Connecticut Alternate Science (CTAS) Assessment:

Test Administration Manual

2023 - 2024

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Connecticut Comprehensive Assessment Program Portal

https://ct.portal.cambiumast.com/

This website is the home page for all Connecticut Alternate Science Assessment administration information.

Connecticut Comprehensive Assessment Program Help Desk

1-844-202-7583 | cthelpdesk@cambiumassessment.com

The Help Desk is open Monday–Friday 7:00 a.m. to 4:00 p.m. EST outside of the summative testing window and Monday–Friday 7:00 a.m. to 7:00 p.m. EST during the summative testing window (excluding holidays).

Connecticut Student Assessment Website

https://portal.ct.gov/SDE

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Overview of the Connecticut Alternate Science Assessment

The purpose of this Connecticut Alternate Science (CTAS) Assessment Test Administration Manual (TAM) is to guide Teachers Administering the Alternate (TEAs) to prepare for the administration of the CTAS to eligible students in Grades 5, 8, or 11 with significant cognitive disabilities. These students were determined by a Planning and Placement Team (PPT) using the Connecticut Alternate Assessment System Eligibility Form to meet the eligibility criteria for participation in the Alternate Assessment System.

For the purposes of this Test Administration Manual, the Connecticut Alternate Science Assessment will be referred to as "Connecticut Alternate Science Assessment", "CTAS" or "Test."

This TAM contains the following sections:

- Section I: Overview of the Connecticut Alternate Science Assessment
- Section II: Teacher Administering the Alternate and Test Coordinator Responsibilities
- Section III: Testing Integrity, Appropriate and Inappropriate Test Practices
- Section IV: Administration of the Connecticut Alternate Science Assessment

Terms and Acronyms

Table 1 provides a summary of terms with the associated acronyms used frequently in this TAM and other documents related to Connecticut Assessments.

Table 1. Connecticut Alternate Science Assessment Terms and Acronyms

Term	Acronym
Approved Private Special Education Program	APSEP
Assistive Technology	AT
Augmentative and Alternative Communication	AAC
Connecticut Alternate Assessment of English Language Proficiency (CAAELP)	CAAELP
Connecticut Core Standards	CCS
Connecticut State Department of Education	CSDE
Connecticut Special Education Data System	CT-SEDS
Connecticut Alternate Science Assessment	CTAS
Data Entry Interface	DEI
District Administrator for Testing in TIDE	DA

District Test Coordinator	DC
Individualized Education Program	IEP
Next Generation Science Standards	NGSS
Planning and Placement Team	PPT
School Test Coordinator	SC
State Assigned Student Identifier	SASID (or SSID as used in all CAI systems)
Teacher Administering the Alternate	TEA
Test Administration Manual	TAM
Test Information Distribution Engine	TIDE

Section I. Overview of the Connecticut Alternate Science Assessment

I.I Overview

The Connecticut Alternate Science (CTAS) Assessment provides eligible students with significant cognitive disabilities in Grades 5, 8, and 11 the opportunity to demonstrate what they know in science. An overview of the CTAS is summarized below in Table 2.

Table 2. Overview of the Connecticut Alternate Science Assessment

Overview of the Connecticut Alternate Science Test	
Topic	Description
Students Assessed	Eligible special education students with significant cognitive disabilities. Student eligibility is confirmed with the Connecticut Alternate Assessment System Eligibility Form.
Grades Assessed	Grades 5, 8, and 11
Test Content Alignment	Aligned to Next Generation Science Standards (NGSS) and derived Connecticut Alternate Science Essence Statements.
Test Delivery Method	1. Trained Teachers Administering the Alternate (TEAs) provide a one-to-one test administration using the Performance Tasks and color-printed Resources. 2. Trained TEAs administer all six Performance Tasks (2 per content area) to each student individually. 3. Trained TEAs record student scores for each activity/core extension on the Student Score Worksheet. 4. Trained TEAs submit student scores in the Data Entry Interface (DEI).
Security	Test administration materials, including Performance Tasks, Resource Packet, and Student Score Worksheets for the Connecticut Alternate Science Assessment are non-secure.
Test Window (upload)	CTAS test administration should occur beginning in the fall of each school year and be completed in advance of the last day of testing (May 31, 2024).
Student Score Worksheet Upload to the DEI	March 25–May 31, 2024 *Note: The student scores must be submitted in the DEI by May 31, 2024, for reporting.*

Table 2. Overview of the Connecticut Alternate Science Assessment

Overview of the Connecticut Alternate Science Test	
Topic	Description
Testing Time per Student	Testing time will vary for each student. The CTAS is an untimed test. It is recommended that the activities within each Performance Task be administered consecutively, as they often relate to each other. However, students may take as long as is needed to complete the assessment within the test administration window. If multiple activities are conducted in one day, attention to cognitive or physical fatigue must be considered.
Allowable Adaptations	The allowable adaptations for this assessment are discussed in detail in the section Allowable Adaptations for the Connecticut Alternate Science Assessment.
Training	All TEAs must participate annually in the required online Alternate Assessment System training and pass the associated quiz with a score of 80% or better to be eligible to access the tests and associated secure materials, administer alternate assessments, and submit the CTAS Student Score Worksheets into the DEI portal.

I.II Background and Purpose

The Connecticut Alternate Science (CTAS) Assessment is Connecticut's alternate assessment used to assess eligible students in Grades 5, 8, and 11 on the content aligned to the Next Generation Science Standards (NGSS). The CTAS is intended to be administered throughout the school year as teachers work with eligible students to rate student performance on accessible science activities. The Connecticut State Department of Education's (CSDE's) expectation is that all eligible students in Grades 5, 8, and 11 participate in the CTAS test which is included in district accountability reports for performance and for participation. This means that students eligible for the Connecticut Alternate Assessment (CTAA) who are in Grades 5, 8, or 11 are expected to also participate in the CTAS Assessment.

Development and Design of the Connecticut Alternate Science Assessment

Development

Prior to beginning the design and development of the CTAS, the CSDE sought extensive informal and formal feedback from educators across the state of Connecticut on the science assessment format that would be most relevant and appropriate for students with the most significant cognitive disabilities who met eligibility requirements. Based on that feedback, the following guiding principles were established.

CTAS should:

- *be meaningful and accessible to participating students;*
- *guide science curriculum and instruction throughout the year by providing a coherent sequence of assessment activities;*
- *allow for administration of the assessment throughout the year;*
- *include an appropriate balance of the breadth and depth of NGSS Learning Progressions across grade bands;*
- *assess the three-dimensions of NGSS (i.e., science and engineering practices, disciplinary core ideas, and crosscutting concepts);*
- *incorporate scientific phenomena that students make sense of or use to solve a problem; and*
- *expect consistent demonstration of the performance expectations by students statewide.*

The guiding principles, basic format, and function of the CTAS were synthesized from feedback from the field of educators including the CTAS Committee, comprised of Connecticut educators with knowledge of the NGSS standards and/or experience with students with disabilities (particularly those with significant cognitive disabilities). This committee met several times to offer comprehensive guidance on test design and contributed to all phases of test development.

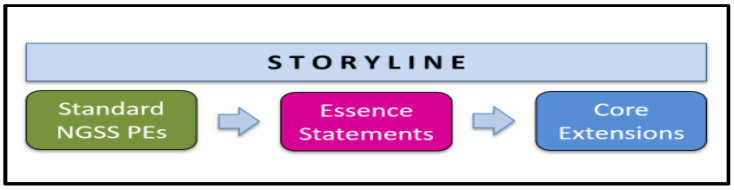
Design

In collaboration with the CSDE and the American Institute for Research, the CTAS Committee selected a variety of NGSS Standard Performance Expectations that are most appropriate for the students with significant cognitive disabilities to create derived Essence Statements. Essence Statements capture the most important elements of each standard and make them more accessible to participating students. The NGSS Standard Performance Expectations and Connecticut Alternate Science Essence Statements were used to develop the assessment.

Each Connecticut Alternate Science Essence Statement is associated with 2-4 Core Extensions. These describe specific student performances and are connected to activities to be administered to the student by the Trained TEA. The Trained TEA then rates the student's performance on a 0-2 scale. Additional details regarding rating/scoring procedures are included in General Rating Scale and Student Score Worksheet.

Figure 1 is a diagram of the primary components of the CTAS Assessments.

Figure 1. Primary Components of the Connecticut Alternate Science Assessment



The Connecticut Alternate Science Assessment has been organized into six storylines in each assessed grade – Grades 5, 8, and 11. There are two storylines per content area: Earth Science (Storylines 1 and 2); Life Science (Storylines 3 and 4); and Physical Science (Storylines 5 and 6).

Each storyline includes the NGSS Standard Performance Expectations, the derived Connecticut Alternate Science Essence Statement, and the corresponding Core Extensions, which are directly aligned to the activities in the Performance Tasks. Each activity provides a coherent sequence of instruction for the Trained TEA on how to assess student performance associated with each Core Extension. These activities ask students to make sense of real-world phenomena and/or engage with an engineering design problem.

Table 3 includes an overview of the each of the six storylines and associated Performance Tasks by content area.

Table 3. Storylines and Performance Tasks Overview

Content Area	Storyline Number	Storyline and Performance Task	Grade-Level Performance Task (PT)
Earth Science	1	Earth Systems	Grade 5
			Grade 8
			Grade 11
	2	Natural Resources	Grade 5
			Grade 8
			Grade 11
Life Science	3	Living Organisms	Grade 5
			Grade 8
			Grade 11
	4	Healthy Ecosystems	Grade 5
			Grade 8
			Grade 11
Physical Science	5	Forces and Motion	Grade 5
			Grade 8
			Grade 11
	6	Using Energy Every Day	Grade 5
			Grade 8
			Grade 11

I.III Administration of the Connecticut Alternate Science Assessment

Trained TEAs are encouraged to begin administering the Performance Tasks to their students and complete the ratings beginning in the fall of each school year. A record of the student scores should be kept for the online submission into the DEI during the CTAS upload window of March 25 - May 31, 2024. Additional details regarding student scoring procedures are included in General Rating Scale and Student Score Worksheet.

Storyline Overview

Each storyline outlines the following components used to inform the Performance Task:

- Content Area
- Guiding Questions
- NGSS Learning Progressions
- NGSS Standard Performance Expectations
- Connecticut Alternate Science Essence Statements
- Core Extensions
- Vocabulary

For an explanation of each storyline component, refer to Table 4. A sample storyline is included in Figure 2.

Table 4. Storyline Components

Storyline Components	
Component	**Description**
Content Area	Content areas include: • Earth Science (Storyline 1 and Storyline 2) • Life Science (Storyline 3 and Storyline 4) • Physical Science (Storyline 5 and Storyline 6)
Guiding Questions	There are a series of Guiding Questions for each Performance Task. Each guiding question serves to motivate learners to explore an idea or a phenomenon. These guiding questions give a purpose for learning by describing "What are we trying to find out?"
NGSS Learning Progressions	The development of this assessment was informed by the Next Generation Science Standards (NGSS) K-12 Progressions. Each learning progression is related to the assessed content area. Grade-level learning progressions were used to select appropriate NGSS Performance Expectations for the assessed population and guide the breadth and depth of the Performance Tasks.
NGSS Standard Performance Expectations	For each storyline, a set of two to three NGSS Standard Performance Expectations were selected for the CTAS Assessment. NGSS Standard Performance Expectations were used to derive the Essence Statements.
Connecticut Alternate Science Essence Statements	Essence Statements define the derived core understandings embedded in the grade-level NGSS Standard Performance Expectation, making them accessible and achievable by students with significant cognitive disabilities. Essence Statements generally include the three NGSS dimensions—Science & Engineering Practices, Disciplinary Core Ideas, and Cross Cutting Concepts.

Core Extensions	For each NGSS Standard Performance Expectation and associated Essence Statement, a set of corresponding Core Extensions representing a range of student performances is used to assess student understanding of the associated Essence Statement and Standard Performance Expectation. Core Extensions describe specific student performances and are connected to activities to be administered to the student by the Trained TEA.
Appropriate Vocabulary	Selected vocabulary terms are associated with the NGSS Standard Performance Expectations, Essence Statements and Core Extensions which are appropriate for students with significant cognitive disabilities to use to access the CTAS Assessment. A set of grade-appropriate vocabulary terms are included in each Performance Task.

Figure 2. Sample Storyline

Life Science
Storyline 4: Healthy Ecosystems
Grade 8 Performance Task

Guiding Questions: What are resources that affect the size of populations in ecosystems? What are the nonliving and living factors that affect populations in an ecosystem? How do populations change over time in an ecosystem? What traits enable populations to change and survive over time?

NGSS Learning Progressions	Grade 8		
	NGSS Standard Performance Expectations	Connecticut Alternate Science Essence Statements	Core Extensions
LS2.A Interdependent relationships in ecosystems	MS-LS2-1 Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.	CTAS-MS-LS2-1 Interpret data to provide evidence for the effects of resource availability on populations of organisms in an ecosystem.	1. Recognize the difference between physical (non-living) and living features in a given ecosystem. (CTAD-MS-LS2-5) 2. Identify two resources (e.g., food, water, shelter) that affect the size of a population in a given ecosystem. (CTAS-MS-LS2-1) 3. In a given ecosystem, describe how one trait in a plant or an animal may affect the population over time. (CTAS-MS-LS4-6) 4. Identify how two factors (one physical [non-living] and one living) may affect the plants and animals living in an ecosystem. (CTAS-MS-LS2-5) 5. Use data from a table or a graph to provide evidence of how the availability of a resource affects the size of a population. (CTAS-MS-LS2-1) 6. Evaluate a solution (by identifying one benefit and one drawback) to a problem in an ecosystem (e.g., lack of water, pollution, or invasive species). (CTAS-MS-LS2-5) 7. Describe how a trait in a plant or animal population has changed over time from provided visual representations. (CTAS-MS-LS4-6) 8. Use data from a table or graph to support an explanation of how a trait in a plant or animal population has changed over time. (CTAS-MS-LS4-6)
LS2.C Ecosystem dynamics, functioning, and resilience	MS-LS2-5 Evaluate competing design solutions for maintaining biodiversity and ecosystem services.*	CTAS-MS-LS2-5 Evaluate a solution to maintaining a healthy ecosystem, including the physical environment and the plants and animals that live there.	
LS4.C Adaptation	MS-LS4-6 Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time.	CTAS-MS-LS4-6 Use data to support an explanation for a change in the traits of animals and plants in a population over time.	
Appropriate Vocabulary	Organisms, ecosystems, populations, traits, resource availability, healthy ecosystem, unhealthy ecosystem, living, non-living, solution		

Performance Task Overview

There are two storylines per content area with an associated Performance Task for each storyline. Each Performance Task:

- follows the storyline and guiding questions to engage students in making sense of scientific phenomena or thinking about an engineering design problem.
- includes a series of cohesive activities supporting each storyline.
- includes a set of resources required for use during the administration of each activity.
- is used to elicit evidence for the Trained TEA about whether the student can demonstrate understanding described in the Core Extensions.

