE to print individual student Pre-ID labels that were not provided in the original Pre-ID shipment. If additional blank, print-on-demand labels are required, contact your Test Coordinator. For information on how to print out an individual student Pre-ID using TIDE, please refer to the *TIDE User Guide* which is posted on your state portal.

**Important steps to follow:**

1. **Before testing**, TAs should ensure that students’ Pre-IDs are affixed to subject and grade level appropriate answer booklets for each student.

2. Test administrators should affix a Pre-ID label on the front cover of each student’s appropriate grade level answer booklet in the box labeled “Place Student Barcode Label Here.”

3. If a Pre-ID label is not available, TIDE should be used to create a student’s Pre-ID label using the Pre-ID print-on-demand feature. This Pre-ID should then be affixed on the student’s appropriate grade level answer booklet in the box labeled “Place Student Barcode Label Here.”

4. Pre-ID labels **must be** used for each student’s answer booklet.
5. Do not let a student use any answer booklet that has another student's Pre-ID label on it.

Below is an example of a student's Pre-ID label and answer booklet:

Pre-ID Label:

```
GLASS, GEORGE
DIST/SCH: 0999709997-01
Demo School 999701
ID: 99992002
On-Demand
GRD: 11  GENDER: M
20150115  1493115  9
```

Answer Booklet:

```
Mathematics Summative Assessment
Paper-Pencil Answer Booklet
High School
```

```
Print-on-Demand Label 2015-2016
```

```

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Preparing Test Booklets and Answer Booklets

Test booklets and answer booklets should have each student's name printed on them just prior to the time of testing. Students should use the same test booklet and answer booklet for each testing session.

Important steps to follow:

1. TAs should ensure that they have received the grade and subject appropriate test booklets and answer booklets for the testing session.

2. **Before testing**, TAs should print the first and last names for each student testing in the space provided, labeled “Student Name,” at the top of the front cover of the test booklet and answer booklet.

3. If additional testing materials are required, TAs should contact their Test Coordinator.

Below is an example of the front cover of a test booklet:
Incomplete or Defective Test Materials

It is possible that a student might receive an incomplete or a defective answer booklet or test booklet. If material is incomplete or defective, follow these procedures:

**Incomplete or defective answer booklets:** If a student discovers an incomplete or a defective answer booklet while taking the test, he or she should be given a blank answer booklet that has been checked to verify that it is not defective. The student should continue with the new copy. A Test Coordinator should later transfer all responses from the defective answer booklet to the one to be scored. The word “Defective” should be written across the defective answer booklet and a Do Not Score label should be affixed over the Pre-ID label on the front cover of the answer booklet. A new Pre-ID should be printed using TIDE and applied to the non-defective answer booklet for scoring. Return the defective answer booklet with other non-scorable materials.

**Incomplete or defective test booklets:** If a student discovers an incomplete or defective test booklet, follow the steps below:

- Give the student a new booklet that you have verified as accurate.
- Direct the student to write her or his name on the booklet.
- So everyone is clear about what has happened, tell the student that you will be making some changes on his or her materials because the materials were defective.
- TAs should collect the defective test booklet and write “Defective” on the cover in large letters. Make sure the defective test booklet is not distributed again but is put aside for later return with other non-scorable materials.
PART 3: ADMINISTERING THE MATHEMATICS SUMMATIVE ASSESSMENT

GRADE 3, SESSION 1

For the Mathematics Summative Assessment, please read aloud the directions in boldface preceded by the word SAY for students.

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet.

**SAY** Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

Pause to make sure the students have their own test booklet and answer booklet.

**SAY** Now you will be taking Session 1 of the Mathematics Summative Assessment. First, open your test booklet to page 1. Then, open your answer booklet to page 1.

**SAY** We will begin by doing some sample questions. This test booklet contains several different types of problems as shown below. Each sample shows what a certain type of problem looks like in the test booklet. Respond to each problem in your answer booklet. You will mark your answers to the sample questions in the box above Session 1 in your answer booklet. For Sample A, fill in only the bubble that goes with the answer you choose. Be sure to fill in the bubble completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark. Let’s practice!

Give students time to answer Sample A. Do not read the sample aloud.

Students should respond to the sample items in their answer booklet. The correct answers to the sample items are shown in the test booklet on page 2. However, wait until students answer all sample items in their answer booklets before directing them to check their answers against the keys shown on page 2 in the test booklet.

The correct answer to Sample A is choice B.
SAY Are there any questions?

Pause to answer any questions, then continue.

SAY Now go to Sample B. For some questions in the test, there will be more than one correct response. Sample B is an example of this type of test question. For Sample B, fill in the two bubbles that go with the answers you choose. Be sure to fill in the two bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample B.
Do not read the sample aloud.
The correct answers to Sample B are choices A and B.

SAY Are there any questions?

Pause to answer any questions, then continue.

SAY Now go to Sample C. For some questions in the test, there will be more than one part. Sample C is an example of a question which contains three parts. For Sample C, you will need to complete parts a, b, and c. Fill in the bubbles that go with the answers you choose. Be sure to fill in the bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample C.
Do not read the sample aloud.
The correct answers to Sample C are
   a. N
   b. N
   c. Y

SAY Are there any questions?

Pause to answer any questions, then continue.
Now go to Sample D. For some questions in the test, you will need to write your own response. Other questions on the test may contain blank lines for you to write your answer on. For Sample D, draw a point on the number line to show your answer.

Give students time to answer Sample D.

The correct answer to Sample D is a point placed at the line representing the number 4.

Are there any questions?

Pause to answer any questions, then continue.

Now turn to page 2 in your test booklet. At the top of page 2, you’ll find the directions for completing the grids. Feel free to refer back to this page as you work through Session 1. For this type of question in the test, you will complete a grid. Read the question and work the problem to find an answer. Write your answer in the answer boxes at the top of the grid. Print your answer with the first digit in the answer box all the way to the left, OR with the last digit in the answer box all the way to the right. Print only one digit in each answer box. Do NOT leave a blank answer box in the middle of an answer. Fill in a bubble under each answer box that you used to write your answer. Fill in one and ONLY one bubble for each answer box. Fill in each bubble by making a solid mark that completely fills the bubble. You MUST fill in the bubbles to receive credit for your answer.

Give students time to answer Sample E.

The correct answer to Sample E is 23.

At the bottom of page 2, you’ll see a completed answer key for the sample questions we just discussed. Check to be sure you correctly bubbled in your answers to the sample questions in your answer booklet. Any questions?

Pause.

Read each problem carefully and follow the directions. You may do your work in this test booklet, but you must mark your answers in the answer booklet. You may also use the scratch paper provided if you need more room to work the problems.
Pause.

**SAY**

When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?

Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

**SAY**

Turn to page 6 in your test booklet. You may begin.

Make sure that the students are on the correct page.

When the students have finished,

**SAY**

Stop. This is the end of the Mathematics Summative Assessment, Session 1. Please close your test booklet and answer booklet.

Depending upon whether your school chooses to administer Sessions 1 and 2 in one test sitting or in two separate test sittings, TAs will need to adjust the following procedures.

For those administering Sessions 1 and 2 in a **single** test sitting, you will need to collect any used scratch paper and distribute new, blank scratch paper before beginning Session 2. Be sure to give students a break between sessions, but you may be able to allow them to leave their test booklets and answers booklets closed on their desks rather than collecting them.

For those administering Sessions 1 and 2 in **separate** test sittings, collect all test materials and securely store until you begin Session 2.
GRADE 3, SESSION 2

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet.

SAY

Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

Pause to make sure the students have their own test booklet and answer booklet.

SAY

Now, you will be taking Session 2 of the Mathematics Summative Assessment. Be sure to read each problem carefully and mark your answers in your answer booklet. You may NOT go back to Session 1 in your test booklet. Work through each problem in Session 2 only.

Pause.

SAY

When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?

Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

SAY

Turn to page 18 in your test booklet. Now turn to page 3 in your answer booklet. You may begin.

Make sure that the students are on the correct page.

When the students have finished,

SAY

Stop. This is the end of the Mathematics Summative Assessment, Session 2. Please close your test booklet and answer booklet.

Collect all test materials.
GRADE 3, SESSION 3 (PERFORMANCE TASK)

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet.

**SAY** Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student's. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

**SAY** In this session, you will complete a performance task. The performance task is made up of six questions and information that will help you answer the questions. First, you will read about the task you have been given. Then, you will answer the six questions. You may use scratch paper to help you with this task, but be sure to answer the questions in the space provided in your answer booklet. Open your test booklet to page 28. Now open your answer booklet to page 6. Please read the directions at the top of page 28 in your test booklet along with me as I read them aloud.

Pause to make sure the students have their own test booklet and answer booklet.

**SAY** This session contains a performance task. Read the following information about your task. Then provide answers for each of the six problems that follow, referring back to this information as often as needed. Be sure to write your answers in your answer booklet.

You may NOT go back to Session 1 or Session 2 in your test booklet. Work through each problem in Session 3 only.

Pause.

**SAY** When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?
Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

**SAY** You may begin.

Make sure that the students are on the correct page.
When the students have finished,

**SAY** Stop. This is the end of the Mathematics Summative Assessment, Session 3. Please close your test booklet and answer booklet.

Collect all test materials.
GRADE 4, SESSION 1

For the Mathematics Summative Assessment, please read aloud the directions in boldface preceded by the word SAY for students.

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet.

SAY Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

Pause to make sure the students have their own test booklet and answer booklet.

SAY Now you will be taking Session 1 of the Mathematics Summative Assessment. First, open your test booklet to page 1. Then, open your answer booklet to page 1.

SAY We will begin by doing some sample questions. This test booklet contains several different types of problems as shown below. Each sample shows what a certain type of problem looks like in the test booklet. Respond to each problem in your answer booklet. You will mark your answers to the sample questions in the box above Session 1 in your answer booklet. For Sample A, fill in only the bubble that goes with the answer you choose. Be sure to fill in the bubble completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark. Let’s practice!

Give students time to answer Sample A. Do not read the sample aloud.

Students should respond to the sample items in their answer booklet. The correct answers to the sample items are shown in the test booklet on page 2. However, wait until students answer all sample items in their answer booklet before directing them to check their answers against the keys shown on page 2 in the test booklet.

The correct answer to Sample A is choice B.

SAY Are there any questions?

Pause to answer any questions, then continue.
Now go to Sample B. For some questions in the test, there will be more than one correct response. Sample B is an example of this type of test question. For Sample B, fill in the two bubbles that go with the answers you choose. Be sure to fill in the bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample B.
Do not read the sample aloud.
The correct answers to Sample B are choices A and B.

Are there any questions?

Pause to answer any questions, then continue.

Now go to Sample C. For some questions in the test, there will be more than one part. Sample C is an example of a question which contains three parts. For Sample C, you will need to complete parts a, b, and c. Fill in the bubbles that go with the answers you choose. Be sure to fill in the bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample C.
Do not read the sample aloud.
The correct answers to Sample C are

   a. N
   b. N
   c. Y

Are there any questions?

Pause to answer any questions, then continue.

Now go to Sample D. For some questions in the test, you will need to write your own response. Other questions on the test may contain blank lines for you to write your answer on. For Sample D, draw a point on the number line to show your answer.
Give students time to answer Sample D.
The correct answer to Sample D is a point placed at the line representing the number 4.

SAY Are there any questions?

Pause to answer any questions, then continue.

SAY Now turn to page 2 in your test booklet. At the top of page 2, you'll find the directions for completing the grids. Feel free to refer back to this page as you work through Session 1. Now go to Sample E. For this type of question in the test, you will complete a grid. Read the question and work the problem to find an answer. Write your answer in the answer boxes at the top of the grid. Print your answer with the first digit in the answer box all the way to the left, OR with the last digit in the answer box all the way to the right. Print only one digit in each answer box. Do NOT leave a blank answer box in the middle of an answer. Fill in a bubble under each answer box that you used to write your answer. Fill in one and ONLY one bubble for each answer box. Fill in each bubble by making a solid mark that completely fills the bubble. You MUST fill in the bubbles to receive credit for your answer.

Give students time to answer Sample E.
The correct answer to Sample E is 23.

Pause.

SAY At the bottom of page 2, you'll see a completed answer key for the sample questions we just discussed. Check to be sure you correctly bubbled in your answers to the sample questions in your answer booklet. Any questions?

Pause.

SAY Read each problem carefully and follow the directions. You may do your work in this test booklet, but you must mark your answers in the answer booklet. You may also use the scratch paper provided if you need more room to work the problems.
Pause.

**Say**  
When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?

Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

**Say**  
Turn to page 6 in your test booklet. You may begin.

Make sure that the students are on the correct page.

When the students have finished,

**Say**  
Stop. This is the end of the Mathematics Summative Assessment, Session 1. Please close your test booklet and answer booklet.

Depending upon whether your school chooses to administer Sessions 1 and 2 in one test sitting or in two separate test sittings, TAs will need to adjust the following procedures.

For those administering Sessions 1 and 2 in a **single** test sitting, you will need to collect any used scratch paper and distribute new, blank scratch paper before beginning Session 2. Be sure to give students a break between sessions, but you may be able to allow them to leave their test booklet and answers booklet closed on their desks rather than collecting them.

For those administering Sessions 1 and 2 in **separate** test sittings, collect all test materials and securely store until you begin Session 2.
GRADE 4, SESSION 2

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet.

SAY  Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

Pause to make sure the students have their own test booklet and answer booklet.

SAY  Now, you will be taking Session 2 of the Mathematics Summative Assessment. Be sure to read each problem carefully and mark your answers in the answer booklet. You may NOT go back to Session 1 in your test booklet. Work through each problem in Session 2 only.

Pause.

SAY  When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?

Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

SAY  Turn to page 16 in your test booklet. Now turn to page 3 in your answer booklet. You may begin.

Make sure that the students are on the correct page.

When the students have finished,

SAY  Stop. This is the end of the Mathematics Summative Assessment, Session 2. Please close your test booklet and answer booklet.

Collect all test materials.
