Supplement to the
Examiner’s Manual for
End-of-Course Science
Earth Science, Biology, & Chemistry Tests

Directions for Paper Tests
Regular and Special Forms
Revised October 2020

Only those persons who have signed the School Division Personnel Test Security Agreement may participate in the administration of the Standards of Learning assessments to students.
# Examiner’s/Proctor’s Checklist for Administering Paper Tests

<table>
<thead>
<tr>
<th>Activities Before Test Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Read this <em>Supplement to the Examiner’s Manual</em>, the <em>Examiner’s Manual</em>, and any local directions you have been given. Resolve any questions you might have with your STC (<em>Supplement, Section 2.1</em>).</td>
</tr>
<tr>
<td>2. Prior to participating in the SOL test administration, read and sign the <em>School Division Personnel Test Security Agreement</em>, and read the legislation passed by the Virginia General Assembly (§ 22.1–19.1 and § 22.1–292.1) regarding the repercussions of violating test security (refer to the <em>Examiner’s Manual, Appendices</em>).</td>
</tr>
<tr>
<td>3. Inform students of testing (refer to the <em>Examiner’s Manual</em>).</td>
</tr>
<tr>
<td>4. Prepare students for testing (refer to the <em>Examiner’s Manual</em>). Teachers/Examiners should discuss with students the consequences of: having access to cell phones, electronic devices, or other unauthorized materials during testing, and cheating (refer to the <em>Examiner’s Manual</em>).</td>
</tr>
<tr>
<td>5. Prepare the test site for testing. Ensure all items that are capable of providing an unfair advantage are covered or removed as appropriate (refer to the <em>Examiner’s Manual</em>).</td>
</tr>
<tr>
<td>6. Verify the use of Proctors or need for additional assistance (refer to the <em>Examiner’s Manual</em>).</td>
</tr>
<tr>
<td>7. Be aware of the alternate test site for students who may not finish their test by the end of the allotted test administration time and understand the process of moving students from one test site to another (refer to the <em>Examiner’s Manual</em>).</td>
</tr>
<tr>
<td>8. Be familiar with the directions for administering the test (<em>Supplement, Section 2.2</em>). Paper test directions are located in Section 5.2 of this <em>Supplement</em>.</td>
</tr>
<tr>
<td>9. Review the materials needed for testing (<em>Supplement, Section 2.3</em>).</td>
</tr>
<tr>
<td>10. If you are administering tests to students who require special accommodations, become familiar with the accommodations specified in their IEPs, 504 Plans, or EL Assessment Participation Plans. Coordinate with your STC how accommodations will be provided (<em>Supplement, Section 2.4, Examiner’s Manual Appendices</em>).</td>
</tr>
<tr>
<td>11. Understand the requirements for a student-initiated break (refer to the <em>Examiner’s Manual</em>).</td>
</tr>
<tr>
<td>12. Know if the student or an authorized staff member will hand code the student information fields on the answer document. (<em>Supplement, Sections 3.1 and 3.2</em>).</td>
</tr>
<tr>
<td>13. Understand how students should mark the answer document or how to complete the answer document for students with certain accommodations (<em>Supplement, Sections 3.3 and 3.4</em>).</td>
</tr>
<tr>
<td>14. Use the directions in Section 4 if students will fill out the demographic portions of their own answer documents.</td>
</tr>
</tbody>
</table>

**CAUTION:** Before you begin the *Earth Science, Biology, or Chemistry* tests, verify that you are using the appropriate answer documents, Version 1.0. Using the wrong answer documents will result in inaccurate scores and delay delivery of test results.
### Examiner’s/Proctor’s Checklist for Administering Paper Tests, continued

#### Activities During Test Administration

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<tbody>
<tr>
<td>1.</td>
<td>On the day of testing, receive test materials needed for the paper test session(s) from the STC; verify receipt of secure materials by signing the appropriate transmittal form; and fill out Assembly ID Sheets as you open test booklet packs (Supplement, Section 5.1).</td>
</tr>
<tr>
<td>2.</td>
<td>Verify the preparation of the testing room. It must meet the requirements specified in the Examiner’s Manual.</td>
</tr>
<tr>
<td>3.</td>
<td>Know the procedure for reporting test errors to the STC as reported by students (refer to the Examiner’s Manual).</td>
</tr>
<tr>
<td>4.</td>
<td>Administer the paper test by reading the directions verbatim, or reading the directions with modifications for students with certain testing accommodations (Supplement, Section 5.2).</td>
</tr>
<tr>
<td>5.</td>
<td>Monitor the students as they test, following the guidelines in Section 5.3, and understand how to answer student questions and respond to common test scenarios (Supplement, Section 5.3).</td>
</tr>
<tr>
<td>6.</td>
<td>Collect the students’ answer documents and test materials as described in the Supplement, Section 5.4.</td>
</tr>
</tbody>
</table>

#### Activities After Test Administration

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Inspect students’ answer documents per STC directions (Supplement, Section 6.1).</td>
</tr>
<tr>
<td>2.</td>
<td>Organize secure test materials for return to the STC (Supplement, Section 6.2).</td>
</tr>
<tr>
<td>3.</td>
<td>Return ALL test materials to the STC (Supplement, Section 6.3).</td>
</tr>
<tr>
<td>4.</td>
<td>Read and sign the Test Booklets/Prompts Transmittal Form and Affidavit for Examiners/Proctors or the Special Test Forms/Kits Transmittal Form and Affidavit for Examiners/Proctors (refer to the Supplement to the Writing and Non-Writing Test Implementation Manuals).</td>
</tr>
<tr>
<td>5.</td>
<td>Inform the STC of any student absent from the test session (Supplement, Section 7).</td>
</tr>
<tr>
<td>6.</td>
<td>Be prepared to assist with make-up testing for absent students.</td>
</tr>
</tbody>
</table>
IMPORTANT REMINDERS

Using the Supplement to the Examiner’s Manual

- This Supplement to the Examiner’s Manual provides the testing directions that Test Examiners and Proctors must use for the administration of the paper End-of-Course (EOC) Science Standards of Learning (SOL) Assessments: Earth Science, Biology, and Chemistry. This Supplement must be used in conjunction with the Examiner’s Manual for EOC Science, which contains additional information, guidance, procedures, and responsibilities that the Test Examiner and Proctor are required to follow in order to administer the SOL tests.

- Unlike the Examiner’s Manual, this Supplement is not available as a paper manual sent to the divisions in the non-secure shipments. Instead, it is available in electronic format at the Virginia Department of Education Web site, where it may be downloaded:
  www.doe.virginia.gov/testing/test_administration/index.shtml

Paper Test Format

All students are required to take the online version of the Standards of Learning (SOL) tests with the exception of students who meet one of the criteria for paper testing. Those criteria are listed below:

- The student attends school in a location where a secure network connection or the required technology is not available to access an online test. Such locations include the following: special situations schools; homebound, residential, or hospital placement; night school or Governor’s school.

- The student requires an accommodation specified in his/her Individualized Education Plan (IEP), 504 Plan, or English Learner (EL) Assessment Participation Plan that is described in the Examiner’s Manual Appendices as requiring a paper test (e.g., large-print test, braille test, brailler, and some instances of multiple test sessions).

- The student has a documented medical condition, such as a seizure disorder, where exposure to a testing device will aggravate the student’s condition.

- Students student’s eligibility for paper tests has been established using the Documentation of Need for Paper Standards of Learning (SOL) Assessment form, which is retained in the office of the Division Director of Testing. The procedure for completing this document establishes that the use of paper tests is intended only to provide access to the SOL assessments for the following students:
  - students with disabilities who require other accommodations that necessitate a paper test, and
  - students with medical conditions that render them unable to take an online test.

- The use of paper tests may not be permitted for the purpose of improving performance.
IMPORTANT REMINDERS, continued

Answer Documents

- All students taking the EOC Science paper tests must use Version 1.0 answer documents.
- Student demographic information on paper answer documents must be carefully hand coded. **NOTE:** Leave Field D, Gender, blank.