For an explanation of each Performance Task component, refer to Table 5.

Table 5. Performance Task Components

Performance Task Components	
Component	Description
Performance Task	There are six total Performance Tasks per grade. Each Performance Task represents a storyline in one of three content areas, Earth Science, Life Science, and Physical Science. Each Performance Task: • includes a series of cohesive activities supporting each storyline. • is used to elicit evidence for the Trained TEA about whether the student can demonstrate understanding described in the Core Extensions. • follows the storyline and guiding questions to engage students in making sense of scientific phenomena or thinking about an engineering design problem. • includes a set of required resources to be used during the administration of each activity.
Activity	Each activity: • was developed to align with a single Core Extension. • asks students to make sense of real-world phenomena and/or engage with an engineering design problem. • provides a coherent sequence of instruction for the Trained TEA on how to assess student performance associated with each Core Extension. • is administered using the Teacher-Provided Resources (e.g., cup) and required Resource Packet (e.g., Posters, Cards). • is used by the Trained TEAs to score student performance associated with each Core Extension.

Resources	Teacher-Provided Resources Some Performance Tasks include physical resources that must be provided by the Trained TEA to complete the activity. A list of required Teacher-Provided Resources is included in the Performance Task, if applicable. Teacher-Provided Resources are generally required for activities that center on a student/teacher-conducted investigation. Resource Packet Most resources required to administer the CTAS are provided in the Resource Packet (in PDF form). These resources must be printed in color ink to administer each activity.

Each Performance Task includes the following materials in the order indicated below:

- Cover Page
  - The cover page is used to identify the content area, storyline number, storyline name, and grade-specific Performance Task (refer to Figure 3).
- Storyline
  - Refer to Storyline Overview.
- General Overview
  - Includes an overall description of the grade-specific Performance Task and the content of the activities (refer to Figure 4).
- List of Materials Needed
  - Includes a list of all *Teacher-Provided Resources*, if applicable. Teacher-provided resources are needed to administer activities in which the student and teacher perform an investigation together.
  - Includes *Instructions for Preparing Materials*.
  - Includes a list of all resources included in the Resource Packet (refer to Figure 5). Resources are listed according to the Resource Identifier, which appears on the back of each resource. The directions included for preparing resources must be followed exactly for the Resource Identifiers to appear as intended. These resources must be printed in color ink. Refer to Resources Overview for a comprehensive set of instructions for preparing the required resources.
- Activities
  - A series of cohesive activities designed to elicit student responses and determine student scores on each Core Extension (refer to Activity Overview).

Figure 3. Sample Cover Page

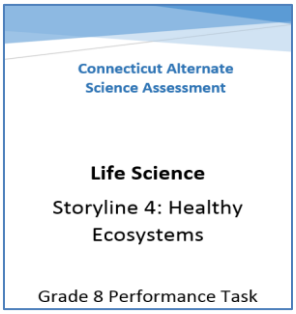


Figure 4. Sample General Overview and List of Materials Needed- Part One

Life Science
Storyline 4: Healthy Ecosystems
Grade 8 Performance Task

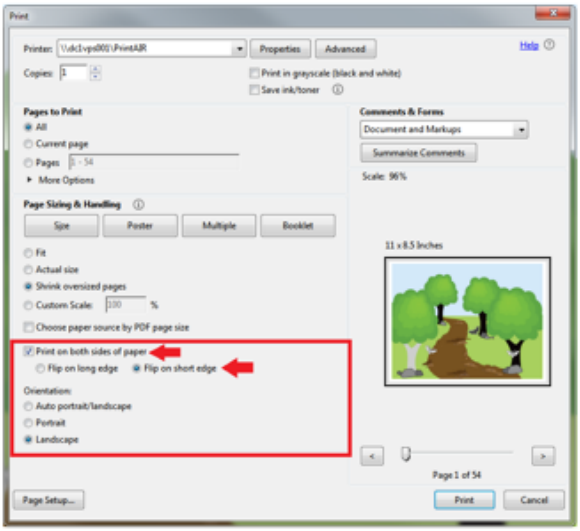
General Overview:
Students complete a series of activities focused on a forest environment. The student considers how the availability of resources impacts populations of animals living in the forest. The student considers how traits and adaptations enable animals to survive in an environment and how the traits change over time.

List of Materials Needed:
Teacher-Provided Resources:
There are no Teacher-Provided Resources that are required for this Performance Task.

Instructions for Preparing Materials:
Teachers need to print all resources provided in the Resource Packet as indicated below (e.g., Cards, Posters, Sentence Strips, and Strips) prior to the administration of each activity. **Resources must be printed in color ink.** The Card, Sentence Strip, and Strip resources will need to be cut out.

Resources are listed according to the Resource Identifier, which appears on the back of each Resource. The Resources needed for the administration of each activity are listed according to these Resource Identifiers in the Teacher Notes section of each activity. **These directions must be followed exactly in order for each Resource Identifier to appear as intended.** In order for the resource identifiers to align to the correct resources, please make sure to set your printer preferences **print double-sided, in color ink, flip on the short edge, and select landscape orientation** (refer to Figure 1).

Figure 1. Printer Preferences – Resource Packet Preparation



Connecticut Alternate Science Assessment
Life Science
Storyline 4: Healthy Ecosystems
Grade 8 Performance Task

Figure 5. Sample General Overview and List of Materials Needed – Part Two

List of Resources:

- Activity 1 Resource 1: Forest Poster
- Activity 1 Resource 2: Cards 2a – 2d
  - Card 2a – Tree
  - Card 2b – Rock
  - Card 2c – Soil
  - Card 2d – Moth
- Activity 2 Resource 1a: One Squirrel in Tree Poster
- Activity 2 Resource 1b: Many Squirrels in Tree Poster
- Activity 2 Resource 2: Cards 2a – 2d
  - Card 2a – Nuts
  - Card 2b – Soil
  - Card 2c – Branches
  - Card 2d – Sun
- Activity 3 Resource 1: Leaves Poster
- Activity 3 Resource 2: Beetles Poster
- Activity 3 Resource 3: Cards 3a – 3d
  - Card 3a – Green
  - Card 3b – Brown
  - Card 3c – Large
  - Card 3d – Small
- Activity 3 Resource 4: Cards 4a – 4c
  - Card 4a – Blend
  - Card 4b – Crawl
  - Card 4c – Eat
- Activity 4 Resource 1a: Stream Before Drought Poster
- Activity 4 Resource 1b: Stream After Drought Poster
- Activity 4 Resource 2: Cards 2a – 2c
  - Card 2a – Increase
  - Card 2b – Decrease
  - Card 2c – Same
- Activity 5 Resource 1: Graph – Fox and Rabbit Population Over Time
- Activity 5 Resource 2: Sentence Strips 2a – 2c
  - Sentence Strip 2a – More Foxes
  - Sentence Strip 2b – Fewer Foxes
  - Sentence Strip 2c – Same Number
- Activity 5 Resource 3: Sentence Strips 3a – 3c
  - Sentence Strip 3a – Less Water
  - Sentence Strip 3b – Less Food
  - Sentence Strip 3c – Less Shelter

Connecticut Alternate Science Assessment
Life Science
Storyline 4: Healthy Ecosystems
Grade 8 Performance Task

Activity Overview

In each Performance Task, there are a series of cohesive activities designed to elicit student responses and determine student scores on each Core Extension. Refer to Figure 6 for a sample activity. Each Performance Task with associated activities includes the following:

- Activity Number (e.g., ACTIVITY 1)
- Essence Statement
    - To which the activity is aligned (e.g., Essence Statement: CTAS-MS-LS2-1 Interpret data to provide evidence for the effects of resource availability on populations of organisms in an ecosystem.)
- Core Extension
    - Align to each activity (e.g., Core Extension 1: Recognize the difference between physical (non-living) and living features in a given ecosystem. [CTAS-MS-LS2-5])
- Teacher Notes
    - Includes a list of required resources that should be collected prior to the administration of the activity.
        - Resources are listed according to their Resource Identifier, found on the back of each resource.
        - Resources include a list of *Teacher-Provided Resources* (if applicable) that should be collected prior to the administration of the activity.
    - May include any additional notes that benefit the TEA administering the activity (e.g., instructions for how to set up an investigation for an activity using the list of materials and diagrams included in the resources).
- Steps to Follow
    - Include a step-by-step directive to the TEA for the administration of the activity.
    - Provide text that should be communicated to the student, included in quotations following the word “SAY” or “ASK”.
    - Provide directives to the teacher to indicate a resource or part of a resource, with the Resource Identifier.
- Allowable Adaptations
    - Includes any allowable adaptations that are unique to the activity.
    - Refer to Allowable Adaptations for the Connecticut Alternate Science Assessment for a full exploration of allowable adaptations that may be made to administer each activity.
- Scoring Guidance and Scaffolding
    - Unique to each activity.
    - Includes scaffold instructions.
    - Includes correct answers for each question asked to the student.
    - Includes content guidance to determine student ratings and scores for each activity/Core Extension.
    - Refer to Scoring Overview for additional information.

Figure 6. Sample Activity

Connecticut Alternate Science Assessment

ACTIVITY 1

Essence Statement: CTAS-MS-LS2-1 Interpret data to provide evidence for the effects of resource availability on populations of organisms in an ecosystem.

Core Extension 1: Recognize the difference between physical (non-living) and living features in a given ecosystem. (CTAS-MS-LS2-5)

Teacher Notes:

Collect the following resources for this activity:

- Activity 1 Resource 1: Forest Poster
- Activity 1 Resource 2: Cards 2a – 2d
  - Card 2a – tree
  - Card 2b – rock
  - Card 2c – soil
  - Card 2d – moth

Steps to Follow:

1. | **SAY** | "In this activity, we are going to talk about a forest environment." |
2. Display Resource 1: Forest Poster for the student.
3. Indicate Resource 1.

SAY	"Some of the trees in the forest have black trunks. Some trees have grey trunks. There are black moths and grey moths flying in the forest. There are rocks at the bottom of some trees. A soil path winds through the forest."

4. | **ASK** | "What is one Card that shows something that is living in the forest?" |
5. Provide Resource 2: Cards 2a – 2d to the student. Indicate and read each Card.
   a. Indicate Card 2a.

SAY	"tree"

   b. Indicate Card 2b.

SAY	"rock"

   c. Indicate Card 2c.

SAY	"soil"

Teacher-Provided Resources

Some Performance Tasks include physical resources that must be provided by the Trained TEA to complete the activity. A list of required *Teacher-Provided Resources* is included in the Performance Task, if applicable. *Teacher-Provided Resources* are generally required for activities that focus on a student and teacher-conducted investigation.

Resource Packet

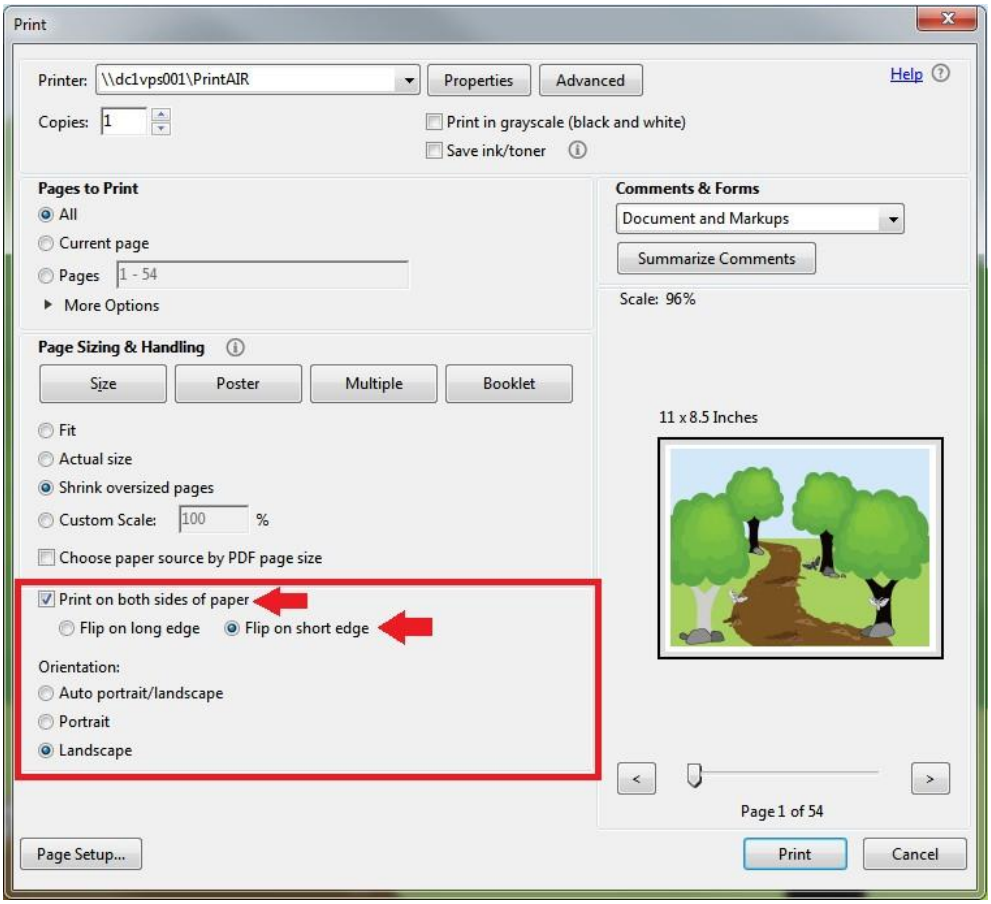
Most resources required to administer the Connecticut Alternate Science Assessment are provided in the Resource Packet (in PDF form). These resources must be printed in color ink to administer each activity.

Each Performance Task includes a list of all associated Resources included in the Resource Packet. Resources are listed according to the Resource Identifier, which appears on the back of each resource. The directions included for Resource Packet Preparation must be followed exactly to ensure that each Resource Identifier functions as intended.

Resource Packet Preparation

Teachers need to prepare all resources provided in the Resource Packet and indicated in the List of Materials Needed (e.g., Cards, Graphs, Posters, Sentence Strips, and Strips) prior to the administration of each activity. Resources must be printed in color ink. The Card, Sentence Strip, and Strip resources will need to be cut out. Please make sure to set your printer preferences to print double-sided, in color ink, flip on the short edge, and select landscape orientation (refer to Figure 7).