GRADE 4, SESSION 3 (PERFORMANCE TASK)

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet.

**SAY** Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

**SAY** In this session, you will complete a performance task. The performance task is made up of six questions and information that will help you answer the questions. First, you will read about the task you have been given. Then, you will answer the six questions. You may use scratch paper to help you with this task, but be sure to answer the questions in the space provided in your answer booklet. Open your test booklet to page 28. Now open your answer booklet to page 6. Please read the directions at the top of page 28 in your test booklet along with me as I read them aloud.

Pause to make sure the students have their own test booklet and answer booklet.

**SAY** This session contains a performance task. Read the following information about your task. Then provide answers for each of the six problems that follow, referring back to this information as often as needed. Be sure to write your answers in your answer booklet.

You may NOT go back to Session 1 or Session 2 in your test booklet. Work through each problem in Session 3 only.

Pause.

**SAY** When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?
Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

**SAY** You may begin.

Make sure that the students are on the correct page.

When the students have finished,

**SAY** Stop. This is the end of the Mathematics Summative Assessment, Session 3. Please close your test booklet and answer booklet.

Collect all test materials.
GRADE 5, SESSION 1

For the Mathematics Summative Assessment, please read aloud the directions in boldface preceded by the word SAY for students.

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet.

**SAY** Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

Pause to make sure the students have their own test booklet and answer booklet.

**SAY** Now you will be taking Session 1 of the Mathematics Summative Assessment. First, open your test booklet to page 1. Then, open your answer booklet to page 1.

Pause.

**SAY** We will begin by doing some sample questions. This test booklet contains several different types of problems as shown below. Each sample shows what a certain type of problem looks like in the test booklet. Respond to each problem in your answer booklet. You will mark your answers to the sample questions in the box above Session 1 in your answer booklet. For Sample A, fill in only the bubble that goes with the answer you choose. Be sure to fill in the bubble completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark. Let’s practice!

Give students time to answer Sample A. Do not read the sample aloud.

Students should respond to the sample items in their answer booklet. The correct answers to the sample items are shown in the test booklet on page 2. However, wait until students answer all sample items in their answer booklet before directing them to check their answers against the keys shown on page 2 in the test booklet.

The correct answer to Sample A is choice B.

**SAY** Are there any questions?

Pause to answer any questions, then continue.
Now go to Sample B. For some questions in the test, there will be more than one correct response. Sample B is an example of this type of test question. For Sample B, fill in the two bubbles that go with the answers you choose. Be sure to fill in the bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample B.
Do not read the sample aloud.
The correct answers to Sample B are choices A and B.

Are there any questions?
Pause to answer any questions, then continue.

Now go to Sample C. For some questions in the test, there will be more than one part. Sample C is an example of a question which contains three parts. For Sample C, you will need to complete parts a, b, and c. Fill in the bubbles that go with the answers you choose. Be sure to fill in the bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample C.
Do not read the sample aloud.
The correct answers to Sample C are
a. N
b. N
c. Y

Are there any questions?
Pause to answer any questions, then continue.

Now go to Sample D. For some questions in the test, you will need to write your own response. Other questions on the test may contain blank lines for you to write your answer on. For Sample D, draw a point on the number line to show your answer.
Give students time to answer Sample D.
The correct answer to Sample D is a point placed at the line representing the number 4.

SAY Are there any questions?

Pause to answer any questions, then continue.

SAY Now turn to page 2 in your test booklet. At the top of page 2, you'll find the directions for completing the grids. Feel free to refer back to this page as you work through Session 1. Now go to Sample E. For this type of question in the test, you will complete a grid. Read the question and work the problem to find an answer. Write your answer in the answer boxes at the top of the grid. Print your answer with the first digit in the answer box all the way to the left, OR with the last digit in the answer box all the way to the right. Print only one digit in each answer box. Do NOT leave a blank answer box in the middle of an answer. Fill in a bubble under each answer box that you used to write your answer. Fill in one and ONLY one bubble for each answer box. Fill in each bubble by making a solid mark that completely fills the bubble. You MUST fill in the bubbles to receive credit for your answer.

Give students time to answer Sample E.
The correct answer to Sample E is 23.

Pause.

SAY At the bottom of page 2, you'll see a completed answer key for the sample questions we just discussed. Check to be sure you correctly bubbled in your answers to the sample questions in your answer booklet. Any questions?

SAY Read each problem carefully and follow the directions. You may do your work in this test booklet, but you must mark your answers in the answer booklet. You may also use the scratch paper provided if you need more room to work the problems.

Pause.

SAY When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?
Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

**SAY**  
**Turn to page 6 in your test booklet. You may begin.**

Make sure that the students are on the correct page.  
When the students have finished,  

**SAY**  
**Stop. This is the end of the Mathematics Summative Assessment, Session 1. Please close your test booklet and answer booklet.**

Depending upon whether your school chooses to administer Sessions 1 and 2 in one test sitting or in two separate test sittings, TAs will need to adjust the following procedures.

For those administering Sessions 1 and 2 in a single test sitting, you will need to collect any used scratch paper and distribute new, blank scratch paper before beginning Session 2. Be sure to give students a break between sessions, but you may be able to allow them to leave their test booklets and answers booklets closed on their desks rather than collecting them.

For those administering Sessions 1 and 2 in separate test sittings, collect all test materials and securely store until you begin Session 2.
GRADE 5, SESSION 2

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet.

**SAY**  Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

Pause to make sure the students have their own test booklet and answer booklet.

**SAY**  Now, you will be taking Session 2 of the Mathematics Summative Assessment. Be sure to read each problem carefully and mark your answers in the answer booklet. You may NOT go back to Session 1 in your test booklet. Work through each problem in Session 2 only.

Pause.

**SAY**  When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?

Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

**SAY**  Turn to page 16 in your test booklet. Now turn to page 3 in your answer booklet. You may begin.

Make sure that the students are on the correct page.
When the students have finished,

**SAY**  Stop. This is the end of the Mathematics Summative Assessment, Session 2. Please close your test booklet and answer booklet.

Collect all test materials.
GRADE 5, SESSION 3 (PERFORMANCE TASK)

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet.

SAY Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

SAY In this session, you will complete a performance task. The performance task is made up of six questions and information that will help you answer the questions. First, you will read about the task you have been given. Then, you will answer the six questions. You may use scratch paper to help you with this task, but be sure to answer the questions in the space provided in your answer booklet. Open your test booklet to page 28. Now open your answer booklet to page 6. Please read the directions at the top of page 28 in your test booklet along with me as I read them aloud.

Pause to make sure the students have their own test booklet and answer booklet.

SAY This session contains a performance task. Read the following information about your task. Then provide answers for each of the six problems that follow, referring back to this information as often as needed. Be sure to write your answers in your answer booklet.

You may NOT go back to Session 1 or Session 2 in your test booklet. Work through each problem in Session 3 only.

Pause.

SAY When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?
Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

**SAY** You may begin.

Make sure that the students are on the correct page.
When the students have finished,

**SAY** Stop. This is the end of the Mathematics Summative Assessment, Session 3. Please close your test booklet and answer booklet.

Collect all test materials.
GRADE 6, SESSION 1

For the Mathematics Summative Assessment, please read aloud the directions in boldface preceded by the word SAY for students.

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, graph paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet. Calculators are not allowed for Session 1.

SAY

Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

Pause to make sure the students have their own test booklet and answer booklet.

SAY

Now you will be taking Session 1 of the Mathematics Summative Assessment. First, open your test booklet to page 1. Then, open your answer booklet to page 1.

Pause.

SAY

We will begin by doing some sample questions. This test booklet contains several different types of problems as shown below. Each sample shows what a certain type of problem looks like in the test booklet. Respond to each problem in your answer booklet. You will mark your answers to the sample questions in the box above Session 1 in your answer booklet. For Sample A, fill in only the bubble that goes with the answer you choose. Be sure to fill in the bubble completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark. Let’s practice!

Give students time to answer Sample A. Do not read the sample aloud.

Students should respond to the sample items in their answer booklet. The correct answers to the sample items are shown in the test booklet on page 3. However, wait until students answer all sample items in their answer booklets before directing them to check their answers against the keys shown on page 3 in the test booklet.

The correct answer to Sample A is choice B.

SAY

Are there any questions?

Pause to answer any questions, then continue.
Now go to Sample B. For some questions in the test, there will be more than one correct response. Sample B is an example of this type of test question. For Sample B, fill in the two bubbles that go with the answers you choose. Be sure to fill in the bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample B.
Do not read the sample aloud.
The correct answers to Sample B are choices A and B.

Are there any questions?

Pause to answer any questions, then continue.

Now go to Sample C. For some questions in the test, there will be more than one part. Sample C is an example of a question which contains three parts. For Sample C, you will need to complete parts a, b, and c. Fill in the bubbles that go with the answers you choose. Be sure to fill in the bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample C.
Do not read the sample aloud.
The correct answers to Sample C are
   a. N
   b. N
   c. Y

Are there any questions?

Pause to answer any questions, then continue.

Now go to Sample D. For some questions in the test, you will need to write your own response. Other questions on the test may contain blank lines for you to write your answer on. For Sample D, draw a point on the number line to show your answer.
Give students time to answer Sample D.
The correct answer to Sample D is a point placed at the line representing the number $1\frac{2}{3}$.

**SAY**  Are there any questions?

Pause to answer any questions, then continue.

**SAY**  Now turn to page 2 in your test booklet. At the top of page 2, you’ll find the directions for completing the grids. Feel free to refer back to this page as you work through Session 1. Now go to Sample E. For this type of question in the test, you will complete a grid. Read the question and work the problem to find an answer. Write your answer in the answer boxes at the top of the grid. Be sure to write a decimal point or fraction bar in the answer box if it is a part of the answer. Print your answer with the first digit in the answer box all the way to the left, or with the last digit in the answer box all the way to the right. Print only one digit, decimal point, or fraction bar in each answer box. Do NOT leave a blank answer box in the middle of an answer. Fill in a bubble under each answer box that you used to write your answer. Fill in one and ONLY one bubble for each answer box. Fill in each bubble by making a solid mark that completely fills the bubble. You MUST fill in the bubbles to receive credit for your answer.

Give students time to answer Sample E.
The correct answer to Sample E is $\frac{3}{4}$ or 0.75.

Pause.

**SAY**  At the top of page 3, you’ll see a completed answer key for the sample questions we just discussed. Check to be sure you correctly bubbled in your answers to the sample questions in your answer booklet. Any questions?

Pause.

**SAY**  Read each problem carefully and follow the directions. You may do your work in this test booklet, but you must mark your answers in the answer booklet. No calculators are allowed in this session. You may also use the scratch and/or graph paper provided if you need more room to work the problems.
Pause.

**SAY** When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?

Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

**SAY** Turn to page 6 in your test booklet. You may begin.

Make sure that the students are on the correct page.

When the students have finished,

**SAY** Stop. This is the end of the Mathematics Summative Assessment, Session 1. Please close your test booklet and answer booklet.

Depending upon whether your school chooses to administer Sessions 1 and 2 in one test sitting or in two separate test sittings, TAs will need to adjust the following procedures.

For those administering Sessions 1 and 2 in a **single** test sitting, you will need to collect any used scratch paper and distribute new, blank scratch paper before beginning Session 2. Be sure to give students a break between sessions, but you may be able to allow them to leave their test booklets and answers booklets closed on their desks rather than collecting them.

For those administering Sessions 1 and 2 in **separate** test sittings, collect all test materials and securely store until you begin Session 2.
GRADE 6, SESSION 2

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, graph paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet. Four-function calculators are allowed for Session 2.

SAY Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

Pause to make sure the students have their own test booklet and answer booklet.

SAY Now, you will be taking Session 2 of the Mathematics Summative Assessment. Be sure to read each problem carefully and mark your answers in the answer booklet. You may NOT go back to Session 1 in your test booklet. Work through each problem in Session 2 only. You may use a four-function calculator for this portion of the test.

Pause.

SAY When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?

Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

SAY Turn to page 14 in your test booklet. Now turn to page 3 in your answer booklet. You may begin.

Make sure that the students are on the correct page.

When the students have finished,

SAY Stop. This is the end of the Mathematics Summative Assessment, Session 2. Please close your test booklet and answer booklet.

Collect all test materials.
Grade 6, Session 3 (Performance Task)

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, graph paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet. Four-function calculators are allowed for Session 3.

SAY

Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

SAY

In this session, you will complete a performance task. The performance task is made up of six questions and information that will help you answer the questions. First, you will read about the task you have been given. Then, you will answer the six questions. You may use scratch and/or graph paper to help you with this task, but be sure to answer the questions in the space provided in your answer booklet. You may use a four-function calculator to help you with this task. Open your test booklet to page 26. Now open your answer booklet to page 7. Please read the directions at the top of page 26 in your test booklet along with me as I read them aloud.

Pause to make sure the students have their own test booklet and answer booklet.

SAY

This session contains a performance task. Read the following information about your task. Then provide answers for each of the six problems that follow, referring back to this information as often as needed. Be sure to write your answers in your answer booklet.

You may NOT go back to Session 1 or Session 2 in your test booklet. Work through each problem in Session 3 only.

Pause.

SAY

When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?
Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

SAY  You may begin.

Make sure that the students are on the correct page.  
When the students have finished,

SAY  Stop. This is the end of the Mathematics Summative Assessment, Session 3. Please close your test booklet and answer booklet.

Collect all test materials.
GRADE 7, SESSION 1

For the Mathematics Summative Assessment, please read aloud the directions in boldface preceded by the word SAY for students.

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, graph paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet. Calculators are not allowed for Session 1.

**SAY** Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student's. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

Pause to make sure the students have their own test booklet and answer booklet.

**SAY** Now you will be taking Session 1 of the Mathematics Summative Assessment. First, open your test booklet to page 1. Then, open your answer booklet to page 1.

Pause.