If you have questions about your school’s testing procedures, contact your School Test Coordinator (STC). If you have concerns about the testing procedures being followed in your school and your STC is unable to address them, contact the Division Director of Testing (DDOT) in your school division’s central office. If you have concerns that your DDOT cannot address, please contact the Office of Student Assessment at (804) 225-2102 or by e-mail at Student_Assessment@doe.virginia.gov.
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1. USE OF THIS SUPPLEMENT FOR THE ADMINISTRATION OF PAPER STANDARDS OF LEARNING (SOL) END-OF-COURSE SCIENCE TESTS

This Supplement to the Examiner’s Manual describes procedures that Test Examiners and Proctors must use for the administration of the paper End-of-Course (EOC) Earth Science, Biology, and Chemistry Standards of Learning (SOL) assessments. This Supplement must be used in conjunction with the Examiner’s Manual for the EOC Science assessments. The Examiner’s Manual contains additional information, guidance, procedures, and responsibilities that the Examiner/Proctor is required to follow in order to administer the paper SOL tests. The Examiner’s Manual is available for download from the Virginia Department of Education Web site at:

www.doe.virginia.gov/testing/test_administration/index.shtml

2. PREPARE FOR ADMINISTERING PAPER TESTS

2.1 Read All Materials

Prior to the day of testing, carefully read this Supplement to the Examiner’s Manual, the Examiner’s Manual itself, your students’ Individualized Education Programs (IEPs), 504 Plans, English Learner (EL) Assessment Participation Plans, and any local directions you have received.

Review the Examiner/Proctor’s Checklist (in the front of this Supplement to the Examiner’s Manual) to make sure that you understand the activities before, during, and after the test administration and your duties and responsibilities. Resolve any questions you might have with your STC well in advance of test administration.

2.2 Be Familiar with the Directions for Administering the Test

All directions that Examiners must read aloud to the students are in bold type so that they stand out from the rest of the text. This text must be read exactly as written, using a natural tone and manner. If a mistake is made in reading directions, the Examiner should stop and say, “No, that is wrong. I must read it to you again.” Then re-read the direction.

Other text is for your information and should not be read to students. It is essential that you become familiar with the instructions in this manual before test administration and that you follow them exactly as they appear.

Examiners may mark up this manual in order to help deliver the directions to the students in the clearest possible way. However, directions may not be modified or deleted unless it is necessary due to a student's disability. For example, students with "mark their answers in the test booklet" (Examiner Records Responses, accommodation code 18) would not be given the directions about marking their answers on their answer document, but would be directed to circle their answers in their test booklet.

Specific audio/read-aloud directions are contained in a gray box. Note that the directions in the box begin with a sentence in which the first part is in brackets: [Read the sample question and each answer choice to yourself] as I read them aloud. The bracketed part has already been read to students, in the previous direction, and need not be re-read. The Examiner should continue with “… as I read them aloud,” keeping a natural flow to the voice. For example:

SAY Read the sample question and each answer choice to yourself. (Pause.)
AUDIO/READ-ALoud TESTS ONLY (🎧 or 🎧)

SAY [Read the sample question and each answer choice to yourself] as I read them aloud.

Other testing directions contained in brackets indicate options for the Examiner. For example, in the following direction the Examiner must state either “Earth Science,” or “Biology,” or “Chemistry” to match the content area of the students being tested:

SAY Today you will be taking the SOL End-of-Course [Earth Science, or Biology, or Chemistry] test.

Mixed group testing. If students taking the audio test (using headphones) will be testing in the same room as students taking the test without the audio accommodation, the Test Examiner may read the audio/read-aloud directions to all students. Students administered a read-aloud test must be tested in a “read-aloud only” test room.

2.3 Review Materials Needed for Testing
Students should be familiar with the tools and materials needed for the test they will be taking. Refer to the materials listed below.

Table 1. Description of Materials Permitted on the Paper EOC Science Tests

<table>
<thead>
<tr>
<th>Materials Description</th>
<th>Earth Science</th>
<th>Biology</th>
<th>Chemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Booklets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular test booklets, or as required:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Regular Audio Test Booklet Kit—regular test booklet and audio CD.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>• Large-Print Test Booklet Kit—large-print test booklet, Examiner’s copy of the test in regular print, and a CD if the kit is specified as audio.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>• Braille Test Booklet Kit—braille test booklet, Examiner’s copy of the test in regular print, two sheets of braille paper, and a CD if the kit is specified as audio. Consult the DDOT regarding the braille formats available for each SOL test.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Answer Documents (as appropriate)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Pencils</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Only No. 2 pencils or mechanical pencils with No. 2 lead must be used when completing the answer document. Have extra No. 2 pencils available.
<table>
<thead>
<tr>
<th>Materials Description</th>
<th>Earth Science</th>
<th>Biology</th>
<th>Chemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scratch Paper</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Scratch paper must be of a single color and blank (must not contain any words, numbers, symbols, labels, graphics, etc.). Acceptable scratch paper includes plain paper (no lines), lined paper, grid paper, sticky notes, and note cards. Patty paper is permitted for paper testing only. Students may not be issued any form of a graphic organizer, writing web, template, outline, enhanced scratch/grid paper (such as with added raised lines, some lines darker than others), etc. Students may be issued multiple sheets and multiple types of scratch paper; however, Examiners must keep track of all scratch paper distributed to students and ensure that it is all collected and accounted for before students are dismissed from the testing session. The STC may distribute the scratch paper to Examiners prior to testing or on the day of testing, or may instruct Examiners to provide their own scratch paper for testing sessions. All scratch paper must be returned to the STC. Examples of acceptable grid/graph paper are posted on the VDOE Web site at: <a href="http://www.doe.virginia.gov/testing/test_administration/ancilliary_materials/index.shtml">www.doe.virginia.gov/testing/test_administration/ancilliary_materials/index.shtml</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculator</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Students may use one hand-held State-approved four-function, Scientific, or Graphing calculator. Refer to Table 2 and the Hand-Held Calculator Guidelines for state-approved calculator models, pre-testing preparation, and guidelines.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metric/Standard Ruler or Straightedge Tool</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Periodic Table of the Elements</td>
<td>NO</td>
<td>NO</td>
<td>Yes</td>
</tr>
<tr>
<td>The Periodic Table of the Elements is included in the test booklet. Kits containing the large-print or braille versions for the Chemistry test include the corresponding large-print or braille version of the Periodic Table of the Elements.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPTIONAL: Highlighter, Colored Pencil, or Pen</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>In addition to the No. 2 pencil, as previously described, students may be provided two additional writing implements such as highlighters, colored pencils, or colored pens. The student may use the writing implements in the test booklet and on the scratch paper. The highlighters, colored pencils, or pens must not be used anywhere on the student's answer document. Answer documents submitted with highlighter, colored pencil, or pen marks will not scan properly and therefore cannot be scored. The student's answer document must only be completed with the No. 2 pencil.</td>
<td></td>
<td></td>
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</tbody>
</table>
Table 2 lists the State-approved calculators for the EOC Science test as noted in Table 1.