Figure 7. Printer Preferences for Resource Packet Preparation



Scoring Overview

Scoring components are outlined in Table 6 and include the following:

- General Rating Scale
- Scoring Guidance, Content Guidance, and Scaffolding
- Student Score Worksheet

Table 6. Scoring Components

Scoring Components	
Component	Description
General Rating Scale	Each Core Extension is rated by the Trained TEA using a General Rating Scale of 0, 1, or 2 with additional content guidance recommendations for clarity. The Rating Scale is as follows: 0 points – The student does not demonstrate understanding. 1 point – The student demonstrates limited understanding typically requiring additional support through scaffolding. 2 points – The student demonstrates understanding independently without scaffolding.
Scoring Guidance	Each activity will include a key for correct answers used to score student's understanding of each question asked in the Performance Task. Student scores for each activity within the Performance Task should be recorded in the Student Score Worksheet in preparation for upload into the DEI during the upload window.
Content Guidance	Specific Content Guidance will provide Trained TEAs with additional support in making judgments about the level of student performance/understanding for each Core Extension. Content Guidance is associated with student ratings and scores.
Scaffolding	Each activity includes a specific scaffold to be used as guidance for supporting the student within an activity to achieve understanding.
Student Score Worksheet	Student ratings for each activity should be recorded on the Student Score Worksheet. Optional: Trained TEAs can record their student observations on this worksheet. Ratings from this worksheet must be submitted through the DEI during the test window.

General Rating Scale

Each Core Extension is rated by the Trained TEA through the associated activity using a General Rating Scale of 0, 1, or 2 as outlined in Table 7 with additional guidance recommendations for clarity. The General Rating Scale is as follows:

- 0 points – The student does not demonstrate understanding.
- 1 point – The student demonstrates limited understanding typically requiring additional support through scaffolding.
- 2 points – The student demonstrates understanding independently without scaffolding.

Table 7. General Rating Scale and Additional Guidance

0 points – The student does not demonstrate understanding.
Select this rating if a student requires full physical guidance (physical assistance throughout an entire task) or if the student is not able to answer the question(s) in the activity correctly.
1 point – The student demonstrates limited understanding typically requiring additional support through scaffolding.
Select this rating if the student response was supported by the teacher using prompts or cues (any action that increases the probability that a student will complete a specific task). Prompts and cues are outlined in Table 8. Trained TEAs also utilize the specific scaffold provided for each activity to elicit a student response if the student does not respond or responds incorrectly on the first attempt. Specific scoring and content guidance, including the guidance to score student responses that require the application of a scaffold, is provided for each activity. More information about this guidance is provided in Scoring Guidance, Content Guidance, and Scaffolding.
2 points – The student demonstrates understanding independently without scaffolding.
Select this rating for student responses that clearly indicate the student has mastered the skill and performs independently. Original directions may be repeated or rephrased without further explanation or clarification.

Table 8. Allowable Prompts and Cues

Allowable Prompts and Cues		
Prompt/Cue	Description	Example
Partial Physical Guidance	Partial physical assistance during the performance of some part of an activity.	Student requires some physical assistance in providing the correct answer without leading them to the correct choice.
Modeling	Teacher models/demonstrates a specific task or portion of an activity.	Trained TEA shows what action they want the student to perform without leading them to the correct choice.
Repetition(s) with a Cue	Original directions are repeated with the addition of a prompt/cue.	After giving direction such as "show me a plant," the Trained TEA waits for response. If student does not respond, teacher repeats "show me a plant" and points to the array of answer options.

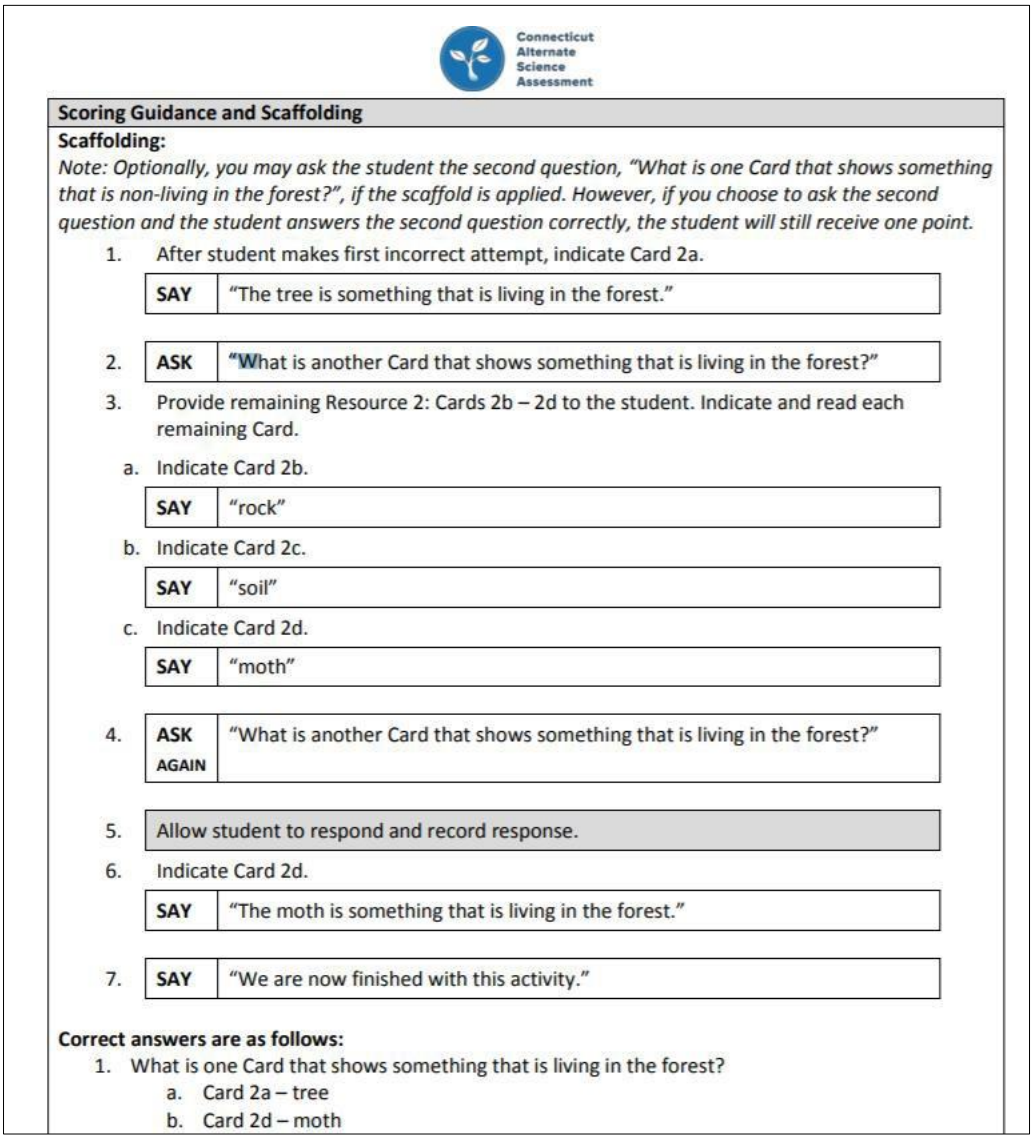
Scoring Guidance, Content Guidance, and Scaffolding

Each activity includes the following:

- Scoring Guidance: specific to each activity, includes a key for correct answers used to score student's understanding of each question asked in the activity.
- Content Guidance: specific to each activity, provides Trained TEA with additional support in making judgments about the level of student performance/understanding for each Core Extension; directly related to student ratings and scores.
- Scaffolding: specific to each activity, a scaffold is to be used as guidance for supporting the student within an activity to achieve understanding; the Content Guidance provides information on how to rate student understanding of the Core Extension if a scaffold is applied.

A sample of the Scoring Guidance and Scaffolding section of each activity is included in Figure 8.

Figure 8. Sample Scoring Guidance and Scaffolding



Connecticut Alternate Science Assessment

Scoring Guidance and Scaffolding

Scaffolding:

Note: Optionally, you may ask the student the second question, "What is one Card that shows something that is non-living in the forest?", if the scaffold is applied. However, if you choose to ask the second question and the student answers the second question correctly, the student will still receive one point.

1. After student makes first incorrect attempt, indicate Card 2a.

SAY	"The tree is something that is living in the forest."

2.

ASK	"What is another Card that shows something that is living in the forest?"

3. Provide remaining Resource 2: Cards 2b – 2d to the student. Indicate and read each remaining Card.

   a. Indicate Card 2b.

SAY	"rock"

   b. Indicate Card 2c.

SAY	"soil"

   c. Indicate Card 2d.

SAY	"moth"

4.

ASK AGAIN	"What is another Card that shows something that is living in the forest?"

5. Allow student to respond and record response.

6. Indicate Card 2d.

SAY	"The moth is something that is living in the forest."

7.

SAY	"We are now finished with this activity."

Correct answers are as follows:

1. What is one Card that shows something that is living in the forest?
   a. Card 2a – tree
   b. Card 2d – moth

Student Score Worksheet

Student Score Worksheets are grade specific. TEAs use the appropriate Student Score Worksheet to record the student's scores for each activity. Student Score Worksheets need to be printed for each student individually and can be located on the CTAS Required Materials page. When entering scores for each activity, TEAs can describe observations in the notes section of the score worksheet, which can be used when discussing student performance and behaviors with colleagues or parent/guardians to support student instruction. These notes are not entered into the DEI but are documented on the paper Student Score Worksheet and stored with the student's records.

Ratings are determined by administering each activity developed to elicit student responses demonstrating understanding of knowledge associated with each Core Extension. Each Core Extension is scored by the trained TEA using a General Rating Scale of 0, 1, or 2. Content guidance is included for each activity for clarity. The General Rating Scale is included on this worksheet, in addition to extra guidance to help make decisions for the selection of student ratings.

Figure 9. Sample Student Score Worksheet

Life Science Storyline 4: Healthy Ecosystems Grade 8 Performance Task						
Connecticut Alternate Science Essence Statement	**Core Extension**	**Teacher Activity/Scoring Notes** Use this column to record student response(s) when administering activities. This information is for district internal purposes only and is not recorded in the online Data Entry Interface.	**Score** **Ratings:** **0 points** – The student **does not** demonstrate understanding. **1 point** – The student demonstrates limited understanding typically requiring additional support through scaffolding. **2 points** – The student demonstrates understanding independently without scaffolding.			
CTAS-MS-LS2-1 Interpret data to provide evidence for the effects of resource availability on populations of organisms in an ecosystem.	**ACTIVITY 1** **Core Extension 1:** Recognize the difference between physical (non-living) and living features in a given ecosystem. (CTAS-MS-LS2-1)		NR * ❍	0 ❍	1 ❍	2 ❍
CTAS-MS-LS2-1 Interpret data to provide evidence for the effects of resource availability on populations of organisms in an ecosystem.	**ACTIVITY 2** **Core Extension 2:** Identify two resources (e.g., food, water, shelter) that affect the size of a population in a given ecosystem. (CTAS-MS-LS2-1)			0 ❍	1 ❍	2 ❍
CTAS-MS-LS4-6 Use data to support an explanation for a change in the traits of animals and plants in a population over time.	**ACTIVITY 3** **Core Extension 3:** In a given ecosystem, describe how one trait in a plant or an animal may affect the population over time. (CTAS-MS-LS4-6)			0 ❍	1 ❍	2 ❍
CTAS-MS-LS2-5 Evaluate a solution to maintaining a healthy ecosystem, including the physical environment and the plants and animals that live there.	**ACTIVITY 4** **Core Extension 4:** Identify how two factors (one non-living and one living) may affect the plants and animals living in an ecosystem. (CTAS-MS-LS2-5)			0 ❍	1 ❍	2 ❍
CTAS-MS-LS2-1 Interpret data to provide evidence for the effects of resource availability on populations of organisms in an ecosystem.	**ACTIVITY 5** **Core Extension 5:** Use data from a table or a graph to provide evidence of how the availability of a resource affects the size of a population. (CTAS-MS-LS2-1)			0 ❍	1 ❍	2 ❍

Early Stopping Rule (ESR) and Student Response Check

Most students eligible to participate on alternate assessments will be able to complete the assessments because they can access the test questions and communicate their responses when provided supports and accommodations that mirror those provided during instruction. However, a small percentage of students with the most significant cognitive and adaptive behavioral needs are reported by their teachers to have no observable way to communicate responses to participate in classroom or large-scale assessments. Trained TEAs should follow the procedures outlined in the Connecticut Alternate Assessment System Early Stopping Rule and Student Response Check to determine if a student has the necessary observable communication skills to participate fully on alternate assessments. TEAs administer the Student Response Check between December 1, 2023, and February 1, 2024, to students they believe may qualify. For details and submission deadlines, refer to the Early Stopping Rule and Student Response Check guidelines.

Documents Needed for Test Administration

Most of the documents listed in Table 9 can be found on the Connecticut Comprehensive Assessment Program Portal (https://ct.portal.cambiumast.com/).

Table 9. Connecticut Alternate Science Assessment Resources

Document	Purpose	User
Connecticut Alternate Science (CTAS) Assessment Test Administration Manual (TAM)	Provides an overview, policies, and procedures for TEAs and DCs/SCs to prepare for the administration of the CTAS to eligible students in Grades 5, 8, and 11.	TEAs and DC/SCs
Performance Tasks PDF	Each Performance Tasks PDF includes all required grade and content specific Performance Tasks. The Performance Tasks are also available individually by grade and content area (Earth Science, Life Science, and Physical Science).	TEAs and DC/SCs
Resource Packet	This packet includes all required grade and content specific resources required to administer the Performance Tasks. Resources MUST be printed according to the instructions outlined in Resource Packet Preparation. *Note: Teacher-Provided Resources are physical objects that will be used by the teacher to administer an activity. Please check the List of Materials Needed in each Performance Task PDF to determine the materials needed. Not all performance tasks include Teacher-Provided Resources.*	TEAs and DC/SCs
Student Score Worksheet	The grade-specific Student Score Worksheet (available for download on the CTAS Required Materials webpage) must be used for each student individually to record their scores aligned to each Core Extension for each activity in the assigned Performance Tasks. Scores recorded on this worksheet must be entered into the DEI by May 31, 2024, for the student's responses to be scored and reported by the CSDE.	TEAs and DC/SCs

Document	Purpose	User
Connecticut Alternate Assessment System Eligibility Form	This form is required to be approved at the PPT for any student who will participate in the alternate assessment system. This includes the Connecticut Alternate Assessment (CTAA) for English language arts and mathematics **and** the Connecticut Alternate Science Assessment. The eligibility form will also be completed for students in Grades K-12 who are dually identified English learners/multilingual learners with significant cognitive disabilities and qualify for the Connecticut Alternate Assessment of English Language Proficiency (CAAELP). The official Connecticut Alternate Assessment System Eligibility Form must be completed within CT-SEDS by the PPT to determine eligibility for the current testing year.	TEAs
Connecticut Alternate Assessment System Early Stopping Rule and Student Response Check	A small percentage of students with the most significant cognitive and adaptive behavioral needs are reported by their teachers to have no observable way to communicate responses to participate in classroom or large-scale assessments. Trained teachers (TEAs) follow the Early Stopping Rule (ESR) and Student Response Check process to determine if the student is able to participate fully in the CTAA, CTAS, and if applicable, the CAAELP.	TEAs
Allowable Adaptations for the Connecticut Alternate Science Assessment	This section in the Test Administration Manual includes allowable adaptations for the Performance Tasks to enhance access to the CTAS Assessment. If you encounter a scenario where an adaptation is required for a student, but it is not addressed by the list of allowable adaptations, please contact the CSDE and/or the Connecticut Comprehensive Assessment Program Help Desk using the information included in Appendix A.	TEAs
CTAS Assessing Students Who are Blind, Deaf, or Deaf-Blind: Additional Guidance for Test Administration	This guidance is intended to be used by the trained Teacher Administering the Alternate (TEA) in conjunction with the required test administration materials. This resource includes tasks, definitions, and strategies, with examples that may be used by the TEA as appropriate for individual students with sensory disabilities to enhance access to the CTAS.	TEAs

Section II. Teacher Administering the Alternate and Test Coordinator Responsibilities

The TEA and District/School Test Coordinators (DCs/SCs) participating in the administration of the CTAS have assigned responsibilities.