**SAY** We will begin by doing some sample questions. This test booklet contains several different types of problems as shown below. Each sample shows what a certain type of problem looks like in the test booklet. Respond to each problem in your answer booklet. You will mark your answers to the sample questions in the box above Session 1 in your answer booklet. For Sample A, fill in only the bubble that goes with the answer you choose. Be sure to fill in the bubble completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark. Let's practice!

Give students time to answer Sample A. Do not read the sample aloud.

Students should respond to the sample items in their answer booklet. The correct answers to the sample items are shown in the test booklet on page 3. However, wait until students answer all sample items in their answer booklets before directing them to check their answers against the keys shown on page 3 in the test booklet.

The correct answer to Sample A is choice B.

**SAY** Are there any questions?

Pause to answer any questions, then continue.
Now go to Sample B. For some questions in the test, there will be more than one correct response. Sample B is an example of this type of test question. For Sample B, fill in the two bubbles that go with the answers you choose. Be sure to fill in the bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample B.
Do not read the sample aloud.
The correct answers to Sample B are choices A and B.

Are there any questions?

Now go to Sample C. For some questions in the test, there will be more than one part. Sample C is an example of a question which contains three parts. For Sample C, you will need to complete parts a, b, and c. Fill in the bubbles that go with the answers you choose. Be sure to fill in the bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample C.
Do not read the sample aloud.
The correct answers to Sample C are:

- a. \(N\)
- b. \(N\)
- c. \(Y\)

Are there any questions?

Now go to Sample D. For some questions in the test, you will need to write your own response. Other questions on the test may contain blank lines for you to write your answer on. For Sample D, draw a point on the number line to show your answer.

Give students time to answer Sample D.
The correct answer to Sample D is a point placed at the line representing the number \(1\frac{2}{3}\).
Are there any questions?

Pause to answer any questions, then continue.

Now turn to page 2 in your test booklet. At the top of page 2, you'll find the directions for completing the grids. Feel free to refer back to this page as you work through Session 1. Now go to Sample E. For this type of question in the test, you will complete a grid. Read the question and work the problem to find an answer. Write your answer in the answer boxes at the top of the grid. Print your answer with the first digit in the answer box all the way to the left, OR with the last digit in the answer box all the way to the right. Print only one digit, decimal point, or fraction bar in each answer box. Do NOT leave a blank answer box in the middle of an answer. Fill in a bubble under each answer box that you used to write your answer. Fill in one and ONLY one bubble for each answer box. Fill in each bubble by making a solid mark that completely fills the bubble. You MUST fill in the bubbles to receive credit for your answer.

Give students time to answer Sample E.

The correct answer to Sample E is \( \frac{3}{4} \) or 0.75.

Pause.

At the top of page 3, you'll see a completed answer key for the sample questions we just discussed. Check to be sure you correctly bubbled in your answers to the sample questions in your answer booklet. Any questions?

Pause.

Read each problem carefully and follow the directions. You may do your work in this test booklet, but you must mark your answers in the answer booklet. No calculators are allowed in this session. You may also use the scratch paper and/or graph provided if you need more room to work the problems.

Pause.

When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?
Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

**SAY**  
**Turn to page 6 in your test booklet. You may begin.**

Make sure that the students are on the correct page.

When the students have finished,

**SAY**  
**Stop. This is the end of the Mathematics Summative Assessment, Session 1. Please close your test booklet and answer booklet.**

Depending upon whether your school chooses to administer Sessions 1 and 2 in one test sitting or in two separate test sittings, TAs will need to adjust the following procedures.

For those administering Sessions 1 and 2 in a **single** test sitting, you will need to collect any used scratch paper and distribute new, blank scratch paper before beginning Session 2. Be sure to give students a break between sessions, but you may be able to allow them to leave their test booklets and answers booklets closed on their desks rather than collecting them.

For those administering Sessions 1 and 2 in **separate** test sittings, collect all test materials and securely store until you begin Session 2.
GRADE 7, SESSION 2

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, graph paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet. Scientific calculators are allowed for Session 2.

SAY  Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

Pause to make sure the students have their own test booklet and answer booklet.

SAY  Now, you will be taking Session 2 of the Mathematics Summative Assessment. Be sure to read each problem carefully and mark your answers in the answer booklet. You may NOT go back to Session 1 in your test booklet. Work through each problem in Session 2 only. You may use the scratch and/or graph paper provided if you need more room to work the problems. You may use a scientific calculator for this portion of the test.

Pause.

SAY  When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?

Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

SAY  Turn to page 14 in your test booklet. Now turn to page 3 in your answer booklet. You may begin.

Make sure that the students are on the correct page.

When the students have finished,

SAY  Stop. This is the end of the Mathematics Summative Assessment, Session 2. Please close your test booklet and answer booklet.

Collect all test materials.
GRADE 7, SESSION 3 (PERFORMANCE TASK)

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, graph paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet. Scientific calculators are allowed for Session 3.

SAY

Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

SAY

In this session, you will complete a performance task. The performance task is made up of six questions and information that will help you answer the questions. First, you will read about the task you have been given. Then, you will answer the six questions. You may use scratch and/or graph paper to help you with this task, but be sure to answer the questions in the space provided in your answer booklet. You may use a scientific calculator to help you with this task. Open your test booklet to page 26. Now open your answer booklet to page 7. Please read the directions at the top of page 26 in your test booklet along with me as I read them aloud.

Pause to make sure the students have their own test booklet and answer booklet.

SAY

This session contains a performance task. Read the following information about your task. Then provide answers for each of the six problems that follow, referring back to this information as often as needed. Be sure to write your answers in your answer booklet.

You may NOT go back to Session 1 or Session 2 in your test booklet. Work through each problem in Session 3 only.

Pause.

SAY

When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?
Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

**SAY** You may begin.

Make sure that the students are on the correct page.
When the students have finished,

**SAY** Stop. This is the end of the Mathematics Summative Assessment, Session 3. Please close your test booklet and answer booklet.

Collect all test materials.
GRADE 8, SESSION 1

For the Mathematics Summative Assessment, please read aloud the directions in boldface preceded by the word SAY for students.

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, graph paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet. Calculators are not allowed for Session 1.

SAY Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

Pause to make sure the students have their own test booklet and answer booklet.

SAY Now you will be taking Session 1 of the Mathematics Summative Assessment. First, open your test booklet to page 1. Then, open your answer booklet to page 1.

Pause.

SAY We will begin by doing some sample questions. This test booklet contains several different types of problems as shown below. Each sample shows what a certain type of problem looks like in the test booklet. Respond to each problem in your answer booklet. You will mark your answers to the sample questions in the box above Session 1 in your answer booklet. For Sample A, fill in only the bubble that goes with the answer you choose. Be sure to fill in the bubble completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark. Let’s practice!

Give students time to answer Sample A. Do not read the sample aloud.

Students should respond to the sample items in their answer booklet. The correct answers to the sample items are shown in the test booklet on page 3. However, wait until students answer all sample items in their answer booklets before directing them to check their answers against the keys shown on page 3 in the test booklet.

The correct answer to Sample A is choice B.

SAY Are there any questions?

Pause to answer any questions, then continue.
SAY Now go to Sample B. For some questions in the test, there will be more than one correct response. Sample B is an example of this type of test question. For Sample B, fill in the two bubbles that go with the answers you choose. Be sure to fill in the bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample B.

Do not read the sample aloud.

The correct answers to Sample B are choices A and B.

SAY Are there any questions?

Pause to answer any questions, then continue.

SAY Now go to Sample C. For some questions in the test, there will be more than one part. Sample C is an example of a question which contains three parts. For Sample C, you will need to complete parts a, b, and c. Fill in the bubbles that go with the answers you choose. Be sure to fill in the bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample C.

Do not read the sample aloud.

The correct answers to Sample C are

   a. N  
   b. N  
   c. Y

SAY Are there any questions?

Pause to answer any questions, then continue.

SAY Now go to Sample D. For some questions in the test, you will need to write your own response. Other questions on the test may contain blank lines for you to write your answer on. For Sample D, draw a point on the number line to show your answer.

Give students time to answer Sample D.

The correct answer to Sample D is a point placed at the line representing the number \( \frac{12}{3} \).
Are there any questions?

Pause to answer any questions, then continue.

Now turn to page 2 in your test booklet. At the top of page 2, you’ll find the directions for completing the grids. Feel free to refer back to this page as you work through Session 1. Now go to Sample E. For this type of question in the test, you will complete a grid. Read the question and work the problem to find an answer. Write your answer in the answer boxes at the top of the grid. Print your answer with the first digit in the answer box all the way to the left, OR with the last digit in the answer box all the way to the right. Print only one digit, decimal point, or fraction bar in each answer box. Do NOT leave a blank answer box in the middle of an answer. Fill in a bubble under each answer box that you used to write your answer. Fill in one and ONLY one bubble for each answer box. Fill in each bubble by making a solid mark that completely fills the bubble. You MUST fill in the bubbles to receive credit for your answer.

Give students time to answer Sample E.

The correct answer to Sample E is $\frac{3}{4}$ or 0.75.

Pause.

At the top of page 3, you’ll see a completed answer key for the sample questions we just discussed. Check to be sure you correctly bubbled in your answers to the sample questions in your answer booklet. Any questions?

Pause.

Read each problem carefully and follow the directions. You may do your work in this test booklet, but you must mark your answers in the answer booklet. No calculators are allowed in this session. You may also use the scratch and/or graph paper provided if you need more room to work the problems.

Pause.

When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?
Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

**SAY**  **Turn to page 6 in your test booklet. You may begin.**

Make sure that the students are on the correct page.  
When the students have finished,

**SAY**  **Stop. This is the end of the Mathematics Summative Assessment, Session 1. Please close your test booklet and answer booklet.**

Depending upon whether your school chooses to administer Sessions 1 and 2 in one test sitting or in two separate test sittings, TAs will need to adjust the following procedures.

For those administering Sessions 1 and 2 in a **single** test sitting, you will need to collect any used scratch paper and distribute new, blank scratch paper before beginning Session 2. Be sure to give students a break between sessions, but you may be able to allow them to leave their test booklets and answers booklets closed on their desks rather than collecting them.

For those administering Sessions 1 and 2 in **separate** test sittings, collect all test materials and securely store until you begin Session 2.
GRADE 8, SESSION 2

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, graph paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet. Scientific calculators are allowed for Session 2.

Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student's. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

Pause to make sure the students have their own test booklet and answer booklet.

Now, you will be taking Session 2 of the Mathematics Summative Assessment. Be sure to read each problem carefully and mark your answers in the answer booklet. You may NOT go back to Session 1 in your test booklet. Work through each problem in Session 2 only. You may use the scratch and/or graph paper provided if you need more room to work the problems. You may use a scientific calculator for this portion of the test.

When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?

Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

Turn to page 16 in your test booklet. Now turn to page 3 in your answer booklet. You may begin.

Make sure that the students are on the correct page.

When the students have finished,

Stop. This is the end of the Mathematics Summative Assessment, Session 2. Please close your test booklet and answer booklet.

Collect all test materials.
GRADE 8, SESSION 3 (PERFORMANCE TASK)

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, graph paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet. Scientific calculators are allowed for Session 3.

SAY

Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

SAY

In this session, you will complete a performance task. The performance task is made up of six questions and information that will help you answer the questions. First, you will read about the task you have been given. Then, you will answer the six questions. You may use scratch and/or graph paper to help you with this task, but be sure to answer the questions in the space provided in your answer booklet. You may use a scientific calculator to help you with this task. Open your test booklet to page 34. Now open your answer booklet to page 7. Please read the directions at the top of page 34 in your test booklet along with me as I read them aloud.

Pause to make sure the students have their own test booklet and answer booklet.

SAY

This session contains a performance task. Read the following information about your task. Then provide answers for each of the six problems that follow, referring back to this information as often as needed. Be sure to write your answers in your answer booklet.

You may NOT go back to Session 1 or Session 2 in your test booklet. Work through each problem in Session 3 only.

Pause.

SAY

When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?
Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

**SAY**  You may begin.

Make sure that the students are on the correct page.
When the students have finished,

**SAY**  Stop. This is the end of the Mathematics Summative Assessment, Session 3. Please close your test booklet and answer booklet.

Collect all test materials.
HIGH SCHOOL, SESSION 1

For the Mathematics Summative Assessment, please read aloud the directions in boldface preceded by the word SAY for students.

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, graph paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet. Calculators are not allowed for Session 1.

**SAY** Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

Pause to make sure the students have their own test booklet and answer booklet.

**SAY** Now you will be taking Session 1 of the Mathematics Summative Assessment. First, open your test booklet to page 1. Then, open your answer booklet to page 1.

Pause.

**SAY** We will begin by doing some sample questions. This test booklet contains several different types of problems as shown below. Each sample shows what a certain type of problem looks like in the test booklet. Respond to each problem in your answer booklet. You will mark your answers to the sample questions in the box above Session 1 in your answer booklet. For Sample A, fill in only the bubble that goes with the answer you choose. Be sure to fill in the bubble completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark. Let's practice!

Give students time to answer Sample A. Do not read the sample aloud.

Students should respond to the sample items in their answer booklet. The correct answers to the sample items are shown in the test booklet on page 3. However, wait until students answer all sample items in their answer booklets before directing them to check their answers against the keys shown on page 3 in the test booklet.

The correct answer to Sample A is choice B.

**SAY** Are there any questions?

Pause to answer any questions, then continue.
Say Now go to Sample B. For some questions in the test, there will be more than one correct response. Sample B is an example of this type of test question. For Sample B, fill in the two bubbles that go with the answers you choose. Be sure to fill in the bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample B.

Do not read the sample aloud.

The correct answers to Sample B are choices A and B.

Say Are there any questions?

Pause to answer any questions, then continue.

Say Now go to Sample C. For some questions in the test, there will be more than one part. Sample C is an example of a question which contains three parts. For Sample C, you will need to complete parts a, b, and c. Fill in the bubbles that go with the answers you choose. Be sure to fill in the bubbles completely and make your mark heavy and dark. If you want to change an answer, completely erase the mark you made before making a new mark.

Give students time to answer Sample C.

Do not read the sample aloud.