Table 2. State-Approved Calculators Guidelines and Preparation Instructions for Testing

<table>
<thead>
<tr>
<th>Four-Function Calculator</th>
<th>Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any model that meets the criteria listed.</td>
<td>A four-function calculator that adds, subtracts, multiplies, and divides is allowed. The calculator may have +/- key(s), a square root key, and a percent key; it may not have fraction capabilities or a multi-line display. The calculator cannot provide information to a student through its display or formatting that may assist the student with content knowledge during testing.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scientific Calculators</th>
<th>Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>TI-30Xa Solar School Edition* CASIO FX-260 School</td>
<td>A scientific calculator may not have fraction capabilities or a multi-line display. The “TI-30Xa Solar School Edition” and the “Casio FX-260 School” are unique versions of those calculators that have fraction keys disabled.</td>
</tr>
<tr>
<td>*This calculator should have a white faceplate. A yellow faceplate edition is not approved for use during testing.</td>
<td></td>
</tr>
<tr>
<td>Sharp EL-501W Series Sharp EL-501V Series Sharp EL-501X Series</td>
<td>A scientific calculator may not have fraction capabilities or a multi-line display. The Sharp EL-501W Series, EL-501V Series, and EL-501X Series calculators do not have fraction keys. The model numbers on these series of calculators may include additional letters that indicate the color of the calculator. For example, the Sharp EL-501W series includes EL-501WBBL. The annexed “BBL” indicates the color of the calculator is blue.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graphing Calculators</th>
<th>Memory Reset and Operating System Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASIO 9750G and 9750GII CASIO 9850G Series CASIO 9860G CASIO 9860GII and 9860GIIIs CASIO PRIZM fx-CG10</td>
<td>Prior to SOL testing, reset “Main Memory.” This deletes all random access memory (RAM), Archive Memory, data, and programs, and resets the calculator to the factory default. Resetting these calculators will result in the default angle setting of “radian.” This setting must NOT be changed while preparing the calculators for testing. Prior to the day of testing, students should be instructed on how to adjust the angle setting. If desired, students can adjust the angle setting after the testing session begins, but must do so without prompting or reminders from Examiners and/or Proctors. <strong>9860GII and 9860GIIIs:</strong> Prior to SOL testing, enable the Examination Mode. Examination mode places limits on calculator functions, which allows it to be used when taking the SOL test. Instructions for enabling Examination Mode may be found at: <a href="https://edu.casio.com/download_service/download/ib/">https://edu.casio.com/download_service/download/ib/</a></td>
</tr>
<tr>
<td>Graphing Calculators</td>
<td>Memory Reset and Operating System Information (continued)</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>TI-82</td>
<td>Prior to SOL testing, reset “All Memory.” This erases all data and programs. Resetting these calculators will result in the default angle setting of “radian.” This setting must NOT be changed while preparing the calculators for testing. Prior to the day of testing, students should be instructed on how to adjust the angle setting. If desired, students can adjust the angle setting after the testing session begins, but must do so without prompting or reminders from Examiners and/or Proctors.</td>
</tr>
<tr>
<td>TI-83</td>
<td>Option 1: Prior to SOL testing, reset “All Memory.” This option deletes all data, programs, and applications (APPs) from the random access memory (RAM) and Archive (flash ROM), except for the Finance APP. Approved APPs will be deleted from the calculator when this option is utilized. This is not recommended if students were provided the approved APPs during instruction. Option 2: Prior to SOL testing, reset “All RAM” (erases all data and programs) and reset the “Archive Vars” (erases all data and programs from Archive); and delete all APPs except the following: • Polynomial Root Finder and Simultaneous Equation Solver APP; • Conic Graphing APP; • Inequality Graphing APP; and • Finance APP. The Finance APP is built in and cannot be deleted from the calculator. Resetting these calculators will result in the default angle setting of “radian.” This setting must NOT be changed while preparing the calculators for testing. Prior to the day of testing, students should be instructed on how to adjust the angle setting. If desired, students can adjust the angle setting after the testing session begins, but must do so without prompting or reminders from Examiners and/or Proctors.</td>
</tr>
<tr>
<td>TI-83 Plus Series</td>
<td></td>
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<tr>
<td>TI-84 Plus Series</td>
<td></td>
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<tr>
<td>TI-Nspire in TI-84 Plus mode</td>
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</tbody>
</table>
### Table 2. State-Approved Calculators Guidelines and Preparation Instructions for Testing, Continued

<table>
<thead>
<tr>
<th>Graphing Calculators</th>
<th>Memory Reset and Operating System Information (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TI-Nspire (non-CAS)</td>
<td>Operating system prior to version 2.1.1:</td>
</tr>
<tr>
<td>TI-Nspire CX (non-CAS)</td>
<td>Prior to SOL testing, enable the Press-to-Test mode with all options disabled (keep all options checked). The Press-to-Test mode temporarily disables, rather than deletes, documents and some features including flash applications.</td>
</tr>
<tr>
<td></td>
<td>Operating system between, and including, versions 2.1.1 and 3.1.x.xxx: Prior to SOL testing, enable the Press-to-Test mode and disable all options (keep all options checked) except for “Disable Inequality Graphing,” “Disable log(_b) x template and summation functions,” and “Disable Polynomial Root Finder and Simultaneous Equation Solver.”</td>
</tr>
<tr>
<td></td>
<td>Operating system version 3.2 and higher: Prior to SOL testing, enable the Press-to-Test mode and disable all options (keep all options checked) except for “Disable Inequality Graphing,” “Disable Implicit Graphing, Conic Templates, Conic Analysis and Geometric Conics,” “Disable log(_b) x template and summation functions,” and “Disable Polynomial Root Finder and Simultaneous Equation Solver.”</td>
</tr>
<tr>
<td></td>
<td>It is recommended that the TI-Nspire operating system be updated for instruction and testing at: <a href="https://education.ti.com/en/software/search">https://education.ti.com/en/software/search</a></td>
</tr>
<tr>
<td></td>
<td>The outdated operating system 2.0.0.1188 should not be used for testing, as it does not meet the minimum recommended features in Press-to-Test mode needed for the SOL test.</td>
</tr>
<tr>
<td></td>
<td>The Press-to-Test mode defaults to the angle setting of “degree.” This setting should NOT be changed when placing the TI-Nspire or TI-Nspire CX into Press-to-Test mode. Prior to testing, students should be familiar with using the calculator in Press-to-Test mode and how to adjust the angle setting. If desired, students can adjust the angle setting after the testing session begins, but must do so without prompting or reminders from Examiners and/or Proctors.</td>
</tr>
</tbody>
</table>
Graphing Calculators | Memory Reset and Operating System Information (continued)
---|---
**TI-73 Explorer** | Prior to SOL testing, reset “All RAM” (erases all data and programs) and delete all APPs.

The following APPs (which are approved for use on SOL tests) are not available for the TI-73 Explorer: Polynomial Root Finder and Simultaneous Equation Solver; Conic Graphing; and Inequality Graphing.

This calculator does NOT have all of the functionality of other approved graphing calculators. The TI-73 Explorer calculator is NOT recommended for use on the Algebra II (2009 or 2016) SOL test.

Resetting this calculator will result in the default angle setting of “degree.” This setting must NOT be changed while preparing the calculators for testing. Prior to the day of testing, students should be instructed on how to adjust the angle setting. If desired, students can adjust the angle setting after the testing session begins, but must do so without prompting or reminders from Examiners and/or Proctors.

### Calculators for Students with Disabilities

- Students with blindness or visual impairments may need calculators with large keys, buttons, displays, and/or talking capabilities in order to access the test. Calculators with these accessibility features are allowed on the SOL Mathematics and Science tests that permit calculators as long as the calculator has the same mathematical capabilities as the state-approved calculators (refer to this table and the Hand-Held Calculator Guidelines). The IEP team/504 committee must determine the student’s eligibility by using the revised Calculator Accommodation Criteria Form (available on the Virginia Department of Education Web page: www.doe.virginia.gov/testing/participation/index.shtml). Students using a calculator with talking capabilities must be tested individually or with headphones/ear buds so that other students are not disturbed.

- Students with disabilities may need calculators with additional mathematical capabilities and/or to use the calculator on the portion of a Mathematics test in which a calculator is not permitted. The IEP team/504 committee must determine the student’s eligibility by using the revised Calculator Accommodation Criteria Form (available on the Virginia Department of Education Web page: www.doe.virginia.gov/testing/participation/index.shtml).

- For additional guidance, refer to the Testing Memo, Calculator Accommodation Criteria Form for Students with Disabilities Including Blindness or Visual Impairments.

- For more information regarding Testing Accommodations for Students with Disabilities, refer to Appendix B in this manual.