II.I Teacher Administering the Alternate (TEA) Responsibilities

Who Can Be a TEA?

The criteria for being a TEA are as follows:

1. A certified and licensed educator familiar with the student, typically the student's special education teacher, who has completed the required CSDE Alternate Assessment System Training with at least an 80% accuracy score may administer the Test.

2. If a student's teacher is a long-term substitute who is a certified and licensed educator and has completed the required CSDE Alternate Assessment System Training with at least an 80% accuracy score, then the long-term substitute may administer the Test.

Table 10 indicates the TEA responsibilities before, during, and after the administration of the CTAS Assessment.

Table 10. Teacher Administering the Alternate Responsibilities

	Before Test Administration
☐	Confirm you have been assigned the user role of TEA by your District Administrator (DA) in TIDE.
☐	Verify that you can access the TIDE system with your username and established password.
☐	Review and complete the online *Connecticut Alternate Assessment System Training- Required for Teachers Administering the Alternate (TEAs)* and pass with at least 80% accuracy each school year.
☐	After passing the required training, confirm that you are a Trained TEA in the TIDE system.
☐	Confirm that you can access the DEI with your TIDE username and established password.
☐	Review each student's Individualized Education Program (IEP) in CT-SEDS to determine which students are eligible to participate in Connecticut's Alternate Assessment System based upon the Planning and Placement Team (PPT) decision using the Connecticut Alternate Assessment System Eligibility Form.
☐	Confirm which eligible students are in Grades 5, 8, or 11. These students will participate in CTAS.
☐	Determine how materials will be accessed. You may print a paper copy from the CSDE Comprehensive Assessment Program Portal according to specified directions or you may access the materials available in your district. (See your DA for more information).
☐	If downloading CTAS materials from the portal, follow the directions for print settings. Resource Packets must be printed in color.

☐	Review the CTAS materials and consider alignment to classroom instruction.
☐	Create a schedule for when each Performance Task will be administered.
☐	Review the scripts for each activity in advance.
☐	Review the materials list, prepare materials/resources form the Resource Packet, and practice any investigations described by the Performance Task.
☐	Review your student's IEP to determine supports and accommodations needed to administer the CTAS. Consider the unique communication mode(s) for your student to determine the most appropriate way to present the materials or allow for the student response. Consider strategies and accommodations provided to the student during instruction/assessment. These same supports should be provided during the CTAS administration. Examples include use of a Smartboard, program switches (or other communication supports), and/or use of puffy paint or hot dots to enhance resources.
	Just Prior to Administering CTAS
☐	Set up the test area to optimally support the student and provide accommodations. Check technology (if applicable) to ensure it is functioning properly during each test session.
☐	Complete the first page of the Student Score Worksheet and have the paper copy available for completion during each testing session.
☐	Organize all relevant test materials: Performance Tasks, Resource Packet materials, and teacher-provided resources (if applicable). Ensure that all resources are prepared and cut out as specified in the Performance Task.
	During Testing
☐	Begin the CTAS administration.
☐	Actively engage with the student using the script and scaffolding defined in each activity. TEAs should also use allowable prompts/cues if appropriate.
☐	Complete the accompanying Student Score Worksheet for each activity administered. Optional: the TEA should take notes about observations regarding student behavior and responses in the Teacher Activity/Scoring Notes section of the Student Score Worksheet. This information may be shared with teachers working with the student, with parents/guardians at meetings, and to support planning for instruction or communication goals. These notes are not submitted with scores.
☐	Be mindful of student's needs while administering the CTAS (i.e., fatigue, health, behavior). The time sequence for the administration of the CTAS is flexible and allows for frequent breaks or the scheduling of multiple sessions over the course of the school year. This assessment is not designed to be administered in one session.
☐	Provide appropriate accommodations according to the student's IEP which are compatible with the CTAS training.
☐	If the student becomes disruptive or refuses to continue or participate, pause the test, and try again at a later time.
☐	Securely store the Student Score Worksheet when not in use.
☐	Report any inappropriate test practices to your School Coordinator (SC) or District Test Coordinator (DC) or DA.
☐	Direct any general concerns to your SC, DC, or DA.

	After Testing
☐	Submit all student ratings on the Student Score Worksheets through the DEI no later than May 31, 2024.
☐	If the student was not able to complete testing, enter any completed ratings in the DEI. Incomplete items should remain blank and the test status should be maintained in a paused status.
☐	Follow your district/school guidelines for the maintenance of CTAS materials as they are used each year for eligible students.
☐	Remove any test related documents or materials from computers and assistive technology (if applicable).

During all phases of testing, contact the CSDE or the Connecticut Comprehensive Assessment Program Help Desk as needed (See Appendix A).

Connecticut Alternate Science Training Requirements for All Teachers Administering the Alternate

To ensure that the Test is administered in a standardized manner, TEAs must complete the online CSDE Alternate Assessment System Training located on the Connecticut Comprehensive Assessment Program Portal. Any teacher who has the primary responsibility for assessing students in Grades 3 – 8 and 11 on the CTAA and/or the Connecticut Alternate Science (CTAS) Assessment for students in Grades 5, 8 and 11, must participate in this training annually. The training topics include student eligibility, the requirements and responsibilities of the Teacher Administering the Alternate, an overview of the CTAA and CTAS, optimal testing conditions, testing procedures, and subject-specific topics and examples. Following the completion of the four training sessions, TEAs must take and pass a quiz with a score of 80% or better, which will activate their trained status in TIDE.

Locating the Required Materials for Connecticut Alternate Science Test Administration

Materials required for administration of the Connecticut Alternate Science (CTAS) Assessment are posted to the Connecticut Comprehensive Assessment Program Portal. These required materials include:

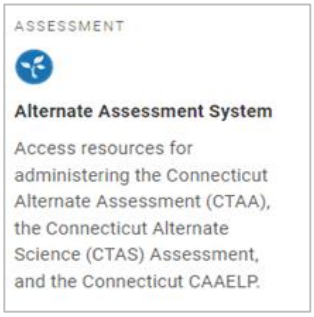
- Grade-specific Performance Tasks PDFs
- Grade-specific Resource Packets
- Grade-specific Student Score Worksheets

To access the required materials to administer the CTAS:

1. Navigate to the Connecticut Comprehensive Assessment Program Portal (https://ct.portal.cambiumast.com/).

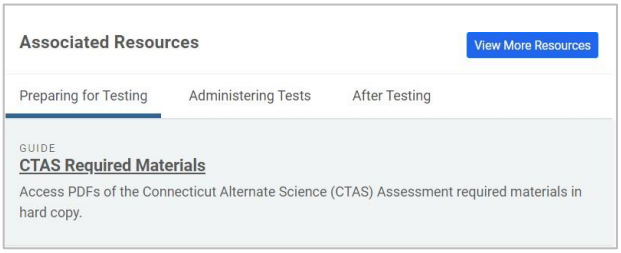
2. Select the Alternate Assessment System program card (Figure 10).

Figure 10. Alternate Assessment System



3. Near the bottom of the page under Associated Resources, select the CTAS Required Materials resource link (Figure 11).

Figure 11. CTAS Materials Card



4. On the CTAS Required Materials page (https://ct.portal.cambiumast.com/en/resources/alternate-assessment-system/ctas-required-materials), locate the Grade specific table of materials ; select and download to print the appropriate grade specific Performance Tasks, Resources and Student Score Worksheets.

Test Coordinator (SC/DC) Responsibilities

In addition to the District Administrator (DA), the District Test Coordinator (DC) provides oversight of the Test at the district level, supporting the DA. The School Test Coordinator (SC) works within the school building to ensure that the CTAS is administered as intended and that the TEAs and students have the support needed for a successful administration. In some schools and districts, the DC and the SC may share the duties or even be the same person.

Regardless of the number of individuals who perform the duties, the responsibilities of each role must be completed. Essential tasks that are required before, during, and after administration of the Test are outlined in Table 11.

Table 11. Test Coordinator Responsibilities for the Connecticut Alternate Science Assessment

	Before Test Administration
☐	The DA (District Administrator) or the District Test Coordinator (DC) should attend the annual District Test Administrator workshop provided by the CSDE Assessment Office.
☐	Ensure TEAs have: • been provided with a TEA role TIDE account, created by the DA; • participated in the annual, required Connecticut Alternate Assessment System Training; and • can access to the Test Delivery System and the Data Entry Interface with a school email address and password associated with their TIDE account.
☐	Ensure that the PPT completed the *Connecticut Alternate Assessment System Eligibility Form* in CT-SEDs by the recommended deadlines.

Connecticut Alternate Assessment System Eligibility Form Verification in CT-SEDS

CT-SEDS Implementation Date	Assessment
Fully Implemented IEP by December 29, 2023	Eligibility forms must be approved, verified, and implemented within the IEP in CT-SEDS for the following assessments for the students to be correctly registered for: • CAAELP (students identified as EL/ML in Grades K-12); and • CTAA and CTAS (Grade 11)
Fully Implemented IEP by February 1, 2024	Eligibility forms must be approved, verified, and implemented within the IEP in CT-SEDS for the following assessments for the students to be correctly registered for the: • CTAA (Grades 3-8, and newly identified students in Grade 11); and • CTAS (Grades 5, 8, and newly identified students in Grade 11)

☐	Communicate all information received from the CSDE regarding the CTAS to TEAs.
☐	Support TEAs to develop a testing schedule so that all grade-specific Performance Tasks are administered well before the close of the testing window.
☐	Support TEAs to develop a testing schedule so that all student ratings for each Core Extension and associated activity are recorded on the Student Score Worksheet and then are submitted in the DEI within the test upload window (March 25-May 31, 2024).
☐	Ensure TEAs have printed all required Resource Packets in color ink. Resources must be printed in color ink to administer the assessment.
	During Test Administration
☐	Monitor to ensure implementation of appropriate test practices and appropriate student participation so that the CTAS administration is completed, and student scores are submitted in the DEI prior to the close of the submission window on May 31, 2024.

☐	Ensure TEAs have the materials and resources needed to administer the assessment. These materials may need to be shared among TEAs.
☐	Report inappropriate test practices to CSDE (Appendix A).
☐	Ensure system technological requirements are met for the Trained TEA to access the DEI.
☐	Ensure that the TEAs have used the Student Score Worksheet to input student ratings for each Performance Task in the DEI prior to the close of the testing window on May 31, 2024.
	After Test Administration
☐	Investigate and report any inappropriate test practices and suspected irregularities to the CSDE (Appendix A).

During all phases of testing, contact the CSDE or the Connecticut Comprehensive Assessment Program Help Desk as needed (Appendix A).

II.II CTAS Participation

Student Participation Criteria

Students with a significant cognitive disability who have been determined eligible by their Planning and Placement Team (PPT) for participation in alternate assessments and meet all three-evidence based criteria as defined by the *Connecticut Alternate Assessment System Eligibility Form* participate in the CTAA for English language arts and mathematics (Grades 3-8 and 11), and the Alternate Science in Grades 5, 8 and 11. The Connecticut Alternate Assessment Eligibility form is completed via the PPT process within the CT-SEDS platform. Figure 12 shows the criteria that PPTs will need review and document in order to make eligibility determination for the Alternate Assessments.

As a reminder, the smallest percentage, usually 1% or less of tested students, are identified with a significant cognitive disability and cannot access standard assessments even with supports and accommodations.

The identification of a significant cognitive disability for participation in the alternate assessments is not based on IDEA disability category or English learner/multilingual learner status. Furthermore, eligibility is not based on previous low academic achievement. PPTs should use the most current data when making eligibility determination for the alternate assessments.

Districts should collaborate with PPTs and carefully monitor the percent of the total number of students with significant cognitive disabilities who are assessed with an alternate assessment in their program to ensure that only those that qualify per the PPT's determination using the evidence and criteria specified by the eligibility form. Please refer to the Annotated Connecticut Alternate Assessment System Eligibility Form for additional information on the eligibility criteria.

Figure 12. Connecticut Alternate Assessment System Eligibility Form

2. Student has adaptive behavior skills well below age-level expectations.

Adaptive behavior is defined as those conceptual, social, and practical skills necessary to meet the common demands of everyday life across multiple settings.

A. Student has adaptive behaviors necessary for the student to live independently and function safely in daily life for their age group.
STOP: student is not eligible to participate in the alternate assessment system.

B. Results of adaptive behavior assessment(s) (e.g., scored more than 1.5 standard deviations below the mean score).

- Assessment Used: (Choose from the drop-down menu)
  - Adaptive Behavior Assessment System (ABAS)
  - Scales of Independent Behavior-Revised (SIB-R)
  - Vineland Adaptive Behavior Scales (VABS)
  - Other (Specify): _____
- Date Completed: _____ (mm/dd/yyyy)
- Composite Name/Functional Level: _____

3. Student requires intensive instruction and significant supports.

A. Student does **not** require extensive, repeated, individualized instruction.
STOP: student is not eligible to participate in the alternate assessment system.

B. Student requires extensive, repeated instruction and support that is not of a temporary or transient nature and uses substantially adapted materials and individualized methods of accessing information in alternative ways to acquire, maintain, demonstrate, and transfer skills.