The correct answers to Sample C are

- a. N
- b. N
- c. Y

Say Are there any questions?

Pause to answer any questions, then continue.

Say Now go to Sample D. For some questions in the test, you will need to write your own response. Other questions on the test may contain blank lines for you to write your answer on. For Sample D, draw a point on the number line to show your answer.

Give students time to answer Sample D.

The correct answer to Sample D is a point placed at the line representing the number $1 \frac{2}{3}$.
SAY Are there any questions?
Pause to answer any questions, then continue.

SAY Now turn to page 2 in your test booklet. At the top of page 2, you'll find the directions for completing the grids. Feel free to refer back to this page as you work through Session 1. Now go to Sample E. For this type of question in the test, you will complete a grid. Read the question and work the problem to find an answer. Write your answer in the answer boxes at the top of the grid. Print your answer with the first digit in the answer box all the way to the left, OR with the last digit in the answer box all the way to the right. Print only one digit, decimal point, or fraction bar in each answer box. Do NOT leave a blank answer box in the middle of an answer. Fill in a bubble under each answer box that you used to write your answer. Fill in one and ONLY one bubble for each answer box. Fill in each bubble by making a solid mark that completely fills the bubble. You MUST fill in the bubbles to receive credit for your answer.

Give students time to answer Sample E.
The correct answer to Sample E is $\frac{3}{4}$ or 0.75.
Pause.

SAY At the top of page 3, you’ll see a completed answer key for the sample questions we just discussed. Check to be sure you correctly bubbled in your answers to the sample questions in your answer booklet. Any questions?

Pause.

SAY Read each problem carefully and follow the directions. You may do your work in this test booklet, but you must mark your answers in the answer booklet. No calculators are allowed in this session. You may also use the scratch and/or graph paper provided if you need more room to work the problems.

Pause.

SAY When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.
Are there any questions?
Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

**SAY** Turn to page 6 in your test booklet. You may begin.

Make sure that the students are on the correct page.
When the students have finished,

**SAY** Stop. This is the end of the Mathematics Summative Assessment, Session 1. Please close your test booklet and answer booklet.

Depending upon whether your school chooses to administer Sessions 1 and 2 in one test sitting or in two separate test sittings, TAs will need to adjust the following procedures.

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For those administering Sessions 1 and 2 in **separate** test sittings, collect all test materials and securely store until you begin Session 2.
HIGH SCHOOL, SESSION 2

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, graph paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet. Graphing calculators are allowed for Session 2.

| SAY | Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed. |

Pause to make sure the students have their own test booklet and answer booklet.

| SAY | Now, you will be taking Session 2 of the Mathematics Summative Assessment. Be sure to read each problem carefully and mark your answers in the answer booklet. You may NOT go back to Session 1 in your test booklet. Work through each problem in Session 2 only. You may use the scratch and/or graph paper provided if you need more room to work the problems. You may use a graphing calculator for this portion of the test. |

Pause.

| SAY | When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly. Are there any questions? |

Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.

| SAY | Turn to page 16 in your test booklet. Now turn to page 3 in your answer booklet. You may begin. |

Make sure that the students are on the correct page.

When the students have finished,

| SAY | Stop. This is the end of the Mathematics Summative Assessment, Session 2. Please close your test booklet and answer booklet. |

Collect all test materials.
HIGH SCHOOL, SESSION 3 (PERFORMANCE TASK)

Be sure that each student has his or her own test booklet, answer booklet, scratch paper, graph paper, and a sharpened No. 2 pencil with an eraser. Students will record their answers in their answer booklet. Graphing calculators are allowed for Session 3.

SAY

Look on the front cover of your test booklet and answer booklet. Make sure you have the test booklet and answer booklet with your name on it and not another student’s. Please do not open your test booklet until I tell you to do so. Make sure you are using a No. 2 pencil with an eraser when taking this test. Pens are not allowed.

SAY

In this session, you will complete a performance task. The performance task is made up of six questions and information that will help you answer the questions. First, you will read about the task you have been given. Then, you will answer the six questions. You may use scratch and/or graph paper to help you with this task, but be sure to answer the questions in the space provided in your answer booklet. You may use a graphing calculator to help you with this task. Open your test booklet to page 32. Now open your answer booklet to page 7. Please read the directions at the top of page 32 in your test booklet along with me as I read them aloud.

Pause to make sure the students have their own test booklet and answer booklet.

SAY

This session contains a performance task. Read the following information about your task. Then provide answers for each of the six problems that follow, referring back to this information as often as needed. Be sure to write your answers in your answer booklet.

You may NOT go back to Session 1 or Session 2 in your test booklet. Work through each problem in Session 3 only.

Pause.

SAY

When you come to the STOP symbol at the bottom of the page, you have finished this session. When you have finished, please close your test booklet and answer booklet and sit quietly.

Are there any questions?

Pause to answer any questions the students might have. When you are sure that the students understand the directions, continue.
SAY You may begin.

Make sure that the students are on the correct page.

When the students have finished,

SAY Stop. This is the end of the Mathematics Summative Assessment, Session 3. Please close your test booklet and answer booklet.

Collect all test materials.
PART 4: AFTER TESTING

ASSEMBLE MATERIALS FOR RETURN

After testing has been completed, prepare materials to be returned to the School Test Coordinator.

Check to make sure that all answer booklets have been removed from inside the test booklets.

Check answer booklets and test booklets to make sure there are no sticky notes, staples, pins, paper clips, or tape of any kind on any pages. Check to make sure that no scratch or graph paper was left inside the test booklets. Remove any extraneous material.

Only one answer booklet per student/content area may be submitted. If multiple answer booklets for any student are identified, please ensure that all responses are transcribed into a single answer booklet.

Make sure that responses for students taking the Braille or Large Print version of the test have been transferred to standard answer booklets or the Data Entry Interface (if applicable).

CHECKLIST FOR TEST ADMINISTRATORS

- Alphabetize both the test and answer booklets into a single stack. Remember to affix the student bar code label or complete the student-identifying information and return the booklets for all enrolled students, including those who do not participate in the Mathematics Summative Assessment, and for whom tests will be invalidated.

- Return the stack of alphabetized test and answer booklets to the School Test Coordinator.

- Bundle all unused materials together and return them to your School Test Coordinator.

- Bundle together all of the scratch and graph paper. This material is to be destroyed. Do not dispose of the scratch and graph paper by placing it in the trash.
PART 5: APPENDICES

APPENDIX A: UNIVERSAL TOOLS, DESIGNATED SUPPORTS, AND ACCOMMODATIONS

The Universal Tools, Designated Supports, and Accommodations Guidelines are intended for school-level personnel and decision-making teams, including Individualized Education Program (IEP) and Section 504 teams, as they prepare for and implement the Smarter Balanced Assessments. The Guidelines provide information for classroom teachers, English language development educators, special education teachers, and instructional assistants to use in selecting and administering universal tools, designated supports, and accommodations for those students who need them. The Guidelines are also intended for assessment staff and administrators who oversee the decisions that are made in instruction and assessment.

The Smarter Balanced Guidelines apply to all students. They emphasize an individualized approach to the implementation of assessment practices for those students who have diverse needs and participate in large-scale content assessments. The Guidelines’ focus is on universal tools, designated supports, and accommodations for the Smarter Balanced Assessments of English language arts/literacy and mathematics. At the same time, the Guidelines support important instructional decisions about and connection between accessibility and accommodations for students who participate in the Smarter Balanced Assessments. For some states, please reference the Universal Tools, Designated Supports, and Accommodations Guidelines for state-specific assessments, which is posted on your state portal.

If a school or district staff member identifies a designated support and/or accommodation that he or she believes should be offered, and that is not available, the school or district should provide that information to its State. The State will keep a list of all requested designated supports and accommodations and provide those annually to Smarter Balanced for evaluation.

The Summative Assessments allow for accommodations. Accommodation resources are defined in Table 3.
### Table 3: Definitions for Universal Tools, Designated Supports, and Accommodations

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accommodations</strong></td>
<td>Accommodations are changes in procedures or materials that increase equitable access during the Smarter Balanced Assessments. Assessment accommodations generate valid assessment results for students who need them; they allow these students to show what they know and can do. Accommodations are available for students with documented IEPs or 504 Plans. Consortium-approved accommodations do not compromise the learning expectations, construct, grade-level standard, or intended outcome of the assessments.</td>
</tr>
<tr>
<td><strong>Designated Supports</strong></td>
<td>Designated supports for the Smarter Balanced Assessments are those features that are available for use by any student for whom the need has been indicated by an educator (or team of educators with parent/guardian and student). It is recommended that a consistent process be used to determine these supports for individual students. Designated supports need to be identified prior to assessment administration.</td>
</tr>
<tr>
<td><strong>Universal Tools</strong></td>
<td>Universal tools are available to all students based on student preference and selection.</td>
</tr>
</tbody>
</table>
For the Smarter Balanced Paper-Pencil Assessment, the *Universal Tools, Designated Supports, and Accommodations* should be used to guide the use of all available universal tools, designated supports, and accommodations. Tables 4, 5, and 6 list and describe the resources that are available for the Smarter Balanced Paper-Pencil Assessment along with considerations for planning and administration.

Table 4: List and Description of Universal Tools Available to All Students

<table>
<thead>
<tr>
<th>Universal Tools</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breaks</td>
<td>Breaks may be given at predetermined intervals or after completion of sections of the assessment for students taking a paper-based test. Sometimes students are allowed to take breaks when individually needed to reduce cognitive fatigue when they experience heavy assessment demands. The use of this universal tool may result in the student needing additional overall time to complete the assessment.</td>
</tr>
<tr>
<td>Calculator (for calculator-allowed sessions only)</td>
<td>In sessions 2 and 3, students may use calculators with maximum functionality described in the table on page 10.</td>
</tr>
<tr>
<td>English glossary</td>
<td>Grade- and context-appropriate definitions of specific construct-irrelevant terms are provided with test materials for a student’s test form. Only glossaries provided with the test materials may be used.</td>
</tr>
<tr>
<td>Highlighter</td>
<td>A tool for marking desired text, item questions, item answers, or parts of these with a color.</td>
</tr>
<tr>
<td>Mark for review</td>
<td>Students may note items for further review after completing other items. Marks can be made in the test booklet to avoid stray marks in the answer booklet that may interfere with scoring.</td>
</tr>
<tr>
<td>Scratch paper</td>
<td>Scratch paper to make notes, write computations, or record responses may be made available. Graph paper is required beginning in sixth grade and can be used on all math sessions. A student can use an assistive technology device for scratch paper as long as the device is certified. Sessions 1 and 2: All scratch paper must be collected and securely destroyed at the end of each session to maintain test security. Performance Tasks: For performance tasks, if a student needs to take the performance task in more than one session, scratch paper may be collected at the end of each session, securely stored, and made available to the student at the next performance task testing session. Once the student completes the performance task, the scratch paper must be collected and securely destroyed to maintain test security.</td>
</tr>
<tr>
<td>Strikethrough</td>
<td>Students may cross out answer options in their test booklets.</td>
</tr>
</tbody>
</table>
Table 5: List and Description of Designated Supports

<table>
<thead>
<tr>
<th>Designated Supports</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color overlays</td>
<td>Color transparencies are placed over a paper-based assessment.</td>
</tr>
<tr>
<td>Magnification</td>
<td>Students may use magnifying devices or take a large print version of the test.</td>
</tr>
<tr>
<td>Masking</td>
<td>Students may be provided materials to block off content that is not of immediate need or that may be distracting to the student. Students are able to focus their attention on a specific part of a test item by masking.</td>
</tr>
<tr>
<td>Noise buffers</td>
<td>Ear mufflers, white noise, and/or other equipment used to block external sounds.</td>
</tr>
<tr>
<td>Read aloud (for math items)</td>
<td>Text is read aloud to the student by a trained and qualified human reader who follows the administration guidelines provided in the Online Test Administration Manual. All or portions of the content may be read aloud.</td>
</tr>
<tr>
<td>Scribe</td>
<td>Students dictate their responses to a human who records verbatim what they dictate. The scribe must be trained and qualified, and must follow the administration guidelines provided in the Online Test Administration Manual.</td>
</tr>
<tr>
<td>Separate setting</td>
<td>Test location is altered so that the student is tested in a setting different from that made available for most students.</td>
</tr>
<tr>
<td>Translations (glossaries)</td>
<td>Translated glossaries are a language support. Translated glossaries are provided for selected construct-irrelevant terms for math. Glossary terms are listed by item and include the English term and its translated equivalent.</td>
</tr>
<tr>
<td>Translations (stacked)</td>
<td>Stacked translations are a language support. Stacked translations are available for some students; stacked translations provide the full Spanish translation of each test item above the original item in English. Students requiring this support should be given the Spanish version of the math paper-pencil assessment. See the Usability, Accessibility, and Accommodations Guidelines, which is posted on your state portal, for a complete list of available languages.</td>
</tr>
<tr>
<td>Translated test directions</td>
<td>Translation of test directions is a language support available prior to beginning the actual test items. Students can see test directions in another language. As an embedded designated support, translated test directions are automatically part of the stacked translation designated support. See the Usability, Accessibility, and Accommodations Guidelines, which is posted on your state portal, for a complete list of available languages.</td>
</tr>
</tbody>
</table>
### Table 6: List and Description of Accommodations

<table>
<thead>
<tr>
<th>Accommodations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abacus</td>
<td>This tool may be used in place of scratch paper for students who typically use an abacus.</td>
</tr>
<tr>
<td>Alternate Response Options</td>
<td>Students with some physical disabilities (including both fine motor and gross motor skills) may need to use the alternate response options accommodation to respond to test items.</td>
</tr>
<tr>
<td>American Sign Language (ASL)</td>
<td>Test content is translated into ASL. ASL human signer signs the listening portions (say directions) of the test.</td>
</tr>
<tr>
<td>Braille</td>
<td>Graphic material (e.g., maps, charts, graphs, diagrams, and illustrations) is presented in a raised format (paper or thermoform). Contracted and non-contracted braille is available; Nemeth code is available for math. Please note that the response booklets will not be brailled. Administrators must transcribe student responses into the paper-pencil response booklets.</td>
</tr>
<tr>
<td>Calculator (for calculator-allowed sessions only)</td>
<td>A calculator for students needing a special calculator, such as a braille calculator or a talking calculator.</td>
</tr>
<tr>
<td>Multiplication Table (grade 4 and above math items)</td>
<td>A single-digit (1–9) multiplication table may be used by students with a persistent calculation disability. The multiplication table is located in Appendix D of this manual.</td>
</tr>
<tr>
<td>Read Aloud</td>
<td>Text is read aloud to the student by a trained and qualified human reader who follows the administration guidelines provided in the Online Test Administration Manual. All or portions of the content may be read aloud.</td>
</tr>
<tr>
<td>Scribe</td>
<td>Students dictate their responses to a human who records verbatim what they dictate. The scribe must be trained and qualified, and must follow the administration guidelines provided in the Online Test Administration Manual.</td>
</tr>
<tr>
<td>Speech-To-Text</td>
<td>Voice recognition allows students to use their voices as input devices to the computer, to dictate responses or give commands (e.g., opening application programs, pulling down menus, and saving work). Voice recognition software generally can recognize speech up to 160 words per minute. Students may use their own assistive technology devices.</td>
</tr>
</tbody>
</table>
APPENDIX B: ITEM TYPES

Item and Response Types

As students engage with the Smarter Balanced Assessments, they will be asked test questions that require them to respond in several ways, some of which may be new to students.