Refer to the Appendix, Scientific Calculators with Accessibility Features and Additional Mathematical Capabilities, within the Calculator Accommodation Criteria Form, for guidance when considering using the calculators listed below:

- SciPlus-2200VA—large button and large screen scientific calculator.
- SciPlus-2300VA—large button, large screen, and talking scientific calculator.
- Orion TI-30XS MultiView—talking scientific calculator.
- Orion TI-36X (discontinued)—talking scientific calculator.
### Hand-Held Calculator Guidelines

The guidelines outlined below should be followed when addressing calculator use on the EOC Science tests:

- Students may only use one hand-held State-approved calculator during a test and are allowed to use only one model of a calculator (for example, students may not be issued both a graphing calculator and a scientific calculator for use on the same test).
- All calculators must meet the guidelines and/or be reset/prepared as described in Table 2 prior to each test session. If a student is moved to an alternate test site, he/she may continue to use the original calculator issued for the test. However, if the student is issued a different calculator, it must meet the guidelines and/or be reset/prepared as described in Table 2 prior to being issued to the student.
- If the calculator provides a language option for the display, English must be selected.
- Divisions wishing to use calculators which are not on the state-approved list must receive prior approval from the Virginia Department of Education.
- The calculator cannot provide information to a student through its display or formatting that may assist the student with content knowledge during testing.
- Students should be familiar with the calculator they are to use. The SOL test administration should not be the first time a student uses an approved calculator.
- Either a school-owned or student-owned calculator may be used on the test.
- Non state-approved materials that provide information on calculator use or course content may not be used or attached to or included with the calculator or its case during testing. Such materials include, but are not limited to, formula cards, calculator instruction sheets/manuals, note cards, etc.
- A graphing calculator with an algebraic Operating System is not allowed.
- A QWERTY keyboard may not be used.

### 2.4 Accommodations

- Before testing, appropriate staff should become familiar with special test accommodations specified in students’ IEPs, 504 Plans, or EL Assessment Participation Plans. Accommodations and any required materials or equipment are described in detail in the Examiner’s Manual Appendices. Appropriate staff should also be familiar with the following documents: Students with Disabilities: Guidelines for Assessment Participation, Students with Disabilities: Guidelines for Special Test Accommodations and English Learners: Guidelines for Participation in the Virginia Assessment Program, available on the Virginia Department of Education's Web site at:

  [www.doe.virginia.gov/testing/participation/index.shtml](http://www.doe.virginia.gov/testing/participation/index.shtml)

- **Temporary Conditions.** Special test accommodations may be provided to students with a documented temporary condition, such as a broken arm or injured hand, who do not have an IEP or 504 Plan. Documentation of the temporary condition and necessary accommodations must be maintained in the student's school/division file. The STC should coordinate with the Examiner on how accommodations will be provided during the testing session.
- **Paper audio tests**: Students should be familiar with operating the audio equipment for the CD prior to testing.

- **Response Accommodations**: To meet any response accommodations specified in the student’s IEP, 504 Plan, or EL Assessment Participation Plan, directions read aloud to students may be modified. For example, the directions on how to select answers online or mark the answer document may be modified for students who have the accommodation Examiner Records Responses (accommodation code 18.)
  
  - **For Paper Tests**: The testing directions may be modified for students who do not enter their answers onto the answer document themselves. Such students indicate their answers in a different way (verbally, by pointing, or by circling answers in the test booklet) according to the testing accommodations specified in their IEPs, 504 Plans or EL Assessment Participation Plans. The Examiner then enters the student's choices onto the answer document.

  The Examiner may omit the test directions pertaining to the student completing the information in Fields A, F, and G (and Field K for EOC Writing) on the answer document and writing his/her name on the test booklet and prompt sheet. Before or after testing, the Examiner should complete Fields A, F, and G (and Field K for EOC Writing) and write the student's name on his/her test booklet and prompt sheet.

  Examiners may modify the testing directions to reflect the accommodation. For example, the direction to fill in the circle on the answer document for the letter of the best answer may be modified to “circle the answer in your test booklet,” “say your answer,” or “point to the answer.” The direction to write on the lined pages of the answer document may be modified to “type your paper in the word processor” or “ dictate your paper to me.” Refer to the **Examiner’s Manual** Appendices for the requirements for administering tests with accommodations.

- **Braille tests.** Examiners/Proctors responsible for monitoring students using braille tests should be familiar with the Braille Notes and Transcriber’s Notes included in the Examiner’s copy of the braille test. The Braille Notes list the differences between the braille test form and the corresponding Examiner’s copy and are intended to help the Examiner answer any questions that a student may have regarding reading and interpreting items in the braille form. Transcriber’s Notes provide information to the (braille) reader that is not readily apparent by reading the test item’s text alone. If a student has a question pertaining to the Transcriber’s Notes on his/her test, the Examiner can consult the Examiner’s copy for assistance. Consult the DDOT regarding the braille formats available for each SOL test.

- **Large-print tests.** Examiners/Proctors responsible for monitoring students using large-print tests should be aware of font size variations that may appear on a student’s test.
  
  - For all test item questions (stem) and answer options, the font type is Tahoma and font size is 20 point.

  - All text, including, numbers, variables, labels and captions on graphs, pictures, diagrams, maps, charts, coordinate planes, equations, exponential numbers and letters, subscripts and superscripts, notes, and footnotes, are presented in 18–20 point type. Due to the complexity of graphics in some test items, some text embedded within graphics may be enlarged proportionally to the graphic rather than enlarged to 20 point in order to lessen the impact of reformatting the test items. The Special Forms Committee provides recommendations for items of this nature on an item-by-item basis.

- **Mixed group testing.** If students taking the test with the audio accommodation (using a compact disc player with headphones) will be testing in the same room as students taking
the test without the audio accommodation, the Test Examiner may read the audio/read-aloud directions to all students. Students administered a read-aloud test must be tested in a “read-aloud only” test room.

2.5 Testing Condition Adjustments Available to All Students

- The following adjustments to the conditions under which an SOL test may be administered are available to any student as needed. Refer to the Examiner’s Manual Appendices for further information.
  - group size
  - environmental modifications
  - large diameter pencil, special pencil, pencil grip
  - assistance with directions
  - the student reads his/her own test out loud
  - student requires a health management device
  - student requires hearing aids with Internet-enabled device

3. MANAGING STUDENTS’ ANSWER DOCUMENTS

All EOC Science tests must use Version 1.0 answer documents.

3.1 Prepare Answer Documents with Student Information

Identification information for each student must be included on the answer document by carefully hand coding the information in the spaces provided.

Refer to Section 3.2, which contains additional directions on how to complete the demographic information. If it is not clear how to complete the demographic information on the answer document, be sure to ask your STC for directions well in advance of the test administration dates.

3.2 Complete Demographic Information

Answer document data fields must be completed by hand, as directed by your STC. If you are instructed to have the students complete Fields B and C, prior to administering the test, go to Section 4, Directions for Student Completion of Demographic Information on Answer Document. As directed by your STC, Field E, STI, must be completed by you, or another designated adult, to ensure accuracy.

3.3 Understand How Students Should Mark the Answer Document

Remind students to handle their answer documents with care. They should record their answers by completely darkening the circle on the answer document with No. 2 pencil and avoid making extra marks anywhere else on the answer document. Answer documents should never be folded, clipped, stapled, or torn.

While students may write in the SOL test booklets, they should not be encouraged to record their answers in the test booklet first and later transcribe them to the answer document. Errors in transcription may adversely affect the student’s test score. Errors may not be corrected by staff or the student after the student turns in his/her answer document.

3.4 Completing Answer Documents for Students with Accommodations

Some special testing accommodations permit the student to indicate his/her answer in a different manner, as specified in the student’s IEP, 504 Plan, or EL Assessment Participation Plan. For example, the student may circle the answer in his/her test booklet; respond verbally; point to the answer, etc. In
these instances, the student should not be given the answer document. The Examiner/Proctor should fill in the student information sections on the answer document either before or after testing. It is essential that the hand-entered information for Fields B and C match the identity of the student taking the test and the student information entered in Field A. The Examiner/Proctor should also complete the other information fields (A, F, G) on the answer document that the student would normally fill on the day of testing. The Examiner/Proctor must verify the form number entered in Field F matches the form number on the student’s test booklet. Field D, Gender, should be left blank.