Parents/guardians are partners in the PPT meeting to develop the IEP and are engaged in the assessment participation decisions. Thus, they need to receive accurate information about the CTAS. A resource library for parents about relevant topics related to alternate assessments is available at: http://www.ncscpartners.org/resources.

This resource library, as well as the Parent Overview of Connecticut's Alternate Assessment System, should be made available to parents well before the assessment participation decisions are made each year. Additional information is available on the Connecticut State Department of Education Alternate Assessment webpage.

II.III Testing Conditions

TEAs must provide each student an appropriate testing environment during every testing session. TEAs can ensure an appropriate testing environment by providing:

1. Optimal testing conditions for every student;
2. Appropriate student positioning;
3. Allowable adaptations appropriate for individual students;
4. Accommodations as defined in the student's IEP that are consistent with CSDE testing policies; and
5. Supports found in Allowable Adaptations for the Connecticut Alternate Science Assessment, if applicable.

6. Supports found in the CTAS Assessing Students Who Are Blind, Deaf, or Deaf-Blind: Additional Guidance for Test Administration if applicable.

Optimal testing conditions, allowable adaptations, the accommodations defined in student's IEP that are consistent with CSDE policies and using supports suggested in Allowable Adaptations for the Connecticut Alternate Science Assessment, and the CTAS Assessing Students Who Are Blind, Deaf, or Deaf-Blind: Additional Guidance for Test Administration if applicable, provide student access to the CTAS so that they may demonstrate their knowledge. Each of these is discussed in detail below. Implementation of these practices must be planned for prior to testing the student.

Optimal Testing Conditions

Optimal testing conditions must be provided for every student before and during the CTAS test administration as outlined in Table 12.

Table 12. Optimal Testing Conditions

Before Administering the Test
Consider the ability of the student to communicate and demonstrate a response.
Review the Allowable Adaptations for the Connecticut Alternate Science Assessment and prepare environment and materials as appropriate for individual students.
Review the CTAS Assessing Students Who Are Blind, Deaf, or Deaf-Blind: Additional Guidance for Test Administration if applicable.
Identify the accommodations defined in the student's IEP that are consistent with CSDE policies and prepare for implementation during testing.
Make sure that the computer, any Augmentative and Alternate Communication (AAC), and/or Assistive Technology (AT) device a student may use to interact with the assessment are in working order and are available for testing.
Read each assigned storyline and Performance Task for the grade-specific assessment assigned to the student.
Download and print all test materials and resources. Resources provided in the packet must be printed in color ink according to the specifications indicated in Resource Packet Preparation. Some resources may need to be cut out.
Organize all test materials and resources according to the instructions in each Performance Task and its activities.
Arrange to administer the CTAS to individual students in a familiar setting that is free of noise and distractions.
Develop a schedule to administer the CTAS during the best time of day for the student. Consider time needed for breaks for the student.
During Test Administration
Manage testing materials, resources, and the AT or AAC required by the student.
Pause the test administration and resume later or another day as indicated by student needs. The CTAS is an untimed test. It is recommended that the activities in each Performance Task is administered consecutively, as the activities within a Performance Task often relate to each other. However, students may take as long as is needed to complete the assessment within the test administration window. If multiple activities are conducted in one day, attention to cognitive or physical fatigue must be considered.
Provide appropriate student positioning, provide appropriate Allowable Adaptations, and provide the accommodations in the student's IEP that are consistent with CSDE policies.

Provide encouragement to support student engagement and focus. TEAs may use phrases that do not indicate either the correct or incorrect response. Examples of acceptable encouraging phrases include:

"I like the way you are listening and following directions."

"Only one more to go!"

"Just five minutes until a break!"

"Keep working!"

Allowable Adaptations for the Connecticut Alternate Science Assessment

Allowable adaptations support student access to the Performance Tasks. The CTAS is designed to be administered by the Trained TEA in a one-to-one test setting with the student. All activities, questions, and response options are designed to be read aloud by the Trained TEA.

Allowable adaptations may include a change in the test setting, timing, response options, or presentation that does not alter what the test measures or the comparability of student scores. The purpose of an allowable adaptation is to enable a student to participate in an assessment in a way that allows knowledge and skills to be assessed, rather than the physical or communication abilities of the student.

Table 13 provides a list of current allowable adaptations available for the CTAS Assessment.

If you encounter a scenario where an adaptation is required for a student, but it is not addressed by the list of allowable adaptations included below, please contact the CSDE for clarification. See Appendix A.

TEAs should become familiar with the allowable adaptations and may incorporate them into instruction prior to the administration of the test.

Table 13. Connecticut Alternate Science Allowable Adaptations

Setting
Allowable Adaptations
The Alternate Science Assessment was designed to be administered in a one-to-one setting. The following adaptations are examples of those that may be made to the test setting to address the student's needs: • Providing special lighting • Providing adaptive or special furniture • Providing special acoustics Please note that if the assessment is administered in a location other than the classroom (e.g., a conference room or office), ensure that the seating and lighting are appropriate to support the student's needs.
Timing
Allowable Adaptations
The CTAS is an untimed test. It is recommended that the activities in each Performance Task are administered consecutively, as activities often relate to each other within a Performance Task. However, students may take as long as is needed to complete the assessment within the test administration window. If multiple activities are conducted in one day, attention to cognitive or physical fatigue must be considered. Students may: • be assessed at a specific time of day (e.g., afternoon) • be provided frequent breaks • be administered the assessment over several days with one or several sessions per day

Response Options	
Allowable Adaptations	**Description**
Non-Verbal Selection of Answer Option	The student may indicate their selected answer option non-verbally (e.g., eye gaze, pointing, Augmentative and Alternate Communication [AAC] device).
Augmentative and Alternate Communication (AAC)	The student may use the communication system and/or device typically used during instruction. Various methods of communication may be used to supplement or replace speech or writing for those with impairments in the production or comprehension of spoken or written language. These systems of communication may be aided or unaided.

Assistive Technology (AT)* *AT applies to both Allowable Adaptations Response Options and Presentation Options	Includes hardware and software tools used to increase, maintain, or improve the functional capabilities of individuals with disabilities. Assistive technology that is listed in the student's IEP and used routinely during instruction may be used to access the content and respond to task requests during the assessment. However, providing an accommodation or access to assistive technology only during the assessment will not ensure that the student will be able to use it effectively. Prior to the assessment, a student needs opportunity to use the technology during daily instruction to ensure that the student can use it appropriately and effectively during both instruction and for the assessment.
No Observable Mode of Communication/No Response	For students who do not have an observable mode of communication, please see the Connecticut Alternate Assessment System Early Stopping Rule and Student Response Check.
Presentation Options	
Allowable Adaptations	**Description**
Assistive Technology (AT)* *AT applies to both Allowable Adaptations Response Options and Presentation Options	Hardware and software tools used to increase, maintain, or improve the functional capabilities of individuals with disabilities. Assistive technology that is listed in the student's IEP and used routinely during instruction may be used to access the content and respond to task requests during the assessment. However, providing an accommodation or access to assistive technology only during the assessment will not ensure that the student will be able to use it effectively. Prior to the assessment, a student needs opportunity to use the technology during daily instruction to ensure that the student can use it appropriately and effectively during both instruction and for the assessment.
Enlargement of Resources	Enlarge resources (e.g., Cards, Strips, Sentence Strips, and Posters) as appropriate to accommodate the student's visual needs.

Presentation Options	
Allowable Adaptations	**Description**
Object Replacement	Substitute objects, parts of objects, or other tactile symbols for Resources (e.g., Cards, Strips, Sentence Strips, and Posters).
Sign Language	The Trained TEA or qualified interpreter signs all CTAS directions, response options, and content as directed for each Performance Task to the student. Student may respond using sign language (ASL, PSE, SEE etc.)
Braille Test Materials and Tactile Graphics	The Trained TEA may create braille materials, create tactile graphics and tactile symbols, or orally describe the resources defined by the Performance Task in a manner that is appropriate and familiar to the student. The Trained TEA may assist the student in examining tactile graphics to orient the student to the materials.

Accommodations

Accommodations are changes in the materials or procedures of the assessment that do not alter the construct being measured. For the CTAS Assessment, a student may use the accommodations documented in his/her IEP that are consistent with Connecticut policies. Typically, these are defined in the IEP and are also used during instruction.

The use of any physical prompting, including hand-over-hand, will compromise the score that the student receives. Please note that, if a student requires full physical guidance throughout an entire task, they will receive a score of 0 points for the activity. If a student was partially supported by the teacher using prompts or cues throughout a task, they will receive a score of 1 point for the activity. Please see Table 8. Allowable Prompts and Cues for the physical prompts and cues that are acceptable for this assessment.

Accommodations are indicated in Table 14.

Table 14. Accommodations

Accommodations
Augmentative and Alternate Communication (AAC) The student may use the communication system and/or device typically used during instruction for responding to or interacting with the Performance Tasks and associated activities.
Assistive Technology (AT) Assistive technology devices for viewing, responding to, or interacting with the Performance Tasks and associated activities.

Sign Language (e.g., ASL, PSE, SEE)
The Trained TEA may communicate activities, questions, and response options using sign language to student. Responses from the student may also be communicated in Sign Language.

Assessing Students Who are Blind, Deaf, or Deaf-Blind: Additional Guidance for Test Administration

Trained TEAs who are testing a student who is blind, deaf, or deaf-blind, may refer to the Allowable Adaptations for the Connecticut Alternate Science Assessment and the CTAS Assessing Students Who are Blind, Deaf or Deaf-Blind: Additional Guidance for Test Administration for strategies that may be used by the TEA as appropriate for individual students to enhance access to the CTAS Assessment.

If you encounter a scenario where an adaptation or accommodation is required for a student but is not addressed by the list of allowable adaptations, please contact the CSDE and/or the Connecticut Comprehensive Assessment Program Help Desk using the information included in Appendix A.

Section III. Testing Integrity, Appropriate and Inappropriate Test Practices

The CTAS Assessment policies related to testing integrity and appropriate and inappropriate test practices are described in this section. All personnel (DAs, DCs/SCs, and TEAs) must comply with the CSDE's security protocols and procedures.

Testing integrity is critical to ensure accurate, valid, reliable, and timely information about student academic performance. Inappropriate test practices undermine efforts for improving student achievement. Connecticut is committed to providing an assessment that accurately reflects what students know and can do in science. Although the CTAS Assessment materials are non-secure, it is imperative that Trained TEAs administer the Performance Tasks and their associated activities as intended to maintain the validity of the assessment. Please take care to restrict modifications regarding the communication of the Performance Tasks to the student to the Allowable Adaptations outlined in Allowable Adaptations for the Connecticut Alternate Science Assessment. Failure to follow the policies outlined in this section will result in a breach of security and is subject to state law.

After the TEA completes the required CSDE Alternate Assessment System Training and the quiz with a score of at least 80% accuracy, the storylines and Performance Tasks should be read, and associated materials and optimal testing conditions prepared. TEAs should become familiar with the assessment administration protocols and prepare necessary materials, resources, accommodations, and allowable adaptations needed for each student as described in the CTAS Performance Tasks and associated documents.

Connecticut Test Security

Violation of test security is a serious matter with far-reaching consequences. Breaches of test security include, but are not limited to coaching students, giving students answers, and/or changing students' answers. Such acts may lead to the invalidation of an entire school district's student test scores, disruption of the test system statewide, and legal action against the individuals committing the breach. A breach of test security may be dealt with as a violation of the Code of Professional Responsibility for Teachers, as well as a violation of other pertinent state and federal law and regulation. The Connecticut State Department of Education will investigate all such matters and pursue appropriate follow-up action. Any person found to have intentionally breached the security of the test system may be subject to sanctions including, but not limited to, disciplinary action by a local board of education, the revocation of Connecticut teaching certification by the State Board of Education, * and civil liability pursuant to federal copyright law.

*See Section 10-145b (i) of the Connecticut General Statutes, which reads in part as follows: The State Board of Education may revoke any certificate, permit or authorization issued pursuant to said sections if the holder is found to have intentionally disclosed specific questions or answers to students or otherwise improperly breached the security of any administration of a mastery examination, pursuant to section 10-14n.

Preparing an Appropriate Testing Environment

Students are administered the test individually, one-to-one, most likely in their classroom or a similar environment familiar to the student. A secure test environment includes, but is not limited to:

- Administering the test in a one-to-one setting by a Trained TEA; and
- Ensuring a quiet test-taking environment, void of talking, interruptions, or other distractions, and one that does not permit other students hearing or seeing the responses to the test items of the student being tested.

Inappropriate Test Practices

TEAs must administer all test items according to the instructions indicated in the Performance Tasks. Excluding allowable adaptations defined in Allowable Adaptations for the Connecticut Alternate Science Assessment, modifications or changes to Performance Tasks are not permitted and are inappropriate test practices and considered a test irregularity. Inappropriate test practices are any actions that are contrary to those explicitly stated in the Performance Tasks and in the test security policy. Inappropriate and prohibited modifications or changes to the Performance Tasks include but are not limited to the examples in Table 15.

Table 15. Examples of Testing Improprieties

Action
Changing the content of the activities/Performance Tasks.
Using non-prescribed graphic organizers, mnemonic aids, manipulatives, or replacement objects (except as described in Allowable Adaptations for the Connecticut Alternate Science Assessment).
Providing answers to students in advance of or during test administration, except where permitted in activity-specific scaffold instructions.
Providing students clues or supports not indicated in this TAM or in the Performance Task.
Manipulation of testing materials in a way that hints at a correct or incorrect answer, (e.g., reducing the number of answer options), except where permitted in activity-specific scaffold instructions.
Changing a student's answer.
Reminding the student of previously used materials or experiences related to concepts in an item.
Administering of the CTAS by a staff member who has not completed the Alternate Assessment System Training (i.e., a paraprofessional, aide, or student teacher). Staff members must pass the training quiz with at least 80% accuracy.

Monitoring and Reporting Inappropriate Test Practices

Procedures for monitoring testing and reporting inappropriate test practices are outlined in this section and in state law and policy. Each person participating in the state assessment program is directly responsible for immediately reporting any violation or suspected violation of test security or confidentiality. TEAs and other staff must notify their SC or DC if they witness or become aware of an inappropriate test practice or suspect one has occurred. DCs and SCs must report these concerns to the CSDE Assessment Office (refer to Appendix A). DAs must report any incidents involving alleged or suspected violations that fall under the category of an irregularity to the CSDE Assessment Office. State professional codes of ethics and state law provide the guidelines for determining the consequences for any inappropriate test practices.