Smarter Balanced has produced resources that teachers and students can use to get ready for the test, including sample items and classroom activities (if applicable). The sample items will be administered by Test Administrators prior to the beginning of Session 1 of each test; completing these items will provide students an opportunity to view and practice each of the item types. More information on classroom activities (if applicable) can be found on page 12 of this manual.

Summary of Item Types and How to Provide Responses

Table 7 lists the different item types and briefly describes each one.

Not all assessments will necessarily include all item types.

<table>
<thead>
<tr>
<th>Type of Item</th>
<th>Brief Description of Item Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple-choice</td>
<td>3- and 4-option multiple-choice</td>
</tr>
<tr>
<td>Multiple-select responses</td>
<td>Multiple option selected response</td>
</tr>
<tr>
<td>Grid in</td>
<td>Numeric values entered in grid</td>
</tr>
<tr>
<td>Matching tables</td>
<td>Respond to a series of 2–4 statements/questions and bubble in a response for each</td>
</tr>
<tr>
<td>Constructed-response items</td>
<td>Write equation, plot points, fill in tables, explanations, etc.</td>
</tr>
</tbody>
</table>
# APPENDIX C: FREQUENTLY USED TERMS

Table 8 defines terms that are specific to the Smarter Balanced Assessments.

## Table 8: Frequently Used Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation</td>
<td>Changes in procedures or materials that increase equitable access during the Smarter Balanced Assessments. Assessment accommodations generate valid assessment results for students who need them; they allow these students to show what they know and can do. Accommodations are available for students with documented Individualized Education Programs (IEPs) or 504 Plans. Consortium-approved accommodations do not compromise the construct, grade-level standards, or intended outcome of the assessments. See the <em>Usability, Accessibility, and Accommodations Guidelines</em> on your state portal for complete information.</td>
</tr>
<tr>
<td>Appeal</td>
<td>Authorized users may submit and view requests for resetting, reopening, or invalidating students’ assessments in accordance with state policy. These requests must result from a test security incident or incorrect test setting that impacted testing. All requests must be approved by a state education agency representative.</td>
</tr>
<tr>
<td>Break</td>
<td>A student may be provided breaks within a test session as needed. The number of items per session can be flexibly defined based on the student’s need. Students may move about the classroom or take a short break outside to refocus. Students can take breaks during PT test sessions. Please see section 7.3 Testing Time and Recommended Order of Administration of the Test Administration Manual.</td>
</tr>
<tr>
<td>Classroom Activity (If Applicable)</td>
<td>A short, teacher-led activity designed to introduce students to the context and contextual vocabulary in the PT to ensure that students are not disadvantaged in demonstrating the skills the task intends to assess. A Test Administrator (TA) or other authorized staff can lead the Classroom Activity (if applicable). The corresponding Classroom Activity (if applicable) is required before the PT portion of the test. The PT should be administered within three days after the Classroom Activity (if applicable). The Classroom Activity (if applicable) should not be supplemented with any other content that the administrator may think is helpful because doing so may detract from the intended purpose of the Classroom Activity (if applicable).</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Designated Supports</td>
<td>Accessibility resources of the assessments available for use by any student for whom the need has been indicated by an educator (or team of educators working with the parent/guardian and student). See the <em>Usability, Accessibility, and Accommodations Guidelines</em> posted on your state portal for complete information.</td>
</tr>
<tr>
<td>District Test Coordinator (DC)</td>
<td>District-level staff member who is responsible for the overall administration of the summative assessment in a district. DCs should ensure that the School Test Coordinators (SCs) and TAs in their districts are appropriately trained and aware of policies and procedures. In the event there is no DC, another designated individual will be assigned these responsibilities by the State.</td>
</tr>
<tr>
<td>Invalidation</td>
<td>A specific appeal in the Appeals system. Invalidating a test in the Appeals system results in the omission of test results and student responses. Invalidation is often the outcome for assessments impacted by a test security incident. Permission for an invalidation is initiated through the Appeals process.</td>
</tr>
<tr>
<td>Item</td>
<td>A test question or stimulus presented to a student to elicit a response.</td>
</tr>
<tr>
<td>Performance Task (PT)</td>
<td>A PT is an item type designed to provide students with an opportunity to demonstrate their ability to apply their knowledge and higher-order thinking skills to explore and analyze a complex, real-world scenario. It is a required portion of the test.</td>
</tr>
<tr>
<td>School Test Coordinator (SC)</td>
<td>School staff member responsible for monitoring the test schedule, process, and TAs. SCs are also responsible for ensuring that TAs have been appropriately trained and that testing is conducted in accordance with the test security and other policies and procedures established by the Smarter Balanced Assessment Consortium.</td>
</tr>
<tr>
<td>Session</td>
<td>A timeframe in which students actively test in a single sitting. The length of a test session is determined by building or district administrators who are knowledgeable about the periods in the building and the timing needs associated with the assessment. Smarter Balanced recommends that session durations range between 15 and 90 minutes. However, Smarter Balanced Assessments are not timed, and an individual student may need more or less time overall. Further, individual students will have unique needs regarding the length of a test session.</td>
</tr>
<tr>
<td>State Student ID Number (SSIDs)</td>
<td>A statewide, unique student identifier. In some cases, this may be the same identifier used on other state assessments.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Stimulus/Stimuli</td>
<td>Material or materials used in the test context which form the basis for assessing the knowledge and skills of students. Many items/tasks for the assessments include a stimulus along with a set of questions to which the student responds. Stimulus materials are used in mathematics assessments to provide context for assessing the knowledge and skills of students and are diverse. They can be traditional reading passages/texts for students to use for research or scenarios to react to.</td>
</tr>
<tr>
<td>Test Administrator (TA)</td>
<td>District or school personnel responsible for administering the Smarter Balanced Assessments in a secure manner in compliance with the policies and procedures. The Smarter Balanced Assessments should be administered by individuals with an existing state certification in education (e.g., teachers, school psychologists, principals, etc.). Expanding the TA role to other individuals who receive the required test administration trainings is a decision made at the state level in accordance with state policy, protocol, or guidelines.</td>
</tr>
<tr>
<td>Test Security Incident</td>
<td>For additional information about security protocols, refer to Section 3.0 Test Security of the Online Administration Manual.</td>
</tr>
<tr>
<td>Testing Breach</td>
<td>An event that poses a threat to the validity of the test. Examples may include such situations as a release of secure materials or a security/system risk. These circumstances have external implications for the Consortium and may result in a Consortium decision to remove the test item(s) from the available secure bank. A breach incident must be reported to the District Test Coordinator (DC) and School Test Coordinator (SC) immediately. For specific details on how to proceed when an incident has occurred, please refer to Section 4.0 of the Responding to Testing Improverties, Irregularities, and Breaches of the Online Test Administration Manual.</td>
</tr>
<tr>
<td>Testing Impropriety</td>
<td>An unusual circumstance that has a low impact on the individual or group of students who are testing and has a low risk of potentially affecting student performance on the test, test security, or test validity. These circumstances can be corrected and contained at the local level. For specific details on how to proceed when an incident has occurred, please refer to Section 4.0 of the Responding to Testing Improperities, Irregularities, and Breaches of the Online Test Administration Manual.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Testing Irregularity</td>
<td>An unusual circumstance that impacts an individual or group of students who are testing and may potentially affect student performance on the test, test security, or test validity. These circumstances can be corrected and contained at the local level and submitted in the online Appeals system for resolution. For specific details on how to proceed when an incident has occurred, please refer to Section 4.0 Responding to Testing Improprieties, Irregularities, and Breaches of the Online Test Administration Manual.</td>
</tr>
<tr>
<td>Universal Tools</td>
<td>Tools available to all students based on student preference and selection. See the Usability, Accessibility, and Accommodations Guidelines on your state portal for complete information.</td>
</tr>
</tbody>
</table>
APPENDIX D: MULTIPLICATION TABLE

A single-digit (1–9) multiplication table is a non-embedded accommodation for grades 4 and above mathematics items. The multiplication table is to be used only for students with a documented and persistent calculation disability (i.e., dyscalculia). This table can be printed for students requiring this accommodation.

<table>
<thead>
<tr>
<th>x</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
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<td>2</td>
<td>4</td>
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<td>10</td>
<td>12</td>
<td>14</td>
<td>16</td>
<td>18</td>
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<td>6</td>
<td>9</td>
<td>12</td>
<td>15</td>
<td>18</td>
<td>21</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>16</td>
<td>20</td>
<td>24</td>
<td>28</td>
<td>32</td>
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<td>18</td>
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<td>30</td>
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<td>14</td>
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<td>28</td>
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<td>49</td>
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<td>63</td>
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<tr>
<td>8</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>32</td>
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<tr>
<td>9</td>
<td>9</td>
<td>18</td>
<td>27</td>
<td>36</td>
<td>45</td>
<td>54</td>
<td>63</td>
<td>72</td>
<td>81</td>
</tr>
</tbody>
</table>
APPENDIX E: INSTRUCTIONS FOR ADMINISTERING BRAILLE AND LARGE PRINT

GENERAL

Test Administrators must provide users of both the Braille and Large Print versions of the test with sufficient time to complete the test. The Test Coordinator should provide Test Administrators with Braille and Large Print test kits as appropriate. The following materials are included in the Braille and Large Print test kits:

Braille test kits

- a cover sheet;
- a copy of these instructions;
- a grade-appropriate version of the following: a regular test booklet, a plastic-bound Braille test booklet, an answer booklet (if applicable), and a packet of ancillary materials (transcriber’s notes) on the inside back cover of the Braille booklets.

Large Print test kits

- a cover sheet;
- a copy of these instructions;
- a grade-appropriate version of the following: a Large Print test booklet, a Large Print answer booklet (if applicable), and a regular answer booklet (if applicable).

STUDENT IDENTIFICATION

Print the student’s name; county, district, and school code; and school name on the cover of the Braille or Large Print test booklet. Please note that responses in these test booklets will not be scored. All responses must be transcribed by the Test Administrator into the regular answer booklet or entered into the Data Entry Interface. If responses are not transcribed into a regular answer booklet or entered into the Data Entry Interface, they cannot be scored. Regular answer booklets are enclosed in the Braille or Large Print kit. Ensure that the student’s name is written on the regular answer booklet and affix the Pre-ID label to the front of the regular answer booklet and the Large Print answer booklet (if applicable). Note that when Large Print answer booklets are used, responses must still be transcribed into a regular answer booklet or entered into the Data Entry Interface (if applicable) in order to be scored.

INSTRUCTIONS

The administration directions that appear in the Paper-Pencil Test Administration Manual should be the basis for administering the Braille and Large Print versions of the test. However, some modifications to these instructions are required. The Test Administrator, with the assistance of the Test Coordinator, should review these directions before administering a Braille or Large Print test, and modify the instructions as needed considering specifications in the student’s IEP.
The Test Administrator should use the regular test booklet to answer questions about the directions that are included in the test. However, the Test Administrator must not read or interpret any test questions for the student. The regular test booklet is not to be copied or used for any purpose other than to administer the test. The school security checklist must be used to record the distribution and collection of the Braille, Large Print, and regular test booklets.

TIMING
Test Administrator must provide users of both the Braille and Large Print versions of the test with sufficient time to complete the test.

RECORDING ANSWERS
Students with disabilities have the option to use accommodations for providing responses on this assessment. These accommodations allow students with disabilities to provide oral responses, taped responses, or written responses on paper besides the answer sheet provided with the assessment. These responses are then transcribed onto the regular answer booklet so that they can be scored. If responses are not transcribed into a regular answer booklet or the Data Entry Interface (if applicable) they cannot be scored. The following guidelines must be followed to ensure accurate and fair transcription of student responses:

• All test materials and student responses are to be considered secure and confidential.
• Only persons who know Braille should transcribe Braille responses.
• Transcribers should be impartial and have no vested interest in student scores.
• Transcriptions of student responses must be identical to what the student provides, including grammar, punctuation, and spelling. If a student provides an incomplete response, the transcription must match that incomplete response exactly.
• Transcriptions should be proofread by a second impartial party to confirm accuracy. For cases where students have provided a graphic in a response, two transcribers should collaborate to transfer the response.
• When transcription is complete, student responses must be securely destroyed.
• Do not dispose of student responses by placing them in the trash.

The Test Administrator must provide written affirmation to the Test Coordinator that student responses have been completed on the Student Answer Booklet with fidelity. Under no circumstances should a student’s answer be altered or edited—to do so is a direct violation of test security.

RETURNING TEST MATERIALS
Keep the transcribed answer booklet with the other used student answer booklets from the student’s class. Return with scorable materials. Collect all regular test booklets, Braille or Large Print test booklets, and Large Print answer booklets (if applicable). Return with non-scorable materials.
APPENDIX F: RECEIPT OF TEST MATERIALS AT A CENTRAL DISTRICT LOCATION OR AT AN INDIVIDUAL SCHOOL (BASED ON EACH STATE’S ORGANIZATIONAL STRUCTURE)

- Districts will be served by FedEx for receipt and return of materials, unless otherwise communicated.