Guidance for modifying the testing directions is located at the beginning of Section 5.2.

Refer to the Examiner’s Manual Appendices for the requirements for administering tests with accommodations.

4. DIRECTIONS FOR STUDENT COMPLETION OF DEMOGRAPHIC INFORMATION ON THE ANSWER DOCUMENT

**DIRECTIONS:** If you have been instructed by your STC to have students complete Fields B and C before or during the testing session, then you should read the following directions to students.

**SAY** Today you are going to complete only the demographic information on your answer document in Fields B and C.

Before distributing answer documents to students, make sure that all desks/workstations are clear of books and all other materials. Ensure that each student has sharpened soft-lead (No. 2) pencils with erasers.

**SAY** I will give each of you an answer document. When you receive it, leave it on your desk. Do not write anything on it until I tell you what to do. Do not fill in any boxes except the ones I tell you to fill in. Some of the boxes may be left blank.

Distribute the answer documents with the front page facing up.

**SAY** In Field B, find the box that contains areas labeled “Last Name” and “First Name.” In the area labeled “Last Name,” print your last name in the boxes at the top of each column. Begin in the left-hand column, and write only one letter in each box.

Give help as needed. When all students have finished,

**SAY** Now, in the area labeled “First Name,” print your first name in the boxes at the top of each column. Begin in the left-hand column, and write only one letter in each box.

Give help as needed. When all students have finished,

**SAY** Now, fill in the matching circle beneath each letter in your name. Be sure you fill in only one circle for each letter. Are there any questions?

Give help as needed. When all students have finished,

**SAY** Now find Field C, which is labeled “Date of Birth.” In the area labeled “Month,” find the circle for the month of your birthday and fill it in.

Give help as needed. When all students have finished,
SAY The next area is labeled “Day.” In the boxes, write the date on which you were born, entering one number in each box. For example, if your birthday is between the 1st and the 9th of the month, you would write “0” in the first box and the correct number in the second box. Are there any questions?

Answer all questions, and give help as needed. When all students have finished,

SAY Now beneath each box, fill in the circle that has the same number that you wrote in the box.

Give help as needed. When all students have finished,

SAY The next area is labeled “Year.” Fill in the circle next to “19” [or “20”]. In the next boxes, write the last two digits of the year in which you were born. Then fill in the circles for these two digits.

Give help as needed. When all students have finished,

SAY Leave Field D, Gender, blank.

Gender information will be gathered using the Student Registration Import process.

SAY Field F, Form, and Field G, Test Date, will be completed during the actual testing session. Do not fill in the fields that are labeled with the letters D, H, or I. Are there any questions?

On the back page of your answer document, find the top two boxes labeled “Last Name” and “First Name.” (Demonstrate.) Print your Last Name and First Name in the labeled boxes. Are there any questions?

Give help as needed. Answer students’ questions. Collect answer documents and keep them in a secure location until testing begins.

NOTE: As directed by your STC, Field E, the student’s State Testing Identifier (STI) must be completed by the Test Examiner or other designated school staff member.
5. DIRECTIONS FOR ADMINISTERING THE PAPER EOC EARTH SCIENCE, BIOLOGY, OR CHEMISTRY TESTS

5.1 Receive Test Materials

On the day of testing, you will receive all materials needed to administer the SOL EOC Earth Science, Biology, or Chemistry test (refer to Section 2.3). Prior to testing, ensure the calculator's memory has been reset following the guidelines in Section 2.3. The STC should provide you with instructions for distributing the test materials.

The STC will ask you to initial a Test Booklets/Prompts Transmittal Form and Affidavit for Examiners/Proctors or Special Test Forms/Kits Transmittal Form and Affidavit for Examiners/Proctors (Appendix B of the Supplement to the Writing and Non-Writing Test Implementation Manuals), or a similar form, verifying your receipt of the test materials. The purpose of these forms is to track the secure materials throughout the test administration period.

Upon receipt of the test booklets, or kits, open each package and count the materials. Indicate the number of test booklets or kit materials contained in each package by checking off the applicable statement on the Assembly ID Sheet (Appendix B). Then sign and date the Assembly ID Sheet.

Be sure to count the number of test booklets, Special Test Forms Kits, including individual audiotapes, if applicable, and Examiner’s copies of the special test forms received from the STC before you initial the transmittal/affidavit form(s).

For the read-aloud accommodation, the Examiner and all students in the read-aloud group must have the same test form number.

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**AUDIO TESTS**

If you are administering a regular, braille, or large-print EOC Science test that is accompanied by an audio recording on a compact disc (CD), please note the following:

- Check the labels on the CDs to verify that the subject area and test form numbers match the braille, large-print, or regular test booklet version.
- Check the audio equipment to ensure that it is working properly.
- The Examiner will read the test directions, the sample items, and the answers to the sample items to the students. The test directions will instruct students when to begin playing the CD.
- Students should start the CD on the first track when told to start working.
- The students may play, pause/stop, advance, or replay the recording as necessary during the test to better follow its content.
- **Viewing CD Track Details.** When used in a workstation's media player, the CD will display track numbers. If the school wishes for students to see the individual track details on the media player screen, a CD-Text plug-in must be installed for the individual media player. Individual track details would include the question numbers and/or the passage titles. CD-Text plug-ins are dependent on the media player loaded on individual workstations. If a school chooses to use a CD player rather than a computer workstation with the CDs, students will only be able to view track numbers. It is not possible for a CD player to display the CD-Text information.
5.2 Specific Directions for Administering the Paper EOC Earth Science, Biology, or Chemistry Tests

Once students and the Test Examiner enter the testing room, all instruction and/or review of the content covered by the test or discussion of testing strategies must stop.

NOTE: The testing directions may be modified for students who do not enter their answers into the answer document themselves. Such students indicate their answers in a different way (verbally, by pointing, by circling answers in the test booklet) according to the testing accommodations specified in their IEPs, 504 Plans, or EL Assessment Participation Plans. The Examiner then enters the student's choices into the answer document.

The Examiner may omit the test directions pertaining to the student completing the information in Fields A, F, and G on the answer document and to writing his/her name on the test booklet. Before or after testing, the Examiner should complete Fields A, F, and G, and write the student's name on his/her test booklet.

Examiners may modify the testing directions to reflect the accommodation. For example, the direction to fill in the circle on the answer document for the letter of the best answer may be modified to “circle the answer in your test booklet,” “say your answer,” or “point to the answer.” Refer to the Examiner’s Manual Appendices for the requirements for administering tests with accommodations.

Before distributing any materials,

SAY Today you will be taking the SOL End-of-Course [Earth Science, or Biology, or Chemistry] test. Please check your work area. You should only have the materials that are allowed for this test. Cell phones and devices that can transmit, receive, photograph, or record information must be removed during all tests.

Ensure students’ cell phones, all electronic devices, and other unauthorized materials have been removed from the students’ work area and are inaccessible to students. Refer to the Examiners must ensure that unauthorized materials (backpacks, books, papers, cell phones, electronic devices, etc.) have been removed from the students’ work areas and are inaccessible to students. Refer to the Examiner’s Manual for details.

SAY I am going to give each of you an answer document. Do not write anything on it until I tell you what to do.

Distribute the answer documents with the front page facing up. Ensure all students have sharpened No. 2 pencils with erasers. Ensure that students also have any needed materials or supplies required for accommodations.

SAY We will complete some of the information on the front page. In Field A, find the line labeled “Student Name.” Carefully print your last name, then your first name, and then your middle initial.

Answer students’ questions. Refer them to the dry-erase board or chalkboard if you have written identification information there. While students are completing the information, walk around the room to see that they are following instructions.
**ADDITIONAL TEST DIRECTIONS (OPTIONAL)**

If instructed by the STC to complete the remaining information in Field A:

**SAY** Now, on the other lines in Field A, fill in the rest of the information requested—teacher, school, school division, grade, your date of birth, and today’s date as the testing date. (Provide students with the month, day, and year.) **Are there any questions?**

**NOTE:** You may expand on this instruction to clarify the information students are to complete in Field A of the answer document.

