

TCAP Science Assessment

Calculator Guidance

Grades 3-5

The TCAP science assessment in grades 3-5 does not require the use of a calculator. TN Science standards for this grade band only require students to recognize patterns and count using number lines and therefore students are not permitted to use a calculator (see below for guidance).

Grades 6-8

The Tennessee Academic Standards for Science incorporate mathematical concepts in a grade-appropriate manner and vertical progression that aligns to the Tennessee Academic Standards in Mathematics. Recognizing that students at some grade levels may encounter science items that involve the use of mathematical skills, and because the test is designed to look for mastery of the science standards not the mathematical ones, the department has developed calculator guidance for the TCAP science assessments (see below for guidance).

EOC Biology

The Tennessee Academic Standards for Science incorporate mathematical concepts in a grade-appropriate manner and vertical progression that aligns to the Tennessee Academic Standards in Mathematics. Recognizing that students at some grade levels may encounter science items that involve the use of mathematical skills, and because the test is designed to look for mastery of the science standards not the mathematical ones, the Department has developed calculator guidance for the TCAP science assessments (see below for guidance).

Science Calculator Guidance by Grade Band

Grade/Course	Calculator Policy	Rationale
3-5	No calculator permitted.	TN Science standards for this grade band only require students to recognize patterns and count using number lines, and therefore, students are not permitted to use a calculator.
6-8	<p>Calculators permitted.</p> <p>All students taking a paper-based test should be given access to a hand-held calculator from the approved calculator list for grades 6-8 located here (under “math” tab).</p> <p>All students taking the online test will have access to both a TI-30 Scientific Calculator and a Desmos Scientific Calculator within the online platform.</p>	<p>TN Science standards for grades 6- 8 include the introduction of mathematical skills within the context of science.</p> <p>There may be items on the assessment that incorporate grade-level math computation, and therefore, all students are permitted to use a calculator on the assessment.</p>
Biology	<p>Calculators permitted.</p> <p>All students taking a paper-based test should be given access to a hand-held calculator from the approved calculator list for Biology located here (under “math” tab).</p> <p>All students taking the online test will have access to both a TI-84 CE Graphing Calculator and a Desmos Graphing Calculator within the online platform.</p>	<p>TN Science standards in Biology require students to analyze and interpret data at a level that may involve some mathematical calculations. Therefore, all students are permitted to use a calculator on the assessment.</p>

Test Administration Guidelines

- It is the responsibility of the test administrator to ensure the regulations outlined in this policy pertaining to calculator use are followed.
- All memory and user-entered programs and documents must be cleared or removed before and after the test.
- A student may use any grade band-specific permitted calculator on the calculator-permitted subparts.
- Students should have access to no more than one handheld calculator device for calculator-permitted subparts.
- For all Grade 6-8 assessments, students will have access to both the TI-30XS and Desmos Scientific Calculator embedded within the TestNav platform for both the operational assessment and the online practice test.
- For all EOC assessments, students will have access to both the TI-84 Plus, Desmos Graphing Calculator embedded within the TestNav platform for both the operational assessment and the online practice test.

Desmos Calculators

- Note that the Desmos calculators appearing in the TestNav platform are different from standard Desmos calculators freely available in App Stores and on the Desmos homepage (desmos.com). A list of these differences can be found [here](#).
- Instructional videos to learn more about Desmos can be found [here](#).
- Desmos Coaching Corner Webinars can be found [here](#).
- A link to the Desmos Scientific Calculator for Grade 6-8 assessments can be found [here](#).
- A link to the Desmos Graphing Calculator for EOC assessments can be found [here](#).