- Test materials will arrive at the district in boxes labeled with the Test Coordinator’s name and shipping address. Each box label references the school name and is sequentially numbered.
- When test materials arrive, open the white, district Box 1. It contains a Box List, the District Packing List, District Security Checklist, copies of the School Packing List(s), the Return Kit, and other administrative material. This box may also contain secure test materials; please refer to the packing list.
- Find the District Packing List and School Packing List(s). Use these sheets to sort boxes by building and verify that you have received all of the boxes. If you have not received all of the boxes indicated, please call the AIR Help Desk.
- Test materials are packaged by school and supplied based on the enrollment/material orders or the pre-ID information submitted. The district overage materials are packaged separately. They are to be used if any school needs additional or replacement materials. Note: Materials are linked to your district and should not be shared with other districts.
- Distribute materials to the School Test Coordinators as early as possible to allow for timely replacement of damaged or missing items. Remind staff to save the boxes the test materials arrived in to use for returning test materials after the test administration.
- Find your District Security Checklist. Use the District Security Checklist to verify your district overage. The serial numbers of all secure materials sent with the original order are recorded on the security checklist. Verify your overage as soon as possible after distributing materials to the buildings. Do NOT open any shrink-wrapped packages of test booklets that are not intended for immediate use at this time.
- Find your Return Kit. It is in a clear plastic bag that can be found in the white district box. This kit contains:
  - Green scorable and red non-scorable return labels
  - FedEx return shipping labels
  - Return shipping instructions
- Instruct school coordinators on the procedures for collecting and accounting for test materials. Communicate provisions for locked, secure overnight storage of all test materials. Monitor this process throughout testing.
RECEIPT OF TEST MATERIALS IN SCHOOLS

• Receive test material shipment. Each box label references your school name and is sequentially numbered.

• When test materials arrive, open Box 1, which contains the following:
  • Box List
  • School Packing List
  • School Security Checklist
  • Pre-ID labels and/or print-on-demand labels
  • DO NOT SCORE labels (note the DO NOT SCORE labels for each grade appear on the banner page for each grade)
  • Return Kit

• Box 1 may also contain secure test materials. Please refer to your School Packing List.

• Find your School Security Checklist. Use the School Security Checklist to verify your school order. The serial numbers of all secure material sent with the original order are recorded on the security checklist. **Do NOT open any shrink-wrapped packages of test booklets that are not intended for immediate use at this time.**

• Compare types and quantities of materials received with your testing needs. **Report any discrepancies to the AIR Help Desk immediately.**

• Find your Return Kit. It is in a clear plastic bag. This kit contains:
  • Green scorable and red non-scorable return labels
  • FedEx return shipping labels
  • Return shipping instructions

• Place test materials in locked, secure storage.

• Save the box(es) your test materials were delivered in for returning materials when testing is completed.

• Conduct test orientation activities. Provide a copy of the appropriate Test Administration Manual (TAM) or Directions for Administration (DFA), which is posted on the portal. Do not distribute copies of secure test materials at this time.

• Instruct test administrators on the procedures for collecting and accounting for test materials. Communicate provisions for locked, secure overnight storage of all test materials. Monitor this process throughout testing.
APPENDIX G: PACKING MATERIALS FOR RETURN

Districts and schools are encouraged to return materials as early as possible following testing to expedite the scoring process. All test materials must be returned to Measurement Incorporated (MI) no later than one week after testing is complete. The Test Coordinator is responsible for arranging test materials pickup. Contact the AIR Help Desk (see Customer Service section of Test Administration Manual) if there are any problems packing or arranging for pickup.

PREPARATION:

• Identify any damaged or biohazard materials.
  • Responses from biohazard answer booklets should be transcribed into a clean answer booklet. Contact the AIR Help Desk to report biohazard answer booklets. Reported booklets can be securely destroyed according to state or district policies.
  • Place a rubber band around any damaged booklets.

• Separate scorable, non-scorable, secure, and non-secure materials:
  • Organize scorable answer booklets (if applicable) into separate stacks by grade, then by subject.
  • Verify all Braille and Large Print responses have been transcribed. If responses are not transcribed into a regular answer booklet or the Data Entry Interface (if applicable) they cannot be scored. A Pre-ID label must be affixed to the front cover of the regular answer booklet. Verify the student’s name, test administrator, school, and district appear correctly on the front cover of the test booklet. Keep the transcribed answer booklet with the other scorable answer booklets organized by grade/subject.
  • Place a DO NOT SCORE label on individual non-scorable (i.e., blank, Pre-ID labeled) answer booklets. Shrink-wrapped, unused answer booklets and individual unused answer booklets without Pre-ID labels do not require DO NOT SCORE labels. Sort test booklets with non-scorable materials.
  • Non-secure materials include unused print-on-demand Pre-ID and box labels, printed test administration manuals, and directions for administration (if applicable).

PACKING SCORABLE MATERIALS:

• Pack answer booklets in the same boxes in which materials were shipped. If these boxes are not available, use sturdy boxes to return the materials. Copier paper boxes and boxes used for food transportation should not be used. Sturdy boxes are capable of holding 65-95 pounds without collapsing when handled or stacked. Use cushioning materials, if needed, to keep materials secure.
  • A grade level/subject area for a school should not be split across boxes (e.g., all of grade 3 mathematics for a school should be in the same box).
• After you have filled the first box, affix a green scorable label to the top of this box and mark it “1.” The scorable label has a place to mark the number of each box and the total number of boxes being returned. For example, if you have five boxes, mark them “1 of 5,” “2 of 5,” and so on.

• Continue packing, affixing a green scorable label to the top of each box containing scorable answer booklets.

• Seal the top and bottom of all boxes with three strips of plastic shipping tape.

PACKING NON-SCORABLE SECURE MATERIALS:

• Pack all test booklets and unused answer booklets securely in boxes. Include Large Print and Braille test booklets, Large Print answer booklets, printed copies of the ELA Test Administration Listening Transcript, Read-Aloud CDs, and Foreign Language CDs, if applicable.

• Affix a red non-scorable label to the top of all boxes containing non-scorable secure materials. Record the number of each non-scorable box and the total number of non-scorable boxes on the labels.

NON-SECURE MATERIALS

• The following materials should not be returned to MI. Discard these materials according to state or district policies.

• Unused print-on-demand Pre-ID and return shipping box labels

• Printed test administration manuals and directions for administration (if applicable).

RETURN PROCEDURES

Instructions for Returning Materials

Remove or black out any old shipping labels, including the original shipping barcode, and ensure boxes are sealed securely with shipping tape.

FEDEX PICKUP

1) Affix the FedEx ground return label (from the Return Kit) directly on top of the original address label. If additional labels are needed contact the AIR Help Desk. You must use the return shipping labels provided to you in order to guarantee that your boxes can be accurately tracked when you ship them to MI.

2) Print the district name and address in the space provided on the return label.

3) Retain the receipt tab from the top of the return label for your records. Boxes can be tracked online at www.fedex.com or by calling 1-800-463-3339.

4) Contact FedEx to arrange a pickup of your materials. There is no prescheduled pickup day. Materials must be returned no later than one week after testing is complete. Have your receipt tab(s) handy when you make your request. Initiate a return using one of the following methods:
• Use www.fedex.com: select “Ship,” then select “Schedule and Manage Pick-ups” from the drop down menu, then click “Schedule Ground Return Pickup.”

• Call FedEx Customer Service: 1-800-463-3339; explain that you need a “Package Returns Program” pickup.

• Provide materials to your regular FedEx Ground driver.

COURIER PICKUP

1) Courier pickups have been arranged for special circumstances. You should return materials via FedEx unless notified by your state or district that materials are to be returned via courier.

2) Ensure materials have been packed as described in the Packing Materials for Return section. Materials must be ready for pickup by the courier by 8:00 AM on the date communicated by your state or district.

Contact the AIR Help Desk if there are any problems packing or arranging for pickup.

Security Check-In Process

Timely return of materials is essential for scoring and reporting of results. Security reports will be generated after the time materials are due back to MI. Security reports provide a breakdown of secure materials by district, school, and item, and include barcodes for any missing items. MI may contact districts via email and/or phone regarding missing secure materials. MI also works with state departments of education to document and recover missing secure materials.
APPENDIX H: MATH PAPER-PENCIL CLASSROOM ACTIVITIES (IF APPLICABLE)

These are the grade-based Math Paper-Pencil Classroom Activities that should be used before administration of Performance Tasks.

Important Note: The use of Classroom Activities for the 2016 Summative administration is a state-specific decision. Refer to your state’s Online Test Administration Manual for more details.
The Classroom Activity introduces students to the context of a performance task, so they are not disadvantaged in demonstrating the skills the task intends to assess. Contextual elements include: an understanding of the setting or situation in which the task is placed, potentially unfamiliar concepts that are associated with the scenario, and key terms or vocabulary students will need to understand in order to meaningfully engage with and complete the performance task. The Classroom Activity is also intended to generate student interest in further exploration of the key idea(s). The Classroom Activity should be easy to implement with clear instructions.

Please read through the entire Classroom Activity before beginning the activity with students to ensure any classroom preparation can be completed in advance.

Resources needed: None

Learning Goal:

- The student will understand the context of the key ideas related to the topic.
  - Types of books
  - Space of a shelf
School Library Classroom Activity

[Purpose: The facilitator's goal is to help students understand how to organize types of books on a shelf.]

Facilitator says: “Today, in preparation for your performance task, we are going to talk about organizing types of books on shelves in a library.”

Facilitator says: “What is your favorite type of book to read?” [Allow time for student responses. Facilitator can mention specific topics such as mystery, sports, comedy, animals, and others the students might recognize.]

Facilitator says: “When you go to the library, how do you find your favorite type of book?” [Allow time for student responses. If no student response, facilitator should mention that books are grouped by type and they are kept in certain sections of the library.]

Facilitator says: “Books are organized in the library by their topic or type. Types of books are kept together on a shelf.”

Facilitator says: “What types of shelves do you see in a library?” [Allow time for student responses. If no response, discuss the different types of bookshelves, for example, a bookshelf has three shelves or two shelves, or they can be tall or wide.]

Facilitator says: “The shelves typically only hold a certain number of books. You may only find one type of book on a shelf or you may find multiple types of books on a shelf.”

Possible class discussion questions (unscripted):

- Would you put a large group of books on the shelf first or a small group of books?
- How would you know if a shelf was full?
- How would you know if you could add more books?

Facilitator says: “Today we discussed types of books and how they are organized on shelves in a school library. These ideas may help you when you complete your performance task.”

Facilitator says: “Does anyone have any questions?” [Allow for student questions.]

Facilitator says: “You are ready to complete the School Library Performance Task.”
The Classroom Activity introduces students to the context of a performance task, so they are not disadvantaged in demonstrating the skills the task intends to assess. Contextual elements include:

- an understanding of the setting or situation in which the task is placed, potentially unfamiliar concepts that are associated with the scenario, and key terms or vocabulary students will need to understand in order to meaningfully engage with and complete the performance task. The Classroom Activity is also intended to generate student interest in further exploration of the key idea(s). The Classroom Activity should be easy to implement with clear instructions.

Please read through the entire Classroom Activity before beginning the activity with students to ensure any classroom preparation can be completed in advance.

Resources needed:
- Each student should have access to a piece of paper and writing tools\(^1\)
- Some method of displaying images\(^2\)
- Whiteboard or some manner of recording student responses

Resources Provided:
- Resource Documents
  - Figure 1. Planter Box Image
  - Figure 2. Planter Box Picture
  - List 1. Parts of a Community Garden
  - Descriptions for Parts of a Garden

Learning Goal:
- The student will understand the context of the key ideas related to the topic:
  - Gardening
  - Plants
  - Examples of plants that are used as food. (The initial part of this classroom activity asks students to think of examples of parts of plants that are used in their favorite foods, e.g. tomatoes in tomato sauce or ketchup. This is intended to engage students.)
- The student will understand the following vocabulary:
  - Garden: a piece of ground, often near a house, used for growing flowers, fruit, or vegetables.
  - Planter boxes: wooden boxes used to grow plants above ground
  - Tool shed: a small building for storing tools
  - Walkway or Path: clear and open area for walking (no plants to block walking)
  - Fencing: wall surrounding the garden, usually made of wood or metal
  - Weeds: unwanted plants that invade the garden

Definitions are provided here for the convenience of facilitators. Students are expected to understand these key terms as they arise in the context of the task, not to be able to recite the definitions.

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\(^1\) Students who need an accommodation may use their preferred tool for writing.
\(^2\) Instead of displaying Figures 1 and 2, handouts can be given to students if the facilitator chooses.
Community Garden Classroom Activity

**Purpose:** The facilitator’s goal is to help students understand what a garden is and what a community garden is. The activities are presented with suggested text for the facilitator.

**Facilitator says:** “Today in preparation for your performance task, we are going to talk about a community garden. To get ready for this task, we are going to look at the parts of a community garden. Who can describe what a garden is?” [Allow for student responses. If they are unable to describe, prove the meaning of garden. A garden is a piece of ground, often near a house, used for growing flowers, fruit, or vegetables.]

**Facilitator says:** “What do you think we mean by a ‘community garden’? Talk with your neighbor for two minutes.”

[Students should talk in pairs. The following section can be modified to accommodate various teacher-student interaction types such as a teacher-led discussion with the entire class, teacher-student discussion for remote locations with a single student, or small groups.]

**Facilitator says:** “Who would like to share?” [Call on two or three students to share and record answers on the chalkboard/whiteboard/poster paper. After recording responses, summarize student thinking to arrive at the definition of a community garden. If necessary, provide this definition: “A community garden is a garden that many people in a community or neighborhood create and take care of together to grow plants such as fruits and vegetables.”]

**Facilitator says:** “If you were going to grow a garden with other people, you would want to be sure it would contain things that you would like to eat. What might you grow in a garden that could contribute to some of your favorite foods?”

**Facilitator says:** “Talk with your partner for two minutes about what you would like grow in the garden as a part of your favorite food. You may list more than one food. Tell your neighbor why this is your favorite food.” [Students should talk in pairs. Allow student partners two minutes to discuss their favorite foods. You may walk around to monitor and listen to student discussions.]