**SAY** Now look at the back page of your answer document. (Demonstrate.) **Find the top two boxes labeled “Last Name” and “First Name.”** (Point.) **Print your last name and first name in the labeled boxes.**

Answer all questions, and give help as needed.

**SAY** I am going to give each of you a test booklet, a ruler, a calculator, and scratch paper. Do not open your test booklet until I tell you to do so.

Test booklets contained in each package may have different form numbers. Make sure that you pass out the test booklets in the order in which they were packaged. **DO NOT** re-order the test booklets in any way before distribution to students.

**Important:** Verify that the correct calculators are distributed for the test and have been prepared as described in Section 2.3.

Distribute test booklets, scratch paper, rulers, and calculators. **For the Chemistry test,** students must use the *Periodic Table of the Elements* that came in their test booklet or was provided in the special forms kit. Ensure that students also have any materials or supplies required for accommodations.

**SAY** **Check to make sure your calculator is working.** (Pause.)

**SAY** Look at the front cover of your test booklet for the form number of the test you are taking. Find the “S” followed by four numbers. (Demonstrate using a student’s test booklet.) **On your answer document, find field F, Form.** (Point.) **The letter “S” has been written for you.** In the empty boxes, write the four numbers that appear after the “S” from the front cover of your test booklet. Beneath each box in which you wrote a number, fill in the circle that has the same number. **When you have finished,** recheck the form number and the circles you filled in.

Assist students as necessary.

To assist in the identification of the test form, the complete form number indicates the test level (EOC), subject test code (3-digit numbers), followed by a dash (-), an “S” and four numbers. However, only the last four numbers following the “S” must be entered on the answer document.

**As an Examiner,** you may need to complete this field for students with disabilities. **On a large-print test booklet,** the form number is on the top right corner of the test booklet’s front cover. **The form number for a braille test booklet** is on its front cover at the bottom center. Correct completion of the form number is essential for accurate scoring.

**SAY** **Find Field G, Test Date.** (Point.) **In the area labeled “Month,”** find the circle for the month of this test date and fill it in. (Specify the month.)

When all students have finished,
SAY The next area is labeled “Day.” In the two boxes write the test date, entering one number in each box. (Specify the test date.) For example, if the test date is between the 1st and the 9th of the month, you would write “0” in the first box and the correct number in the second box. Are there any questions?

Answer all questions, and give help as needed.

SAY Beneath each box, fill in the circle that has the same number that you wrote in the box.

When all students have finished,

SAY The next area is labeled “Year.” In the last two boxes, write __. (Examiner should state the last two digits of the current year.)

SAY Beneath each box, fill in the circle that has the same number that you wrote in the box.

Give help as needed.

SAY Look at your test booklet. On the front cover find the box labeled “Student Name.” (Point using a student’s test booklet.) Print your first and last name in the box. Then turn your test booklet over. Print your first and last name in the box.

Give help as needed.

Ensure that all students have printed their names clearly in the boxes on the front and back covers of the test booklets.

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**CHEMISTRY TEST ONLY (Including Audio)**

SAY Open your test booklet and carefully tear out the *Periodic Table of the Elements*. (Demonstrate using a student’s test booklet.)

**NOTE:** Students using large-print or braille test forms will not need to tear out the *Periodic Table*. The kit contains a loose *Periodic Table* in large print or braille as required.

Make sure all students have located the *Periodic Table of the Elements*. Assist students as necessary.

SAY Open your test booklet to page 3. (Demonstrate using a student’s test booklet.)

If you are administering a braille or large-print test form, check your Examiner’s copy of a Braille or Large-Print test to verify the starting page number.

Make sure all students have their test booklet open to the correct page.
EARTH SCIENCE DIRECTIONS CONTINUE ON PAGE 18

BIOLOGY DIRECTIONS CONTINUE ON PAGE 19

CHEMISTRY DIRECTIONS CONTINUE ON PAGE 20
**EARTH SCIENCE**

SAY Find the directions at the top of page 3 of your test booklet. Read them to yourself as I read them aloud.

### DIRECTIONS FOR EARTH SCIENCE: LARGE-PRINT OR BRAILLE FORMS ONLY

SAY “Directions: Read each question and choose the best answer.” (Pause.)

### ALL OTHER EARTH SCIENCE TESTS

SAY “Directions: Read each question and choose the best answer. Then fill in the circle on your answer document for the answer you have chosen.” (Pause.)

SAY Find the sample. Read the question and each answer choice to yourself.

Pause, while students read the sample question.

### AUDIO/READ-ALOUD

SAY [Read the question and each answer choice to yourself] as I read them aloud. (Pause.)

SAY “Which of these can be used to measure atmospheric pressure? (A) An anemometer... (B) A barometer... (C) A thermometer... (D) A seismometer.” (Pause.)

SAY Which answer did you choose? (Pause for replies.)

SAY The best answer is “B.” (Pause.)

SAY On the back page of your answer document look at the bottom section. (Demonstrate.)

Now find the shaded box labeled “Sample A.” (Point to this section.)

Make sure all students have found the correct section of the answer document.

SAY Fill in the circle for the letter “B” because “B” is the letter for the best answer.

➡️ DIRECTIONS CONTINUE ON PAGE 21 ⬅️
BIOLOGY

SAY Find the directions at the top of page 3 of your test booklet. Read them to yourself as I read them aloud.

DIRECTIONS FOR BIOLOGY: LARGE-PRINT OR BRAILLE FORMS ONLY

SAY “Directions: Read each question and choose the best answer.” (Pause.)

ALL OTHER BIOLOGY TESTS

SAY “Directions: Read each question and choose the best answer. Then fill in the circle on your answer document for the answer you have chosen.” (Pause.)

SAY Find the sample. Read the question and each answer choice to yourself.

(Pause, while students read the sample question.)

AUDIO/READ-ALOUD

SAY [Read the question and each answer choice to yourself] as I read them aloud. (Pause.)

“A teacher in a biology laboratory is using a chemical to dissolve an eggshell. Which picture shows the safest laboratory practice? (A)... (B)... (C)... (D).”

Refer to the pictures in your test booklet.

SAY Which answer did you choose? (Pause for replies.)

SAY The best answer is “D.” (Pause.)

SAY On the back page of your answer document look at the bottom section. (Demonstrate.)

Now find the shaded box labeled “Sample A.” (Point to this section.)

Make sure all students have found the correct section of the answer document.

SAY Fill in the circle for the letter “D” because “D” is the letter for the best answer.

➤ DIRECTIONS CONTINUE ON PAGE 21 ➤
CHEMISTRY

SAY Find the directions at the top of page 3 of your test booklet. Read them to yourself as I read them aloud.

DIRECTIONS FOR CHEMISTRY: LARGE-PRINT OR BRAILLE FORMS ONLY

SAY “Directions: Read each question and choose the best answer.” (Pause.)

ALL OTHER CHEMISTRY TESTS

SAY “Directions: Read each question and choose the best answer. Then fill in the circle on your answer document for the answer you have chosen.” (Pause.)

SAY Find the sample. Read the question and each answer choice to yourself.

(Pause, while students read the sample question.)

AUDIO/READ-ALOUD

SAY [Read the question and each answer choice to yourself] as I read them aloud. (Pause.)

SAY “Which of the following is a balanced equation?—(A) $H_2 + Br_2$ yields $2HBr$… (B) $H_2 + Br_2$ yields $HBr$… (C) $H_2 + 2Br_2$ yields $2HBr$… (D) $2H_2 + Br_2$ yields $HBr$.” (Pause.)

SAY Which answer did you choose? (Pause for replies.)

SAY The best answer is “A.” (Pause.)

SAY On the back page of your answer document look at the bottom section. (Demonstrate.)

Now find the shaded box labeled “Sample A.” (Point to this section.)

Make sure all students have found the correct section of the answer document.

SAY Fill in the circle for the letter “A” because “A” is the letter for the best answer.

➤ DIRECTIONS CONTINUE ON PAGE 21 ➤
SAY Are there any questions about how to mark an answer on your answer document?