Section IV. Administration of the Connecticut Alternate Science Assessment

IV.I Before Testing

The following activities should be conducted prior to administering the CTAS Assessment:

1. District Administrators Assign TEA User Roles in TIDE.
   The teacher must have a TEA user role assigned in TIDE by the District Administrator.
2. Complete the required TEA training and pass the quiz with a score of 80% or greater.
3. Ensure PPT determination for eligibility through the completion of the Connecticut Alternate Assessment System Eligibility Form and finalization within CT-SEDS for eligibility.

Tasks to be completed by the TEA before testing are included in Table 16.

Table 16. Teacher Administering the Alternate Tasks – Before Testing

Before Testing	
Task	Description
Review PPT determination of eligibility for Alternate Assessment System based on the completion of the Connecticut Alternate Assessment Eligibility Form within CT-SEDS.	Eligibility data representing those students verified in an implemented IEP in CT-SEDS will import and populate the Alt Flag Indicator in TIDE, which provides operational access to alternate assessments in the Test Delivery Interface.
Complete/Confirm Student Demographic Information	The TEA confirms the demographic information for each student available in the Test Information Distribution Engine (TIDE) to ensure that the student's name is spelled correctly, and the student grade is correct.
Confirm Alternate Assessment Indicator	The TEA confirms that the Alternate Assessment Indicator is set to "Yes" in TIDE for students that qualify per an implemented IEP in CT-SEDs. CT-SEDS will import this data to TIDE daily.

Before Testing	
Task	Description
Locate and Download the Appropriate CTAS Required Materials	Required materials to administer the Connecticut Alternate Science (CTAS) Assessment are posted to the Connecticut Comprehensive Assessment Program Portal (https://ct.portal.cambiumast.com/) These required materials include: • Grade-specific Performance Tasks PDFs • Grade-specific Resource Packets • Grade-specific Student Score Worksheets Refer to section Locating the Required Materials for Connecticut Alternate Science Test Administration for detailed instructions to locate and download the appropriate required materials.
Prepare Resources and Performance Tasks	Read through each Performance Task to be administered to the student. Prepare the *Teacher-Provided Resources* (if applicable) and Resource Packet. Consult Performance Task Overview and Resources Overview for additional information. Materials must be printed in color ink and cut out as specified. TEAs should also reference the Connecticut Alternate Science Assessment TEA Responsibility Checklist as it identifies the various responsibilities and suggested steps for test administration.

IV.II After Testing

After administering the CTAS Assessment, the Trained TEA will:

1. Submit Student Scores in the Data Entry Interface.
   Once the student has attempted all activities on all Performance Tasks and the TEA has recorded all student ratings on the paper Student Score Worksheet, scores must be entered and submitted for each Core Extension in the DEI.

2. Maintain the paper copy of the Student Score worksheet in the student files. These will need to be readily available during the school year for ongoing test administration and discussion.

Please use caution to enter student ratings in the DEI only after the student has completed their participation for all Performance Tasks and associated Activities for the Connecticut Alternate Science Assessment.

Tasks to be completed by the TEA after testing are included in Table 17.

Table 17. Teacher Administering the Alternate Tasks – After Testing

After Testing	
Task	Description
Enter Student Scores in the DEI	Following the CTAS administration, student scores must be submitted in the DEI by May 31, 2024.
Maintain paper copy of Student Score Worksheet	The Student Score Worksheet should be maintained in the student file for reference and discussion.

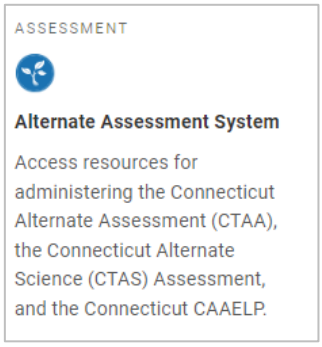
Submitting a Student's Scores in the Data Entry Interface

To enter student scores in the DEI:

1. Navigate to the Connecticut Comprehensive Assessment Program Portal (https://ct.portal.cambiumast.com/).

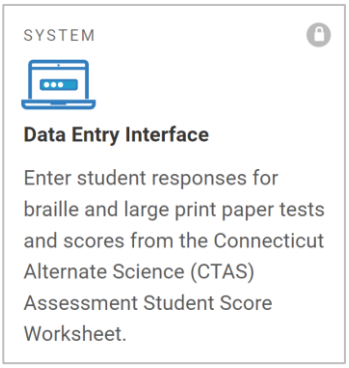
2. Select the Connecticut Alternate Assessments Program Card (Figure 13).

Figure 13. Connecticut Alternate Assessments Program Card



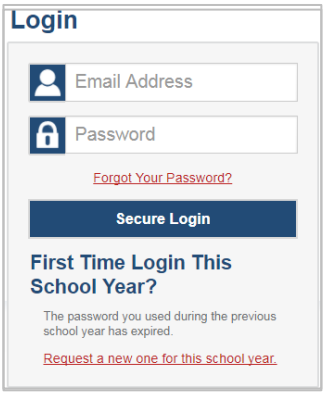
3. Select the Data Entry Interface (DEI) card (Figure 14).

Figure 14. DEI Card



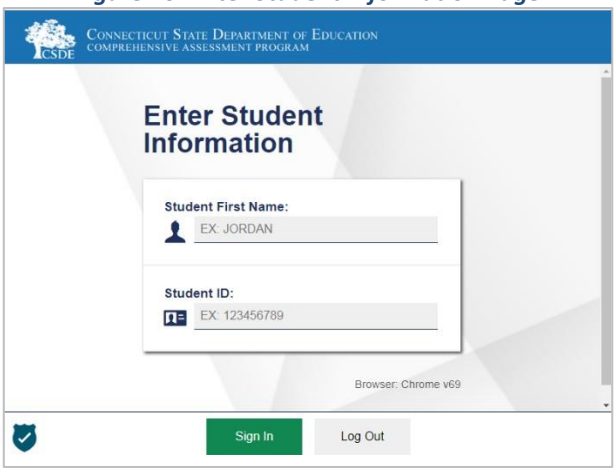
4. Log in to the DEI using your Test Information Distribution Engine (TIDE) credentials as a TEA (Figure 15).

Figure 15. Secure Login Page



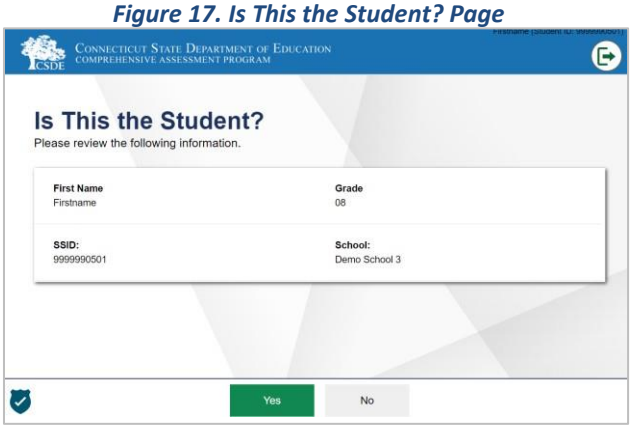
5. Enter the student's first name and SASID as it appears in PSIS and in TIDE. Click Sign In (Figure 16).

Figure 16. Enter Student Information Page



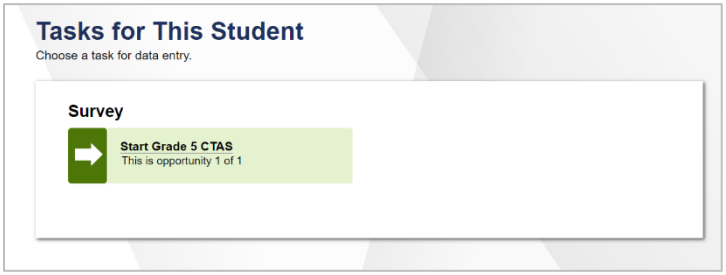
6. Confirm that the information is correct for the student and click Yes (Figure 17). If the information is incorrect, click No and contact your District Administrator.

Figure 17. Is This the Student? Page



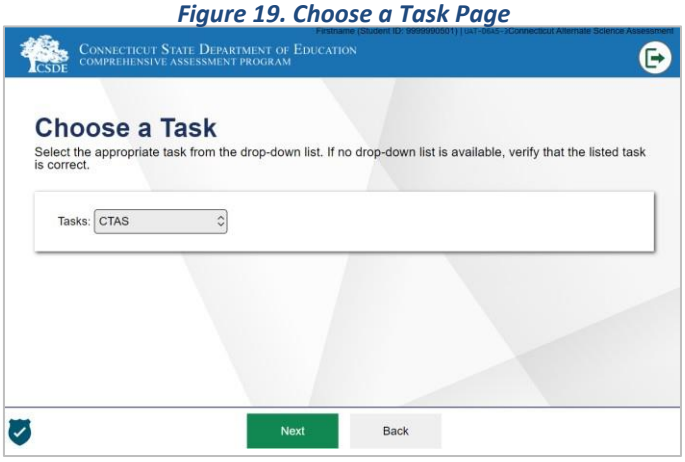
7. Select the Connecticut Alternate Science Assessment (Figure 18).

Figure 18. Tasks for This Student Page



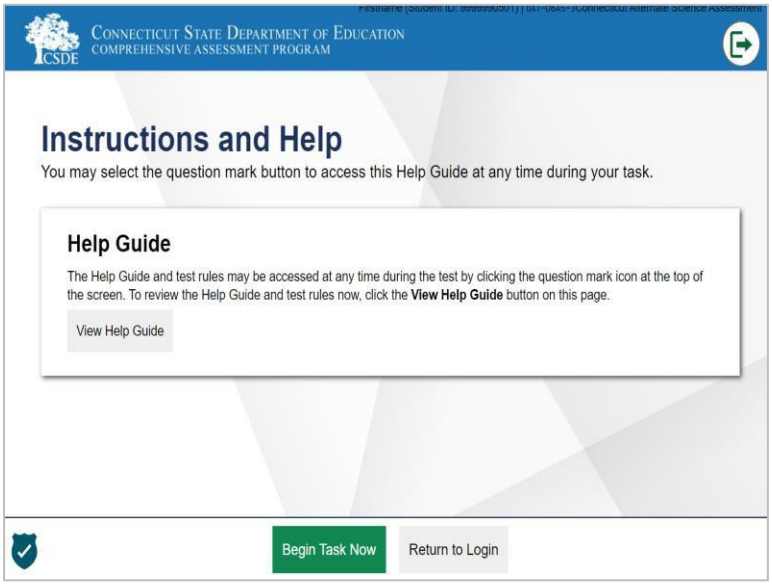
8. On the "Choose a Task" page, select the CTAS from the drop-down list (Figure 19).

Figure 19. Choose a Task Page



9. Review the instructions as needed and click Begin Task Now to begin entering data (Figure 20).

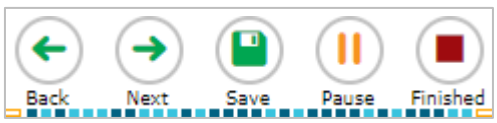
Figure 20. Instructions and Help Page



10. Enter all student scores and ratings for each activity on each Performance Task.

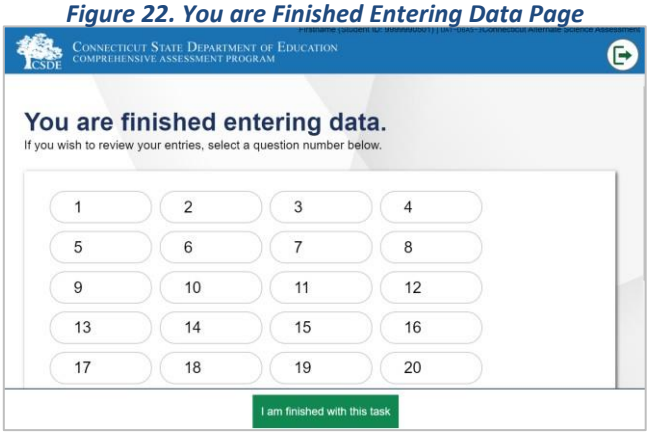
11. Once all items are complete, click Finished (Figure 21)

Figure 21. Finished Button



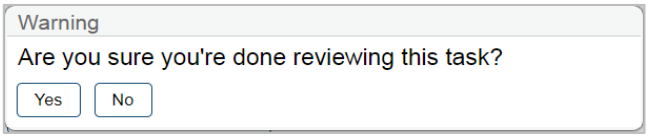
12. To review or edit data, select the item that you wish to review. Once you have verified that the data you have entered is accurate, click I am finished with this task (Figure 22).

Figure 22. You are Finished Entering Data Page



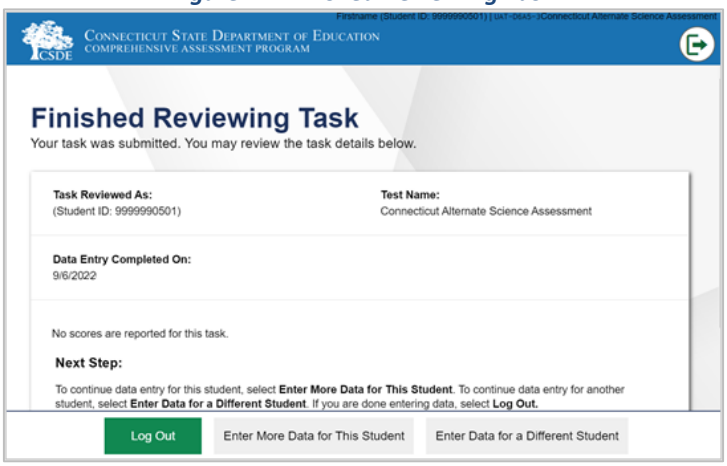
13. Verify that you have finished entering data for the task and click Yes to submit the task (Figure 23).

Figure 23. Submit the Task



14. A confirmation message appears (Figure 24).

Figure 24. Finished Reviewing Task



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Appendix A. Connecticut Alternate Science Assessment Support

Table 18 includes the contact information for the CSDE Office of Student Assessment.

Table 18. CSDE Performance Office Contact Information

Name	Phone	E-mail
Student Assessment, Performance Office	860-713-6860	CTStudentAssessment@ct.gov
Deirdre Ducharme	860-713-6859	Deirdre.Ducharme@ct.gov
Katie Seifert	860-713-6722	Katherine.Seifert@ct.gov

Table 19 includes the contact information for the Connecticut Help Desk.

Please provide the Help Desk with a detailed description of your query, as well as the following:

- If the query pertains to a student, provide the SASID and associated district and school for that student. Do not provide the student's name.
- If the query pertains to a TEA user account, please provide the TEA's full name, school e-mail address, District ID, School ID, and Trained TEA certification status.
- If the query pertains to the DEI, any error messages that appeared with any associated numbers.
- Operating system information and browser information including version numbers (e.g., Windows 8 and Chrome 75 or Mac OS 10.14 and iOS11.4).