**Facilitator says:** “Who would like to share?” [Call on three to four pairs of students to share and record their responses about what they would like to grow in the garden on the chalkboard/whiteboard/poster paper.]

**Facilitator says:** “Now that we have some ideas about what we would like to grow in a community garden, let’s discuss some things that are often found in a garden.”

[Facilitator should display List 1. Parts of a Community Garden on whiteboard or other method.]

**List 1. Parts of a Community Garden**
- Garden
- Planter boxes
- Tool shed
- Walkway or Path
- Fencing
- Weeds
Facilitator says: “Talk with your neighbor about what you think these things are and why you might want them to be part of your garden. You will have three minutes before we come back as a whole class.”

Facilitator says: “Who would like to share?” [Call on one pair of students for each of the four items beginning with planter boxes. A basic description for each item is provided in the resource documents.]

Facilitator says: “What are some things you would not want to have in your garden? [Discuss weeds, or unwanted plants that invade the garden. Tell students that removing weeds from a garden is called ‘weeding’.]”

Possible class discussion questions (unscripted):
- What’s the benefit of using planter boxes?
- Why would you want a walkway in your garden?
- Why would you want fencing around your garden?
- Why would you remove weeds?
- Why would you have a community garden rather than an individual garden? Who might you share the garden with?

[No resolution is needed for these questions. Questions are to increase student interest and to promote discussion regarding the topic.]

Facilitator says: “Today, we learned about community gardens and items found in a garden. These ideas may help you when you complete your performance task.”

Facilitator says: “Are there any questions?” [Allow for student questions.]

Facilitator says: “You are ready to complete the Community Garden Performance Task.”
Resource Documents

Figure 1. Planter Box Image

[Picture Description: Figure 1 shows a tomato plant with many leaves and tomatoes on it. The plant is growing in a planter box made of wood. Some of the soil that fills the planter box can be seen on the corners of the box.]

Figure 2. Planter Box Picture

[Picture Description: Figure 2 shows two wooden planters filled with soil. Several different plants are being grown on the planters.]
Resource Documents

List 1. Parts of a Community Garden
- Garden
- Planter boxes
- Tool shed
- Walkway or Path
- Fencing
- Weeds

Descriptions for Parts of a Garden
- **Planter boxes**: wooden boxes used to grow plants above ground
- **Tool shed**: a small building for storing tools
- **Walkway or Path**: clear and open area for walking (no plants to block walking)
- **Fencing**: wall surrounding the garden, usually made of wood or metal
The Classroom Activity introduces students to the context of a performance task, so they are not disadvantaged in demonstrating the skills the task intends to assess. Contextual elements include: an understanding of the setting or situation in which the task is placed, potentially unfamiliar concepts that are associated with the scenario, and key terms or vocabulary students will need to understand in order to meaningfully engage with and complete the performance task. The Classroom Activity is also intended to generate student interest in further exploration of the key idea(s). The Classroom Activity should be easy to implement with clear instructions.

Please read through the entire Classroom Activity before beginning the activity with students to ensure any classroom preparation can be completed in advance.

Resources needed:
- Each student should have access to a piece of paper and writing tool
- Some method of displaying images and/or ancillary materials
- Whiteboard or some manner of recording student responses

Resources Provided
- Resource Documents
  - Figure 1. Timber Sandbox
  - Figure 2. Concrete Sandbox

Learning Goal:
- The student will understand the context of key ideas related to the topic.
- The student will understand the following vocabulary:
  - Timber - long, thick rectangular pieces of wood
  - Concrete - a liquid mixture which is poured and then hardens to form a hard structure
  - Inside dimensions - a set of measurements telling the size of something; such as length, width and height along the inside frame of a sandbox
  - Outside dimensions - a set of measurements telling the size of something; such as length, width and height along the outside frame of a sandbox

Definitions are provided here for the convenience of facilitators. Students are expected to understand these key terms as they arise in the context of the task, not to be able to recite the definitions.

1 Students who need an accommodation may use their preferred tool for writing.
2 Instead of displaying the ancillary materials at the end of this document, they may be used as handouts for student.
Sandbox Classroom Activity

[Purpose: The facilitator’s goal is to help students understand the planning involved in the construction of a sandbox.]

Facilitator says: “Today, we will get ready for the Sandbox Performance Task. This task is about building a sandbox.”

Facilitator says: “Who has played in a sandbox when you were younger or perhaps played in the sand at a beach or lake?” [Allow time for student responses.]

Facilitator says: “Does anyone have a younger brother or sister or know of a younger child that plays in a sandbox?” [Allow time for student responses.]

Facilitator says: “Sandboxes are great for children. You may not know it, but some schools use sandboxes as a place to conduct science experiments.”

Facilitator says: “I would like for you to imagine that you are asked to build a sandbox.”

Facilitator says: “What would you like to know about building a sandbox?” [Allow time for student responses.]

Facilitator says: “Sandboxes can be built in different styles and with different types of materials.”

Facilitator says: “What if you could only use wood, plastic, or concrete to build a sandbox? Would the type of material used make a difference in how you designed the layout of the sandbox?”

[Allow time for student responses. Lead students to understand that type of material does matter. You need to know how much material you have to work with. The amount of material you have influences the size of the sandbox that you can build. The type of material you use to build the sandbox affects the method you use to build the sandbox. Sides of a wooden sandbox can be nailed together. Sides of a sandbox made out of plastic or concrete must be poured into a form and allowed to harden.]

Facilitator says: How would the location of the sandbox affect the design?

[Allow time for student responses. Lead students to understand that the location must have enough space available for the design. Location can limit the size and shape of a sandbox that can be built in the space available. The sandbox must be able to fit within a location.]

Possible class discussion question (unscripted):

- What shape would you use for a sandbox if you were building one for a science class?

[Allow time for student responses.]

[Facilitator distributes a copy of the resource materials for the classroom activity to each student; or, facilitator displays a copy of resource materials for all to see.]
Facilitator says: “As we have discussed, sandboxes can be built using many different kinds of materials.”

Facilitator says: “Figure 1 shows a square sandbox built out of timbers. Timbers are long, thick, rectangular pieces of wood. The timbers in this picture appear to be about 6 feet long, 4 inches wide and 4 inches tall.”

Figure 1. Timber Sandbox

[Picture Description: This picture shows a square sandbox built out of timbers. Timbers are long, thick, rectangular pieces of wood. The timbers in this picture appear to be about 6 feet long, 4 inches wide and 4 inches tall. Inside the sandbox is a pile of sand.]

Facilitator says: “Figure 2 shows a sandbox built out of concrete. The concrete walls are thick. They appear to be about 8 inches wide and 8 inches tall.”

Figure 2. Concrete Sandbox

[Picture Description: This picture shows a sandbox built out of concrete. The concrete walls are thick. They appear to be about 8 inches wide and 8 inches tall. There is a girl inside the sandbox playing with the sand.]

Facilitator says: “Can you name something else that is made out of concrete?”

[Review all answers. Facilitator can help students identify other common examples such as steps, concrete blocks, and swimming pools.]
Facilitator says: “All sandboxes have what we call inner and outer dimensions.”

Facilitator says: “Can anyone explain what I mean when I talk about the inner and outer dimensions of a sandbox?”

[Review all answers. Lead students to key concepts: Inner dimensions mean length, width and height measurements that you get when you measure along the inside wall of the sandbox. Outer dimensions mean the length, width and height measurements that you get when you measure along the outside wall of the sandbox.]

[Facilitator should demonstrate the concept of inner and outer dimensions by visually running a pointer or finger along the inside and outside walls of the sandbox in Figure 1.]

[Facilitator draws a large rectangle on a chalkboard or other display method.]

Facilitator says: “Let’s pretend the large rectangle I just drew is the outside of a sandbox.”

Facilitator says: “Who would like to draw a smaller rectangle inside this sandbox?”

Facilitator says: “Which dimensions do you think are represented by the inner rectangle?”

[Allow students to respond. Facilitator leads students to recognize that the smaller rectangle represents the inner dimensions of the sandbox.]

Facilitator says: “Which dimensions are represented by the outer rectangle?”

[Allow students to respond. Facilitator leads students to recognize that the larger rectangle represents the outer dimensions of the sandbox.]

Facilitator says: “Which do you think are the larger dimensions — the inner or outer dimensions of a sandbox?” [Review all answers.]

Possible class discussion questions (unscripted):

- Why do you think the inner and outer dimensions differ?
- What causes the difference between inner and outer dimensions of a sandbox?

Facilitator says: “Today we talked about things we need to know in order to plan and construct a sandbox. We talked about how sandboxes can be built out of many different types of materials, especially timbers and concrete. We talked about inner and outer dimensions of sandboxes and the difference between the two types of measurements. These ideas may help you when you complete your performance task.”

Facilitator says: “Does anyone have any questions?” [Allow time for student questions.]

Facilitator says: “You are ready to complete the Sandbox Performance Task.”
Resource Materials

[Note: For students who are visually impaired, describe the process orally.]

Figure 1. Timber Sandbox

[Picture Description: This picture shows a square sandbox built out of timbers. Timbers are long, thick, rectangular pieces of wood. The timbers in this picture appear to be about 6 feet long, 4 inches wide and 4 inches tall. Inside the sandbox is a pile of sand.]

Figure 2. Concrete Sandbox

[Picture Description: This picture shows a sandbox built out of concrete. The concrete walls are thick. They appear to be about 8 inches wide and 8 inches tall. There is a girl inside the sandbox playing with the sand.]
Talent Show Classroom Activity

The Classroom Activity introduces students to the context of a performance task, so they are not disadvantaged in demonstrating the skills the task intends to assess. Contextual elements include: an understanding of the setting or situation in which the task is placed, potentially unfamiliar concepts that are associated with the scenario, and **key terms** or vocabulary students will need to understand in order to meaningfully engage with and complete the performance task. The Classroom Activity is also intended to generate student interest in further exploration of the key idea(s). The Classroom Activity should be easy to implement with clear instructions.

Please read through the entire Classroom Activity before beginning the activity with students to ensure any classroom preparation can be completed in advance.

**Resources Needed:** none

**Learning Goals:**

- The student will understand the context of the key ideas related to the topic:
  - Competing in a talent show
  - Planning a talent show

The student will understand the following vocabulary:

- **Talent:** a special ability that allows someone to do something well
- **Spotlight:** a device that directs a narrow, bright beam of light onto a small area
- **Fog Machine:** a device that emits a fog-like vapor, also called a smoke machine
- **Disco Ball:** a spherical object that reflects light shown on it in many directions, also called a mirror ball
- **Costume:** clothes that are worn by someone (such as an actor) who is trying to look like a different person or thing

Definitions are provided here for the convenience of facilitators. Students are expected to understand these key terms as they arise in the context of the task, not to be able to recite the definitions.
Talent Show Classroom Activity

Purpose: The facilitator’s goal is to introduce the students to the idea of talents and considerations needed when planning a talent show.

Facilitator says: “Today, in preparation for your performance task, we are going to talk about a talent show. Can anyone tell me what talent is?” [Allow students to discuss. Make sure that all students understand that talent is an ability to do something well.]

Facilitator says: “What are some examples of talents that you have or that other people you know have?” [Allow students to provide examples of talents. There are several possibilities. A few that the students may discuss include:

- Music
- Comedy
- Gymnastics
- Dance
- Sports
- Magic.]

Facilitator says: “Does anyone know what a talent show is?” [Allow students to discuss. If necessary, expand on the topic as follows.]

Facilitator says: “In a talent show, different acts compete to win prizes. A talent show could occur at a school assembly or at a special nighttime event. Sometimes there are judges who vote on the best act, and sometimes the audience also votes for the winner. There is usually an act at the beginning, to introduce the show, and a finale at the end, to award the prizes.” [Allow students to ask questions.]

Facilitator says: “What kind of technical equipment might you need for a talent show?” [Allow students to discuss. A few possible responses include:

- Microphones
- Spotlights
- Stereo systems.]

[Expand on the topic as follows if needed.]

Facilitator says: “A spotlight is a type of light that directs a narrow beam of light at a small area. It can be used to draw attention to the performer. A fog machine is a device that lets out a vapor that is similar to smoke. It can be used to add more drama to the performance.”

Facilitator says: “What else might performers use on stage to enhance or make the show better?” [Allow students to discuss. Make sure that disco balls and costumes are mentioned.]

Facilitator says: “Today, we completed an activity about planning a talent show. These ideas may help you when you complete your performance task.”
Facilitator says: “Are there any questions?” [Allow for student questions.]

Facilitator says: “You are now ready to complete the Talent Show Performance Task.”
The Classroom Activity introduces students to the context of a performance task, so they are not disadvantaged in demonstrating the skills the task intends to assess. Contextual elements include: an understanding of the setting or situation in which the task is placed, potentially unfamiliar concepts that are associated with the scenario, and key terms or vocabulary students will need to understand in order to meaningfully engage with and complete the performance task. The Classroom Activity is also intended to generate student interest in further exploration of the key idea(s). The Classroom Activity should be easy to implement with clear instructions.

Please read through the entire Classroom Activity before beginning the activity with students to ensure any classroom preparation can be completed in advance.

Resources Needed: none

Learning Goal:
• The student will understand the context of the key ideas related to the topic
  o Designing a donut box

• The student will understand the following vocabulary:
  o Donut: a piece of sweet, fried dough that is often shaped like a ring
  o Cardboard: a stiff, thick kind of paper that is often used for making boxes
  o Dozen: a group or set of 12

Definitions are provided here for the convenience of facilitators. Students are expected to understand these key terms as they arise in the context of the task, not to be able to recite the definitions.
Donuts Classroom Activity

[Purpose: The facilitator’s goal is to help the student understand the physical attributes and costs related to making donuts and donut boxes.]

Facilitator says: “Today we are going to talk about donuts and donut boxes. Who has ever been to a donut shop?” [Allow students to describe and discuss their experiences with donuts.]