Before actual testing starts, make sure the test procedures are very clear and that students understand the mechanics of selecting a response.

SAY You should read and answer all of the questions. You may have as much time as you need today to complete the test. You may use the tools and the other test materials you were provided whenever you want. Raise your hand if you have a problem with your calculator during the test.

Make sure students have been provided the appropriate authorized materials as outlined in Section 2.3.

SAY You may write in your test booklet or on your scratch paper, but make sure to fill in your answers on your answer document. (Point to this section.)

Notice that odd-numbered questions have answer choices labeled “A,” “B,” “C,” and “D,” and even-numbered questions have answers labeled “F,” “G,” “H,” and “J.” Fill in only one answer for each question. If you decide to change your answer make sure to erase the first answer completely.

Work until you come to the stop sign. (Demonstrate using a student’s test booklet.) When you have finished, you may go back to any question and check your work. Are there any questions?

Answer only questions related to the mechanics of selecting a response. Examiners/Proctors must not answer any questions pertaining to the content of test question.

As instructed by the STC, after students have completed the test session, they may remain in the room until all have finished or they may be dismissed individually to class.

SAY When you have finished, raise your hand and I will collect your materials,

[If students will be staying in the classroom, SAY: then you may sit quietly or read if you wish.]

[If students will be dismissed individually back to class, SAY: then you will be dismissed to class.]

Remember, you must do your own work. At no time may you discuss, or share, by any means, the questions on the test with anyone. Students who cheat on the test will receive a score of zero and will not be permitted another opportunity to take the test until the next test administration.

Pause. The consequences of cheating have a potential impact on a student’s attempt to meet graduation requirements.
5.3 Monitoring the Test and Answering Student Questions

- **Examiner/Proctor monitoring.** During the test administration, Examiners/Proctors must monitor the testing process by moving as unobtrusively as possible about the room. Examiners/Proctors must not engage in other activities that would interfere with monitoring. Such activities include but are not limited to reading, grading papers, using electronic devices, etc. Students must not be left unattended for any length of time.

- **Student access to unauthorized materials.** Examiners/Proctors should ensure that students are working independently and do not have access to unauthorized materials, cell phones, or any other electronic devices in the testing room while any students are testing. Immediately notify the STC if a student accessed or had access to a cell phone, electronic device, or other unauthorized material that could provide an unfair advantage while any students were testing. **If the student is testing at the time of the discovery of the cell phone, electronic device, or unauthorized material, the student may not be permitted to continue testing.** The STC must submit an irregularity to the DDOT providing the details about the incident.

- **Examiner/Proctor reviewing test items.** Before, during, or after testing, Examiners/Proctors must not spend time reading any test items, creating any type of answer key to the test items, copying test items or portions of test items, taking notes about test items, recording student responses to test items, or discussing test items with anyone. (Examiners/Proctors may report a problem with a test item to their STC. Refer to the *Examiner’s Manual* for guidelines.)

- **Examiner/Proctor providing help.** Help must not be given on specific test items. Examples of prohibited help include but are not limited to: pronouncing words, rewording the question, providing hints and clues, and/or giving reminders, giving verbal indications or non-verbal cues about the correctness of a student’s answer. Test questions or portions of the question may not be read to students unless specified by their IEPs, 504 Plans, or EL Assessment Participation Plans. If, after testing is complete, a student asks to discuss a question, the Examiner, Proctor, or teacher should remind the student that the test questions cannot be discussed.
Students leaving the testing room during the test. Students may not leave the testing site and subsequently return to finish the test unless they are closely monitored. Students may not discuss the test or any test items with anyone. Students must not be allowed to interact with each other or any other students in any way, or have access to cell phones, electronic devices, or educational materials.

Students moving to an alternate test room. If students are moved to an alternate testing site to complete their tests, their testing materials must be collected by the Examiner or Proctor prior to the move. Students must not be permitted to discuss the test or course content in any way with anyone or have access to any educational materials, cell phones, or other electronic devices during the move. Once in the alternate site, return each student’s own materials and resume testing. The student should be re-issued the same calculator he/she received for the test. If the student is issued a different calculator, it must meet the guidelines and/or be reset/prepared as described in Section 2.3, Table 2, prior to being issued to the student.

Answer selection. If a student needs assistance with the mechanics of selecting a response, the Examiner/Proctor may provide directions to the student, such as: “Fill in the circle on your answer document for the letter you have chosen.”

Circling in the test booklet. Examiners/Proctors must not direct students to circle answer choices in their test booklets first and then transfer their answers to their answer documents. Only students with the mark-in-test-booklet accommodation may test without an answer document, circling answers in their test booklet.

Prompting students. Examiners/Proctors must not prompt the student to go back to any specific question such as any left unanswered, or questions multiple-marked. The Examiner/Proctor may tell students, “Review your answer document carefully.” Once the student’s answer document has been collected it may not be returned to the student.

Questions about test items. If a student asks a question during the test about a test item, the student should be told, “Read it carefully and choose the best answer.” Help must not be given on any test items. Refer to the bullet above regarding prohibited help.

Cheating. The Examiner must immediately notify the STC if a student is found cheating on the test. If the student is testing at the time of the discovery of cheating, the student may not be permitted to continue testing. The STC must submit an irregularity to the DDOT providing the details about the incident. If the school division makes the determination that a student cheated, the student is not eligible for a retest during the current session. If the test was an EOC SOL test, the student may retest during the next regularly scheduled session. The STC/DDOT must invalidate the test and the student will receive a score of “0.” The student’s test record will note the student cheated on the test.

Student Inactivity. If the Examiner/Proctor observes an inactive student during testing, the Examiner/Proctor may ask the student, “Are you finished with your test?” If the student responds “No,” then the Examiner/Proctor may say, “You need to continue working on your test.” If the student responds, “Yes,” then the Examiner/Proctor should collect the student’s testing materials. Once the student’s answer document has been collected, it may not be returned to the student.

Reporting an error with a test item. If the student reports there is an error with a test question or answer choice, you should record the name of the student, subject-area, test level, format (online or paper), question number, and a brief statement describing the student’s concern. However, under no circumstances should the test question or answer choices be written down or discussed with the student or with other staff members. Tell the
student that the concerns will be reported. The student may continue with the test; you may
tell the student to, “Read the question carefully and choose the best answer.” Notify the
STC of the student’s concern.

- **Assistance with hand-held calculators.** If a student’s calculator malfunctions or stops
working, replace it with another approved calculator for this test. The calculator must meet
the guidelines as described in Table 2, Section 2.3, prior to being issued to the student.

### 5.4 Collecting Students’ Test Materials

- **Before the Examiner/Proctor accepts the answer document from the student,** the Examiner/
Proctor may quickly review the multiple-choice section of the student’s answer document.

If the Examiner/Proctor notices any questions left unanswered, the Examiner/Proctor may
only tell the student:

**SAY**  Review your answer document carefully.

Examiners/Proctors must not prompt the student to go back to any specific question such as
any left unanswered, or questions multiple-marked. Once the student’s answer document
has been collected it may not be returned to the student. As students finish testing, collect all
items (i.e., answer document, test booklet, audio, *Periodic Table*, and scratch paper) from
each individual student, one student at a time. Do not have students pass materials up or
down the rows of desks or workstations.

- **Be sure to account for all test materials including test booklets, answer documents, scratch
paper, *Periodic Tables*, audios, and audio equipment.** The Test Examiner must be sure that
all sheets of scratch paper distributed to each student are collected and accounted for **before**
students are moved to an alternate test site or dismissed from the test session. All scratch
paper that has been written on must be destroyed in accordance with local policies.

- **All test materials must be kept in a secure location until they are returned to the STC.**

### 6. SPECIFIC DUTIES OF EXAMINERS: AFTER TESTING

#### 6.1 Inspect Answer Documents

Remember that the students’ completed answer documents are secure test materials. They must be
returned to your STC **no later than the end of the school day on which the test was administered.**
Examiners should check the answer document to ensure:

- Box A is correctly completed.
- The form number in Box F matches the form number on the student’s test booklet.
- Field B (*Last Name, First Name*) and Field C (*Date of Birth*) must be correctly completed.
- Field D should be left blank.
- Field E (*State Testing Identifier*) must be filled out, however, the STC will determine who fills
  this in.