Table 19. Connecticut Help Desk Contact Information

Connecticut Help Desk
Toll-Free Phone Support: 1-844-202-7583 E-mail Support: cthelpdesk@cambiumassessment.com The Help Desk will be open Monday – Friday from 7:00 a.m. to 7:00 p.m. EST during the summative testing window and Monday – Friday from 7:00 a.m. to 4:00 p.m. EST outside of the summative testing window (except holidays).

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Appendix B. Connecticut Alternate Science Assessment Augmentative and Alternative Communication Guidelines

The Trained TEA must record the student's response(s) exactly as the student indicates using the student's existing augmentative and alternative communication (AAC) system or device.

AAC Methods

- Student should use the communication mode/system with which the student is the most competent and which provides the most accessibility to producing a response.
- Allow the student to select the word/symbol/picture/phrase in the communication mode/system in the same manner as used in instruction (e.g., direct select, indirect such as scanning, eye gaze).
- Allow the student to access words/symbols/pictures/phrases within their communication mode/system in the same manner as in instruction (e.g., subject specific boards, multiple levels by categories). See the examples included in Figures 25-28, below.

Figure 25. Connecticut Help Desk Contact Information

rat

ball

boy

dog

bird

food

Figure 26. Sample Phrase Board


having a friend is important


everyone needs a dream

living under a bridge is hard

Figure 27. Sample Subject Board: Subject-specific board about flight (mixture of single words, phrases, and sentences)

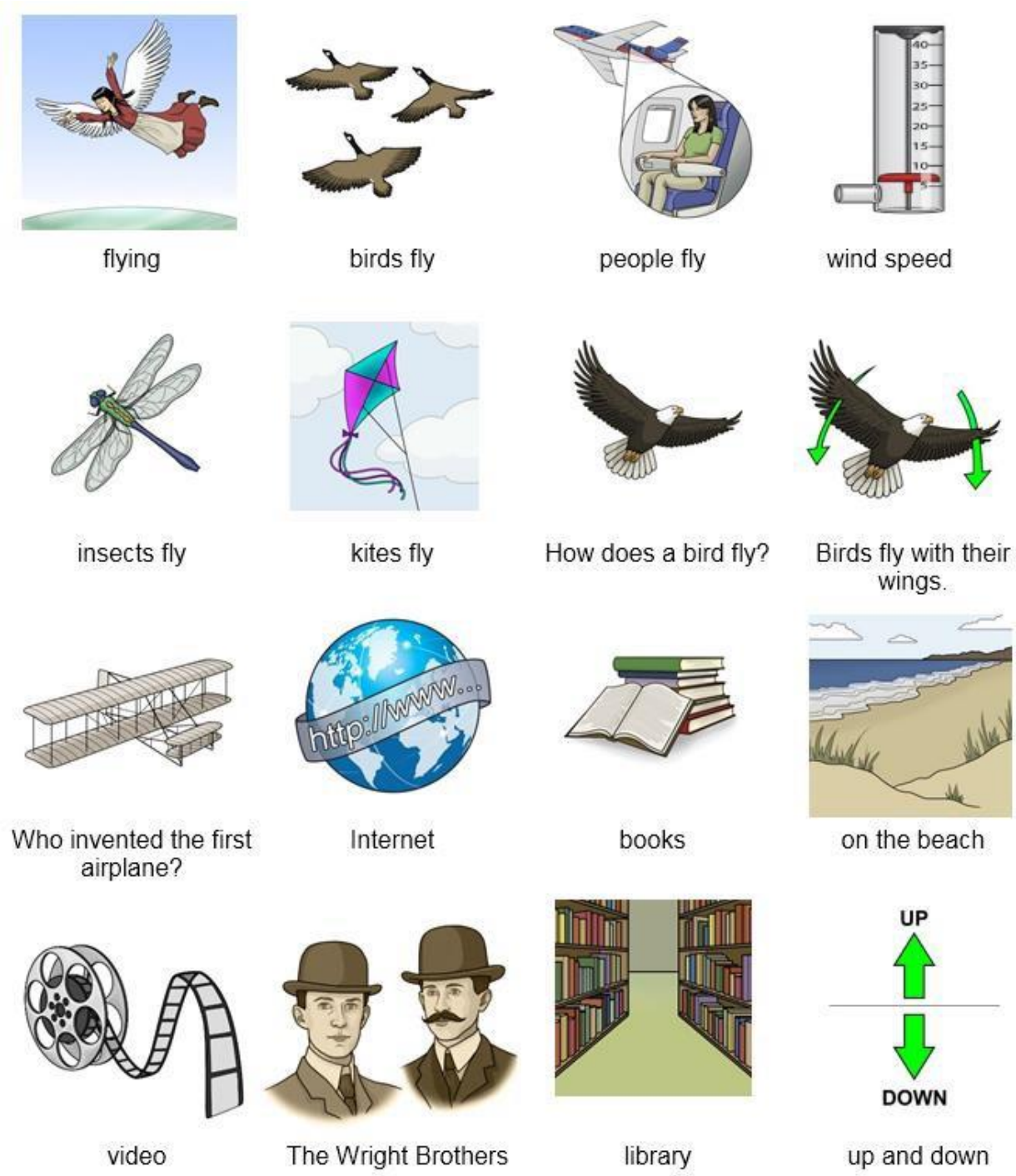

Figure 28. Attribute Table for Images

Image	Attribute	URL to the Image
	Sporting Lucas Terrier - Wikipedia https://en.wikipedia.org/wiki/Sporting_Lucas_Terrier	http://commons.wikimedia.org/wiki/File: LucasTerrier.jpg

AAC Protocol for the Connecticut Alternate Science Assessment

The Trained TEA must adhere to the AAC Protocol to ensure that the student's response is generated in a manner that allows for accurate measurement of the student's ability. The AAC Protocol is outlined in Table 20.

Table 20. AAC Protocol

Words/symbols/pictures/phrases that the student typically uses during instruction to communicate can be provided and should be words/pictures/symbols/phrases that are familiar to the student (i.e., events, descriptive words).
Introduce vocabulary related to the test item, but do not practice or teach the vocabulary in the context of the assessment. • For example, if the test item refers to "solar energy," it is appropriate to define and describe "solar energy" and its uses to familiarize the student with the related symbol(s) using the AAC device.
Any content represented in the grade-specific stimulus materials can be added to the student's AAC device (e.g., list of temporal words, problem/solution cards, words from mentor text or sample essay) to support student responding. • Ensure the words/pictures/symbols/phrases used from the stimulus materials are familiar or can readily be understood.
A response cannot be the result of a series of dichotomous choices of words, phrases, or sentences selected by the TEA. An example of a series of dichotomous choices that would not be allowed is: The teacher asks, "Do you want to say that the amount in the table should be 5 or 4?" The student chooses 5. The teacher then asks, "Do you want to make it balls or pens?" The student chooses pens.
A response can be the result of the student completing a process directed by the TEA using a series of two categories to communicate his/her word/picture/symbol/phrase preference. For example, a series of dichotomous choices that is allowable is: The teacher asks, "Do you want People-Thing words or Action words?" The student selects People-Thing words and the teacher then gives the choice of People or Thing words. The student chooses People words. The teacher then presents a series of choices of People words to allow the student to select the preferred person from those provided on the board. (As stated above, this should not result in a series of dichotomous choices of words, phrases, or sentences selected by the TEA.)
Words/symbols/pictures/phrases cannot be arranged by the TEA on a student's communication board so that any selection would be correct. *An exception to this would be if the student requests or selects a specific category level or board that has all words that could be used in a response (e.g., the student selects or requests the board filled with nouns or numbers and all would apply to the response).*
Refer to the guidance regarding the placement and presentation of words, pictures, checklists, graphic organizers, and/or templates in the Directions for Test Administration (DTA). (DTA's are applicable to the CTAA for English Language Arts and Math.)

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Appendix C. Connecticut Alternate Science Assessment Essence Statements

The Connecticut Alternate Science Assessment Essence Statements used to inform the development of the CTAS were published in fall 2018 (and reprinted in 2023) by grade and storyline.

Grade 5		
Storyline	**NGSS Standard Performance Expectations**	**Essence Statements**
Earth Science Storyline 1: Earth Systems	3-ESS2-1 Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.	CTAS-3-ESS2-1 Use and interpret data in tables and graphs to describe typical weather conditions expected during a particular season.
	3-ESS2-2 Obtain and combine information to describe climates in different regions of the world.	CTAS-3-ESS2-2 Use information to describe climates in different regions of the United States.
	5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.	CTAS-5-ESS2-1 Use a model to show how wind and water interact with land and living organisms.
Earth Science Storyline 2: Natural Resources	4-ESS3-1 Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.	CTAS-4-ESS3-1 Use information to describe renewable (wind, water, and solar) and non-renewable (coal, oil, and natural gas) sources of energy and how their uses affect the environment.
	5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.	CTAS-5-ESS2-2 Interpret data to compare the relative amounts of fresh and salt water on Earth, and use maps to show their locations in various reservoirs (lakes, rivers, and oceans).
	5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	CTAS-5-ESS3-1 Use information from multiple sources to describe ways people can protect our natural resources (water, air, land).
Life Science Storyline 3: Living Organisms	4-LS1-1 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.	CTAS-4-LS1-1 Make and support a claim that plants and animals have structures that function to support survival, growth, and behavior.
	3-LS1-1 Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.	CTAS-3-LS1-1 Compare simple models to describe the similarities and differences in the life cycle stages (birth, growth, reproduction, and death) of common organisms.

Grade 5		
Storyline	**NGSS Standard Performance Expectations**	**Essence Statements**
Life Science Storyline 4: Healthy Ecosystems	5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	CTAS-5-LS2-1 Use a simple model to describe the movement of matter among plants and animals in the environment.
	3-LS4-4 Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.*	CTAS-3-LS4-4 Given evidence, compare possible solutions to a problem that causes changes in an environment affecting the plants and animals that live there.*
	3-LS4-3 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.	CTAS-3-LS4-3 Make and support a claim that in a given habitat, some organisms can survive well, some survive less well, and some cannot survive at all.
Physical Science Storyline 5: Forces and Motion	3-PS2-1 Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.	CTAS-3-PS2-1 Use the results of an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.
	3-PS2-2 Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.	CTAS-3-PS2-2 Make observations and/or measurements to show the pattern of an object's motion and to make predictions.
Physical Science Storyline 6: Using Energy Every Day	4-PS3-1 Use evidence to construct an explanation relating the speed of an object to the energy of that object.	CTAS-4-PS3-1 Make observations that the speed of an object in motion is related to the energy of that object.
	4-PS3-2 Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.	CTAS-4-PS3-2 Make observations that light and heat are forms of energy that can be transferred from place to place.

*Indicates a performance expectation or essence statement that incorporates engineering design.

Grade 8		
Storyline	**NGSS Standard Performance Expectations**	**Essence Statements**
Earth Science Storyline 1: Earth Systems	MS-ESS2-2 Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.	CTAS-MS-ESS2-2 Construct an explanation based on evidence for how the movements of water, ice, and wind can change the Earth's surface.
	MS-ESS2-4 Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.	CTAS-MS-ESS2-4 Use a model to explain how the sun's energy and gravity cause water to cycle between the land and the atmosphere.
	MS-ESS2-5 Collect data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions.	CTAS-MS-ESS2-5 Use data to provide evidence of atmospheric conditions that result in precipitation.
Earth Science Storyline 2: Natural Resources	MS-ESS3-1 Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.	CTAS-MS-ESS3-1 Use evidence to explain that natural resources (fresh water, soil, fossil fuels) used by humans are often limited and not easily replaced by natural processes.
	MS-ESS3-3 Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.*	CTAS-MS-ESS3-3 Evaluate a method for minimizing human impact (waste production) on the environment.*
	MS-ESS3-4 Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.	CTAS-MS-ESS3-4 Analyze data to provide evidence of the amount of water used by humans for everyday purposes.

*Indicates a performance expectation or essence statement that incorporates engineering design.

Grade 8		
Storyline	**NGSS Standard Performance Expectations**	**Essence Statements**
Life Science Storyline 3: Living Organisms	MS-LS1-1 Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells.	CTAS-MS-LS1-1 Use the results of an investigation as evidence that living things are made of different types of cells.
	MS-LS1-3 Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.	CTAS-MS-LS1-3 Make and support a claim based on evidence that the human body is made up of cells and tissues that form body systems.
	MS-LS1-4 Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.	CTAS-MS-LS1-4 Make and support a claim based on evidence for how animal behaviors and plant structures affect their ability to survive and reproduce.
Life Science Storyline 4: Healthy Ecosystems	MS-LS2-1 Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.	CTAS-MS-LS2-1 Interpret data to provide evidence for the effects of resource availability on populations of organisms in an ecosystem.
	MS-LS2-5 Evaluate competing design solutions for maintaining biodiversity and ecosystem services.*	CTAS-MS-LS2-5 Evaluate a solution to maintaining a healthy ecosystem, including the physical environment and the plants and animals that live there.
	MS-LS4-6 Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time.	CTAS-MS-LS4-6 Use data to support an explanation for a change in the traits of animals and plants in a population over time.

*Indicates a performance expectation or essence statement that incorporates engineering design.

Grade 8		
Storyline	**NGSS Standard Performance Expectations**	**Essence Statements**
Physical Science Storyline 5: Forces and Motion	MS-PS2-2 Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.	CTAS-MS-PS2-2 Use and evaluate the results of an investigation to provide evidence that the change in an object's motion depends on the forces acting on the object and the mass of the object. *Note: Students are not expected to understand the difference between mass and weight.*
Physical Science Storyline 6: Using Energy Every Day	MS-PS3-3 Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.*	CTAS-MS-PS3-3 Test a device that either minimizes or maximizes heat energy transfer.*
	MS-PS3-5: Construct, use and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from an object.	CTAS-MS-PS3-5 Make and support a claim about the transfer of energy (kinetic energy) between two objects.

*Indicates a performance expectation or essence statement that incorporates engineering design.