Facilitator says: “Donuts come in many different shapes and sizes. Can anyone give me an example of a shape or size of a donut?” [Allow students to provide examples of different types of donuts. Make sure that students mention that donuts can be circular.]

Facilitator says: “Usually, donuts are purchased by the dozen, but they can also be purchased individually. What should be considered when someone is designing the box to hold a dozen donuts?” [Allow students to discuss different types of boxes that can be used to hold a dozen donuts and the requirements for the boxes. Make sure that students discuss cost, shape, and size as some considerations.]

Facilitator says: “Does anyone know how the owner of a donut shop decides the price to charge customers for a dozen donuts?” [Allow students to discuss setting product prices. Make sure that students discuss cost as a factor in price.]

Facilitator says: “What costs does an owner have to consider when setting donut prices?” [Allow students to elaborate on the costs to make and sell one dozen donuts. Make sure the students discuss the cost of the packaging and the cost of making the donuts when considering price.]

Facilitator says: “Today, we completed an activity about donuts and donut boxes. These ideas may help you when you complete your performance task.”

Facilitator says: “Are there any questions?” [Allow for student questions.]

Facilitator says: “You are ready to complete the Donuts Performance Task.”
The Classroom Activity introduces students to the context of a performance task, so they are not disadvantaged in demonstrating the skills the task intends to assess. Contextual elements include: an understanding of the setting or situation in which the task is placed, potentially unfamiliar concepts that are associated with the scenario, and key terms or vocabulary students will need to understand in order to meaningfully engage with and complete the performance task. The Classroom Activity is also intended to generate student interest in further exploration of the key idea(s). The Classroom Activity should be easy to implement with clear instructions.

Please read through the entire Classroom Activity before beginning the activity with students to ensure any classroom preparation can be completed in advance.

**Resources Needed:**
- Projector or some method of displaying images
- A whiteboard, chalkboard, or some other method to record student responses

**Resources Provided:**
- Resource Documents
  - Figure 1. Map of the World

**Learning Goals:**
- The student will understand the context of the key ideas related to the topic:
  - The location of and weather conditions at the South Pole
  - Reasons to go to the South Pole
  - Dietary considerations when exploring the South Pole

- The student will understand the following vocabulary:
  - **South Pole**: an area in Antarctica; the southernmost point in the world
  - **Expedition**: a journey taken by a group of people with a particular purpose, especially exploration or research
  - **Climate**: the weather conditions common to an area in general or over a long period of time
  - **Calorie**: a unit used to indicate the amount of energy that foods will produce in the human body
  - **Pemmican**: a dried meat product that does not freeze or require a lot of preparation

Definitions are provided here for the convenience of facilitators. Students are expected to understand these key terms as they arise in the context of the task, not to be able to recite the definitions.

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1 Instead of displaying Figure 1, the last page of this document can be used as a handout to students.
South Pole Classroom Activity

**Purpose**: The facilitator’s goal is to introduce the students to the South Pole and help them think about the purposes of taking a trip to the South Pole.

**Facilitator says**: “Today, in preparation for your performance task, we are going to talk about the South Pole. Who can tell me where the South Pole is?” [Allow students to discuss. Possible answers include the southernmost point in the world and a place in Antarctica. Facilitator should show or hand out Figure 1 and explain that the South Pole is in Antarctica.]

**Figure 1. Map of the World**

[For students who are visually impaired, describe the figure orally using the description given.]

**Picture Description**: “The picture shows a map of the world with each continent labeled. There is also a dotted vertical line down the middle labeled Prime Meridian and a dotted horizontal line through the middle labeled Equator.”

**Facilitator says**: “Does anyone know any reasons why people go to the South Pole?” [Allow students to discuss. Some reasons that the students might bring up include research, skiing expeditions, wildlife exploration, and tourism.]

**Facilitator says**: “Scientists frequently take expeditions to the South Pole to examine its weather conditions and wildlife. Who can tell me what an expedition is?” [Allow students to discuss. Make sure that all students understand that an expedition is a journey undertaken by a group of people with a particular purpose.]
Facilitator says: “What things do you think people pack when they take an expedition to the South Pole?” [Allow students to respond. Make sure students mention cold weather clothes and food.]

Facilitator says: “The climate at the South Pole is the coldest in the world. Can anyone guess how cold it gets at the South Pole?” [Allow students to respond. Record student responses on a whiteboard or chalkboard.]

Facilitator says: “During the summer, the high temperature averages –26 degrees Celsius, or –15 degrees Fahrenheit. During the winter, temperatures regularly get down to –58 degrees Celsius, or –72 degrees Fahrenheit. It can be difficult to even imagine temperatures that cold. For example, the temperature of the average refrigerator freezer is –18 degrees Celsius, or 0 degrees Fahrenheit.” [Allow students to ask questions.]

Facilitator says: “These conditions also mean that you need more energy when taking long expeditions to the South Pole. How do you think South Pole explorers get that extra energy?” [Allow students to discuss. Make sure that students understand that South Pole explorers need to eat more food than the average person.]

Facilitator says: “The amount of energy that foods produce is calculated in calories. The average adult needs to eat about 2400 calories to maintain his or her current weight. South Pole explorers need to eat around 6000 calories a day to keep their energy at the level that it needs to be.” [Allow students to ask questions.]

Facilitator says: “What kind of food would you bring to the South Pole?” [Allow students to respond.]

Facilitator says: “Because of the cold conditions, food at the South Pole regularly freezes over. It can take from several hours to days for food to thaw completely. The weather can also make it very difficult to prepare food. Because of this, some South Pole explorers use a dried meat product called pemmican to keep their energy level up. Since pemmican does not freeze or require a lot of preparation and it does have a significant amount of calories, it is the perfect food for South Pole explorers.” [Allow students to ask questions.]

Facilitator says: “Today, we completed an activity about taking a trip to the South Pole. These ideas may help you when you complete your performance task.”

Facilitator says: “Are there any questions?” [Allow for student questions.]

Facilitator says: “You are now ready to complete the South Pole Performance Task.”
Resource Document

Figure 1. Map of the World

[For students who are visually impaired, describe the figure orally using the description given.]

[Picture Description: “The picture shows a map of the world with each continent labeled. There is also a dotted vertical line down the middle labeled Prime Meridian and a dotted horizontal line through the middle labeled Equator.”]
The Classroom Activity introduces students to the context of a performance task, so they are not disadvantaged in demonstrating the skills the task intends to assess. Contextual elements include: an understanding of the setting or situation in which the task is placed, potentially unfamiliar concepts that are associated with the scenario, and key terms or vocabulary students will need to understand in order to meaningfully engage with and complete the performance task. The Classroom Activity is also intended to generate student interest in further exploration of the key idea(s). The Classroom Activity should be easy to implement with clear instructions.

Please read through the entire Classroom Activity before beginning the activity with students to ensure any classroom preparation can be completed in advance.

Resources Needed:
- Something from the classroom—such as a string, a shoe lace, a piece of yarn or an electrical cord—to demonstrate “slack.”
- Some method of displaying images

Resources Provided:
- Figure 1. Zip Line
- Figure 2. Brake Picture A
- Figure 3. Brake Picture B
- Figure 4. Poor Design

Learning Goal:
- The student will understand the context of the key ideas related to the topic
  - How a zip line works
  - Specific type of zip line brake
  - Height is required so riders do not touch the ground
- The student will understand the following key terms:
  - Slack: used to describe how much a cable sags
  - Bungee cord: used to refer to a type of rope that stretches

Definitions are provided here for the convenience of facilitators. Students are expected to understand these key terms as they arise in the context of the task, not to be able to recite the definitions.

2 Instead of displaying Figures 1, 2, 3, and 4, the images can be used as handouts for students.
Zip Line Classroom Activity

Purpose: The facilitator’s goal is to help students understand the concept of a zip line.

Facilitator says: “Today, we will get ready for the Zip Line Performance Task.”

Facilitator says: “Has anyone been zip lining or seen a video or picture of someone zip lining?” [Allow students to describe and discuss their zip lining experiences.]

Unscripted:
Facilitator shows and describes the Figure 1 Zip Line image and asks for a volunteer to explain how a zip line works.

Figure 1. Zip Line

Starting platform

Cable

Ending platform

[Note: For students who are visually impaired, describe the picture orally: The picture shows a rider traveling down a cable that is suspended between a starting platform and an ending platform. The rider is wearing a harness. The harness is attached to the cable with some kind of rope. The rider’s legs hang down below the harness.]

[Facilitator leads students to key concepts about how a zip line works:
  • A zip line is a cable that stretches between points at different elevations.
  • A pulley is attached to the cable so the rider can slide down the cable while secured in a harness.
  • The rider is moved along the zip line by gravity.]

Facilitator says: “What types of things would work to secure the beginning and the end of the zip line cable?” [Allow students to respond. If student responses do not include strong trees and platforms built specifically to support a zip line, the facilitator should provide them.]

Facilitator says: “When the cable is attached, it has to have a certain amount of slack in it.”

Unscripted:
Ask for a student volunteer to demonstrate slack. If no one volunteers, the facilitator may demonstrate.

Have the volunteer stretch the string taut (or other item you are using for this demonstration). Explain that it has little or no slack when it is stretched tight. Have the volunteer bring his or her hands closer together, allowing the string to sag a little. Explain that how much the string curves represents how much “slack” is in the line.

Ask the students for questions, and proceed once you feel confident that the students understand this key concept: The amount of curve in the string represents how much slack is in the line.
Facilitator says: “When designing a zip line, a person doesn’t just have to figure out how to make the rider go. What else does the designer have to consider?” [Allow students to respond. Student responses may include: safety, speed, and stopping the ride.]

Facilitator says: “When a zip line is designed, the design has to include how the rider is going to stop. What are some designs zip lines use to get the rider to stop?” [Allow students to respond. Student responses may include:

- Enough slack that the rider stops in the middle of the ride, because they would have to travel up to reach the end of the zip line.
- A hand brake that the rider uses as the rider nears the end of the zip line.
- A special brake that is attached to the cable and a brake anchor by a bungee cord that slowly reduces the rider’s speed.]

Facilitator shows and describes the Figure 2 Brake Picture A image.

Figure 2, Brake Picture A

[Note: For students who are visually impaired, describe the picture orally: The picture shows a rider traveling down the cable. The rider is wearing a harness. The harness is attached to the cable with some kind of rope. The rider’s legs hang down below the harness. There is a small rectangle on the cable and it is labeled “Brake.” The brake is about 2/3 of the way down the zip line. There is a stake buried in the ground with a circle at the top and it is labeled “Brake anchor”. The brake anchor is below the zip line at about 1/2 way down the zip line. A bungee cord connects the brake to the brake anchor. The bungee cord has a curve to it, because it is not stretched tight.]

Facilitator says: “The brake has a hole through the middle of it, and the cable goes through that hole so the brake can slide along the cable. The brake is connected to the anchor with a bungee cord.”

Facilitator says: “What is a bungee cord? How does it work?” [Allow students to respond. Lead students to key concept: A bungee cord is like a rope except that it stretches.]

Facilitator shows and describes the Figure 3 Brake Picture B image.
[Note: For students who are visually impaired, describe the picture orally: The picture is the same as the first picture, except the rider has traveled toward the end of the zip line and has engaged the brake. The brake is now very close to the end of the zip line. The brake anchor has not moved. The bungee cord still connects the brake anchor to the brake, but it is stretched out to a straight line.]

**Facilitator says:** “When the rider reaches the brake, the brake is pushed along the cable and it starts stretching the bungee cord. Once the bungee cord is stretched as far as it will go, the brake will not be able to go any farther.”

**Unscripted:**
Ask the students to discuss the brake system. Lead students to key concept: When the rider reaches the brake, the brake slides along the cable, stretching out the bungee cord, and slowing the rider down.

Proceed once you feel confident that the students understand this specific type of brake system.

**Facilitator** shows and describes the **Figure 4 Poor Design** graphic.

**Figure 4. Poor Design**

[Note: For students who are visually impaired, describe the picture orally: The picture is the same as **Figure 2 Brake Design A**, except the trees are shorter so the zip line is much closer to the ground.]
Facilitator says: “What would happen if the cable was too low?” [Allow students to respond. Lead students to the key concept: If the cable is too low, the rider’s feet will drag along the ground (or the rider will hit the ground).]

Facilitator says: “What has to be taken into consideration to make sure the cable is high enough so that the rider’s feet will not touch the ground?” [Allow students to answer. Lead students to the key concept: There has to be enough distance between the cable and the ground for the harness to hang down, and for the part of the rider’s body that hangs down below the harness.]

[Ask for questions and proceed once you feel confident that the students understand this concept.]

Possible class discussion questions (unscripted):
1. Do you think you would enjoy zip lining?
2. Would you prefer a high or a low ride?
3. Would you prefer a fast or a slow ride?
4. Would you prefer a short or a long ride?
5. Where do you think would be the best place to zip line?

[No resolution is needed for these questions. Questions are to increase student interest and to promote discussion regarding the topic.]

Facilitator says: “Are there any questions?” [Allow for student questions.]

Facilitator says: “You are now ready to complete the Zip Line Performance Task”
[Description: The picture shows a rider traveling down a cable that is suspended between a starting platform and an ending platform. The rider is wearing a harness. The harness is attached to the cable with some kind of rope. The rider's legs hang down below the harness.]
Figure 2. Brake Picture A

Description: The picture shows a rider traveling down the cable that is suspended between two trees. The rider is wearing a harness. The harness is attached to the cable with some kind of rope. The rider's legs hang down below the harness. There is a small rectangle on the cable and it is labeled “Brake.” The brake is about 2/3 of the way down the zip line. There is a stake buried in the ground with a circle at the top and it is labeled “Brake anchor”. The brake anchor is below the zip line at about 1/2 way down the zip line. A bungee cord connects the brake to the brake anchor. The bungee cord has a curve to it, because it is not stretched tight.
[Description: The picture shows a rider has traveled almost to the end of the cable. The Brake is now almost to the tree at the end of the zip line. The bungee cord still connects the brake to the brake anchor. The bungee cord is now stretched tight.]
Figure 4. Poor Design

[Description: The picture is the same as Figure 2 Brake Design A, except the trees are shorter so the zip line is much closer to the ground.]