**The student’s answer choices must not be altered in any way.**

#### 6.2 Organize Test Materials for Return to the STC

As directed by your STC, assemble the following materials for return to the STC:
Prepare Scorable Test Materials (Answer Documents)

Verify the following:

- There is a completed or partially completed answer document for each student that was administered the test, including answer documents for irregularities that required retesting.
- The number of students tested, the number of completed answer documents, and the number of test booklets (identified with students’ names) match the testing/classroom attendance roster.

Prepare Non-Scorable Test Materials

Verify that the number of test booklets and the Special Test Forms Kits returned match the number you received initially and recorded on the Assembly ID Sheet. Include:

- regular test booklets
- if applicable, Special Test Forms Kits including
  - students’ test booklets
  - accompanying Examiner’s copy of braille or large-print test booklets
  - accompanying CDs of regular, braille, or large-print tests

Check test booklets to ensure students’ answer documents are not included.

Separate these items from answer documents and test booklets:

- unused answer documents
- all scratch paper, Periodic Tables
- damaged and/or “VOID” answer documents
- student paper, audio, or electronic responses used for transcriptions
- audio/electronic and video copies of testing sessions (e.g., read-aloud, interpreting)
- completed Assembly ID Sheets

6.3 Return All Test Materials to the STC After Testing

After all materials are inspected and verified, return them to your STC. Return three separate groups of materials as follows:

- **Group 1—Scorable Secure Answer Documents:**
  - all completed and partially completed answer documents. **NOTE: No loose scratch paper should be included with the scorable answer documents. In the Spring administration, place the bundle of answer documents for Term Graduates on top of the stack.**

- **Group 2—Non-Scorable Secure Test Materials:**
  - all test booklets issued to you for the test session (include braille and large-print Examiner’s copies and accompanying audios)
  - damaged and/or “VOID” answer documents
  - used Periodic Tables and scratch paper written on by students
  - student paper, audio, or electronic responses used for transcriptions
  - audio/electronic and video copies of testing sessions (e.g., read-aloud, interpreting)
The STC will verify that you have returned all test materials and will initial the “IN” column on the Test Booklets/Prompts Transmittal Form and Affidavit for Examiners/Proctors or Special Test Forms/Kits Transmittal Form and Affidavit for Examiners/Proctors or other document.

- **Group 3—Remaining Non-Scorable, Non-Secure Materials:**
  - completed Assembly ID Sheets
  - unused and/or unmarked answer documents
  - unused scratch paper
  - this Supplement to the Examiner’s Manual
  - the Examiner’s Manual

**NOTE:** The unused answer documents, Examiner’s Manual, and their Supplements may be reused in subsequent administrations.

### 6.4 Sign the Examiner’s/Proctor’s Affidavit

After the SOL Earth Science, Biology, or Chemistry tests have been administered and materials returned to the STC, Examiners and Proctors are required to sign the affidavit certifying that the test was administered according to the School Division Personnel Test Security Agreement.

For this certification, the STC should provide the Test Booklets/Prompts Transmittal Form and Affidavit for Examiners/Proctors or Special Test Forms/Kits Transmittal Form and Affidavit for Examiners/Proctors (located in the Appendix of the Supplement to the Writing and Non-Writing Test Implementation Manuals).

### 7. MAKE-UP TESTING

Every student who is absent on the regular test date must be given an opportunity to take the missed test, provided the make-up sessions are within the testing window.

- Students will use a test booklet from the school’s original distribution of main materials. However, for irregularities that require retesting use the alternate multiple-choice form as directed by the Virginia Department of Education.
- The STC must provide you with the appropriate test booklets.
- The STC will provide you with information regarding the schedule for make up testing sessions.
- Consult with your STC if you have any questions about make-up testing.

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**THANK YOU**

The Virginia Department of Education appreciates your time and effort in administering the SOL Assessments for Earth Science, Biology, or Chemistry.

Please e-mail any comments or suggestions for improving this manual to: student_assessment@doe.virginia.gov
APPENDIX A  Sample Answer Document

EARTH SCIENCE
End-of-Course Test

Answer Document
Version 1.0

Section 1
If this answer document is submitted WITH a Pre-ID label, any data in fields B through E will not be read by the scanner. Changes to student information must be made online within PearsonAccess.

If this answer document is submitted WITHOUT a Pre-ID label, fields B through E must be completed. Changes to student information after this document is submitted must be completed online within PearsonAccess.

Please see Section 2 for additional fields.

<table>
<thead>
<tr>
<th>A</th>
<th>STUDENT NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>LAST NAME</td>
</tr>
<tr>
<td>C</td>
<td>DATE OF BIRTH</td>
</tr>
<tr>
<td>D</td>
<td>GENDER</td>
</tr>
<tr>
<td>E</td>
<td>STATE TESTING IDENTIFIER</td>
</tr>
</tbody>
</table>

PLACE PRE-ID LABEL HERE

PLEASE DO NOT WRITE IN THIS AREA

SERIAL #
Section 2: Fields F and G must be completed. Fields H and I should be completed as needed.

**End-of-Course BIOLOGY**

**SAMPLE**

```
1 1 1 1 1 1 1
2 2 2 2 2 2 2
3 3 3 3 3 3 3
4 4 4 4 4 4 4
5 5 5 5 5 5 5
6 6 6 6 6 6 6
7 7 7 7 7 7 7
8 8 8 8 8 8 8
9 9 9 9 9 9 9
10 10 10 10 10 10 10
11 11 11 11 11 11 11
12 12 12 12 12 12 12
13 13 13 13 13 13 13
14 14 14 14 14 14 14
15 15 15 15 15 15 15
```
### CHEMISTRY End-of-Course Test Answer Document

**Section 1**

If this answer document is submitted WITH a Pre-ID label, any data in fields B through E will not be read by the scanner. Changes to student information must be made online within PearsonAccess.

If this answer document is submitted WITHOUT a Pre-ID label, fields B through E must be completed. Changes to student information after this document is submitted must be completed online within PearsonAccess.

Please see Section 2 for additional fields.

<table>
<thead>
<tr>
<th>A</th>
<th>STUDENT NAME</th>
<th>TEACHER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>B</th>
<th>LAST NAME</th>
<th>FIRST NAME</th>
</tr>
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<tbody>
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<td></td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>C</th>
<th>DATE OF BIRTH</th>
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<tbody>
<tr>
<td></td>
<td>MONTH</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>D</th>
<th>GENDER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E</th>
<th>STATE TESTING IDENTIFIER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PLEASE DO NOT WRITE IN THIS AREA**
Section 2: Fields F and G must be completed. Fields H and I should be completed as needed.
VIRGINIA
STANDARDS OF LEARNING
NON-WRITING SECURE TEST MATERIALS
Assembly ID Sheet

Name of Test
EOC, EARTH SCIENCE 2010, FM S5064, PK 5

Form Number
VA00033013

Level

Quantity

 AFTER OPENING THIS PACKAGE BUT BEFORE DISTRIBUTING ITS CONTENTS TO THE STUDENTS:

1. Count the number of test materials contained in this package.
2. Check the one that is applicable and explain any discrepancy.
   - The number of test materials in this package matches the number indicated in the description.
   - The number of test materials in this package DOES NOT match the number indicated in the description.

Discrepancy:

3. Signature __________________________ Date ____________
4. Return this Assembly ID sheet to the STC along with all enclosed test materials

For Internal Use Only:

<table>
<thead>
<tr>
<th>PGM-SSN: N/A</th>
<th>Discrete Job: 2833367</th>
<th>Pack Station: H</th>
</tr>
</thead>
</table>

| Page: 1 | PKT: N/A Of N/A | Seq #: N/A |

EOC Science Tests

Supplement to the Examiner’s Manual

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