Grade 11		
Storyline	**NGSS Standard Performance Expectations**	**Essence Statements**
Earth Science Storyline 1: Earth Systems	HS-ESS2-4 Use a model to describe how variations in the flow of energy into and out of Earth's systems results in change in climate.	CTAS-HS-ESS2-4 Use a model to describe how the sun's energy and its distribution on Earth influence climate.
	HS-ESS2-5 Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.	CTAS-HS-ESS2-5 Use the results of an investigation to show the effects of flowing water (erosion) and freezing water (mechanical weathering) on the Earth's surface.
Earth Science Storyline 2: Natural Resources	HS-ESS3-1 Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.	CTAS-HS-ESS3-1 Construct an explanation based on evidence for how the availability of natural resources influences human activity.
	HS-ESS3-4 Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.*	CTAS-HS-ESS3-4 Evaluate a technological solution (e.g., energy generated from water, wind, or the sun) that reduces impacts of human activities on the environment.*
	HS-ESS3-3 Create a computer simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	CTAS-HS-ESS3-3 Analyze data to show the relationship between the management of a natural resource and the population of organisms living in an environment.
Life Science Storyline 3: Living Organisms	HS-LS1-2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.	CTAS-HS-LS1-2 Use a model to show how the parts of a human organ system (e.g., nervous, muscular, circulatory, digestive, reproductive) and the organ system itself work together to perform functions.
	HS-LS1-3 Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.	CTAS-HS-LS1-3 Use the results of an investigation as evidence that living systems respond to external change in order to maintain balance and survive.
	HS-LS1-4 Use a model to illustrate the role of cellular division (mitosis) and differentiation in producing and maintaining complex organisms.	CTAS-HS-LS1-4 Use a model to show how cell changes (e.g., maintenance through division, differentiation, or multiplication) results in changes to the organism (e.g., growth, complexity).

*Indicates a performance expectation or essence statement that incorporates engineering design.

Grade 11		
Storyline	**NGSS Standard Performance Expectations**	**Essence Statements**
Life Science Storyline 4: Healthy Ecosystems	HS-LS2-1 Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.	CTAS-HS-LS2-1 Use data to explain the factors that affect the limits on plant and animal populations in an ecosystem.
	HS-LS2-7 Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.*	CTAS-HS-LS2-7 Evaluate a possible solution for reducing the impact of human activities on the environment, including plants and animals.*
	HS-LS2-8 Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.	CTAS-HS-LS2-8 Use evidence to show how group behaviors help animals survive and reproduce.
	HS-LS4-4 Construct an explanation based on evidence for how natural selection leads to adaptation of populations. HS-LS4-5 Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.	CTAS-HS-LS4-4/5 Use evidence to explain how natural selection leads to adaptation, growth, and/or possible extinction of populations of organisms and/or species.
Physical Science Storyline 5: Forces and Motion	HS-PS2-1 Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration.	CTAS-HS-PS2-1 Use observations and/or data to support a claim that the net force on an object is equal to its mass multiplied by its acceleration. *Note: Students are not expected to understand the difference between mass and weight.*
	HS-PS2-3 Apply scientific and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision.*	CTAS-HS-PS2-3 Test a device that minimizes the force on a common object during a collision.*

*Indicates a performance expectation or essence statement that incorporates engineering design.

Grade 11		
Storyline	**NGSS Standard Performance Expectations**	**Essence Statements**
Physical Science Storyline 6: Using Energy Every Day	HS-PS3-3 Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.*	CTAS-HS-PS3-3 Test a device that converts one form of energy into another form of energy.*
	HS-PS3-4 Plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (second law of thermodynamics).	CTAS-HS-PS3-4 Use the results of an investigation as evidence that when objects at different temperatures are brought together in a system, they will eventually reach equilibrium (the same temperature).

*Indicates a performance expectation or essence statement that incorporates engineering design.

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Appendix D. Student Score Worksheet

This appendix includes an example of the Student Score Worksheet for grade 5. All CTAS required materials can be viewed or downloaded from the CT Portal.

Connecticut Alternate Science Assessment
Student Score Worksheet
Grade 5 Performance Tasks

Student Name:	**Trained TEA Name:**	
State Assigned Student Identifier (SASID):	**Trained TEA EIN:**	
Grade:	**Start Date:**	**Completion Date:**

Directions:

As you administer each Grade 5 Performance Task and associated activities for each Storyline, use this worksheet to record the student's scores for each activity. Each activity aligns to a single core extension. **Scores recorded on this worksheet must be entered into the Data Entry Interface (DEI) by May 31, 2024, in order for the student's responses to be scored.**

Ratings are determined by administering each activity developed to elicit student responses demonstrating understanding of knowledge associated with each Core Extension. Each Core Extension is scored by the trained educator using a General Rating Scale of 0, 1, or 2. Content guidance is included for each activity for clarity. The General Rating Scale is included below in addition to extra guidance to help make decisions for the selection of student ratings.

The No Response option field should not be selected. It is designated for an internal process for CSDE/Cambium Assessments when assigning an Early Stopping Rule (ESR) code for qualified students who do not show an observable mode of communication. For information about the ESR or details about eligibility, refer to the Connecticut Alternate Assessment System Early Stopping Rule and Student Response Check guidelines.

General Rating Scale:

0 points – The student **does not** demonstrate understanding.	1 point – The student demonstrates limited understanding typically requiring additional support through scaffolding.	2 points – The student demonstrates understanding independently without scaffolding.
Select this rating if a student requires Full Physical Guidance (physical assistance throughout an entire task) or if the student is not able to answer the question(s) in the activity correctly.	Select this rating if the student response was supported by the teacher using prompts or cues (any action that increases the probability that a student will complete a specific task). Prompts and cues are outlined in Figure 1.	Select this rating for student responses that clearly indicate the student has mastered the skill and performs independently. **Original directions may be repeated or rephrased without further explanation or clarification.**

Figure 1. Allowable Prompts and Cues

Prompt/Cue	Description	Example
Partial Physical Guidance	Partial physical assistance during the performance of some part of an activity.	Student requires some physical assistance in providing the correct answer without leading them to the correct choice.
Modeling	Teacher models/demonstrates a specific task or portion of an activity.	Trained TEA shows what action they want the student to perform without leading them to the correct choice.
Repetition(s) with a Cue	Original directions are repeated with the addition of a prompt/cue.	After giving direction such as "show me a plant" the teacher waits for response. If student does not respond, teacher repeats "show me a plant" and points to the array of answer options.

Student Score Worksheets:

Earth Science Storyline 1: Earth Systems Grade 5 Performance Task						
Connecticut Alternate Science Essence Statement	**Core Extension**	**Teacher Activity/Scoring Notes** Use this column to record student response(s) when administering activities. This information is for district internal purposes only and is not recorded in the online Data Entry Interface.	**Score** Ratings: **0 points** – The student does not demonstrate understanding. **1 point** – The student demonstrates limited understanding typically requiring additional support through scaffolding. **2 points** – The student demonstrates understanding independently without scaffolding.			
CTAS-3-ESS2-1 Use and interpret data in tables and graphs to describe typical weather conditions expected during a particular season.	**ACTIVITY 1** **Core Extension 1:** Recognize two forms of water (e.g., rain, snow, hail, sleet) that can fall from clouds to Earth. (CTAS-3-ESS2-1)		**NR** * ❍	**0** ❍	**1** ❍	**2** ❍
CTAS-3-ESS2-1 Use and interpret data in tables and graphs to describe typical weather conditions expected during a particular season.	**ACTIVITY 2** **Core Extension 2:** Identify key components that describe local weather conditions (e.g., temperature, amount of cloud cover, precipitation, and wind speed). (CTAS-3-ESS2-1)			**0** ❍	**1** ❍	**2** ❍
CTAS-3-ESS2-1 Use and interpret data in tables and graphs to describe typical weather conditions expected during a particular season.	**ACTIVITY 3** **Core Extension 3:** From provided temperature and precipitation data, identify the likely seasons. (CTAS-3-ESS2-1)			**0** ❍	**1** ❍	**2** ❍
CTAS-3-ESS2-1 Use and interpret data in tables and graphs to describe typical weather conditions expected during a particular season.	**ACTIVITY 4** **Core Extension 4:** From provided data, compare weather conditions between two specific time periods. (CTAS-3-ESS2-1)			**0** ❍	**1** ❍	**2** ❍
CTAS-3-ESS2-2 Use information to describe climates in different regions of the United States.	**ACTIVITY 5** **Core Extension 5:** Using provided information, describe the climate in Connecticut. (CTAS-3-ESS2-2)			**0** ❍	**1** ❍	**2** ❍

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Earth Science Storyline 1: Earth Systems Grade 5 Performance Task						
Connecticut Alternate Science Essence Statement	**Core Extension**	**Teacher Activity/Scoring Notes** Use this column to record student response(s) when administering activities. This information is for district internal purposes only and is not recorded in the online Data Entry Interface.	**Score** Ratings: **0 points** – The student does not demonstrate understanding. **1 point** – The student demonstrates limited understanding typically requiring additional support through scaffolding. **2 points** – The student demonstrates understanding independently without scaffolding.			
CTAS-3-ESS2-2 Use information to describe climates in different regions of the United States.	**ACTIVITY 6** **Core Extension 6:** From provided data (average temperature and precipitation), compare climates in two regions of the United States (e.g., northeast vs. southwest). (CTAS-3-ESS2-2)			**0** ❍	**1** ❍	**2** ❍
CTAS-3-ESS2-2 Use information to describe climates in different regions of the United States.	**ACTIVITY 7** **Core Extension 7:** From provided information about the climate pattern in a region, make a prediction about typical weather conditions in that region. (CTAS-3-ESS2-2)			**0** ❍	**1** ❍	**2** ❍
CTAS-5-ESS2-1 Use a model to show how wind and water interact with land and living organisms.	**ACTIVITY 8** **Core Extension 8:** Complete a model to describe changes in the shape of a land form due to wind and water. (CTAS-5-ESS2-1)			**0** ❍	**1** ❍	**2** ❍
CTAS-5-ESS2-1 Use a model to show how wind and water interact with land and living organisms.	**ACTIVITY 9** **Core Extension 9:** From provided information, compare the effects of severe weather (e.g., drought, flooding, or hurricane) on land and living organisms. (CTAS-5-ESS2-1)			**0** ❍	**1** ❍	**2** ❍

Earth Science Storyline 2: Natural Resources Grade 5 Performance Task						
Connecticut Alternate Science Essence Statement	**Core Extension**	**Teacher Activity/Scoring Notes** Use this column to record student response(s) when administering activities. This information is for district internal purposes only and is not recorded in the online Data Entry Interface.	**Score** Ratings: 0 points – The student does not demonstrate understanding. 1 point – The student demonstrates limited understanding typically requiring additional support through scaffolding. 2 points – The student demonstrates understanding independently without scaffolding.			
CTAS-5-ESS2-2 Interpret data to compare the relative amounts of fresh and salt water on Earth, and use maps to show their locations in various reservoirs (lakes, rivers, and oceans).	**ACTIVITY 1** **Core Extension 1:** Distinguish between fresh and salt water and which is needed by humans and other organisms for survival. (CTAS-5-ESS2-2)		NR × ❍	0 ❍	1 ❍	2 ❍
CTAS-5-ESS2-2 Interpret data to compare the relative amounts of fresh and salt water on Earth, and use maps to show their locations in various reservoirs (lakes, rivers, and oceans).	**ACTIVITY 2** **Core Extension 2:** Locate sources of freshwater (a lake and river) and saltwater (ocean) shown on a map. (CTAS-5-ESS2-2)			0 ❍	1 ❍	2 ❍
CTAS-5-ESS2-2 Interpret data to compare the relative amounts of fresh and salt water on Earth, and use maps to show their locations in various reservoirs (lakes, rivers, and oceans).	**ACTIVITY 3** **Core Extension 3:** From a simple graphic, compare the relative amounts of fresh and salt water in various reservoirs. (CTAS-5-ESS2-2)			0 ❍	1 ❍	2 ❍
CTAS-4-ESS3-1 Use information to describe renewable (wind, water, and solar) and non-renewable (coal, oil, and natural gas) sources of energy and how their uses affect the environment.	**ACTIVITY 4** **Core Extension 4:** Describe two ways that humans use energy sources (e.g., generate electricity, heat homes, power a car). (CTAS-4-ESS3-1)			0 ❍	1 ❍	2 ❍

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Earth Science Storyline 2: Natural Resources Grade 5 Performance Task						
Connecticut Alternate Science Essence Statement	**Core Extension**	**Teacher Activity/Scoring Notes** Use this column to record student response(s) when administering activities. This information is for district internal purposes only and is not recorded in the online Data Entry Interface.	**Score** Ratings: 0 points – The student does not demonstrate understanding. 1 point – The student demonstrates limited understanding typically requiring additional support through scaffolding. 2 points – The student demonstrates understanding independently without scaffolding.			
CTAS-4-ESS3-1 Use information to describe renewable (wind, water, and solar) and non-renewable (coal, oil, and natural gas) sources of energy and how their uses affect the environment.	**ACTIVITY 5** **Core Extension 5:** Complete a causal chain explaining two ways that non-renewable energy sources (coal, oil, natural gas) affect the environment. (CTAS-4-ESS3-1)			0 ❍	1 ❍	2 ❍
CTAS-4-ESS3-1 Use information to describe renewable (wind, water, and solar) and non-renewable (coal, oil, and natural gas) sources of energy and how their uses affect the environment.	**ACTIVITY 6** **Core Extension 6:** Complete a causal chain explaining two ways that renewable energy sources (wind, water, solar) affect the environment. (CTAS-4-ESS3-1)			0 ❍	1 ❍	2 ❍
CTAS-5-ESS3-1 Use information from multiple sources to describe ways people can protect our natural resources (water, air, land).	**ACTIVITY 7** **Core Extension 7:** From provided information, identify a human activity that affects Earth's natural resources. (CTAS-5-ESS3-1)			0 ❍	1 ❍	2 ❍
CTAS-5-ESS3-1 Use information from multiple sources to describe ways people can protect our natural resources (water, air, land).	**ACTIVITY 8** **Core Extension 8:** From provided information, identify a way to protect Earth's natural resources. (CTAS-5-ESS3-1)			0 ❍	1 ❍	2 ❍
CTAS-5-ESS3-1 Use information from multiple sources to describe ways people can protect our natural resources (water, air, land).	**ACTIVITY 9** **Core Extension 9:** Given a scenario and background information, describe one positive and one negative effect of how a group of people can help to protect their community's natural resources. (CTAS-5-ESS3-1)			0 ❍	1 ❍	2 ❍

Life Science Storyline 3: Living Organisms Grade 5 Performance Task						
Connecticut Alternate Science Essence Statement	**Core Extension**	**Teacher Activity/Scoring Notes** Use this column to record student response(s) when administering activities. This information is for district internal purposes only and is not recorded in the online Data Entry Interface.	**Score** **Ratings:** **0 points** – The student **does not** demonstrate understanding. **1 point** – The student demonstrates limited understanding typically requiring additional support through scaffolding. **2 points** – The student demonstrates understanding independently without scaffolding.			
CTAS-4-LS1-1 Make and support a claim that plants and animals have structures that function to support survival, growth, and behavior.	**ACTIVITY 1** **Core Extension 1:** Identify a structure (part) of a plant or an animal that supports survival. (CTAS-4-LS1-1)		NR × ❍	0 ❍	1 ❍	2 ❍
CTAS-4-LS1-1 Make and support a claim that plants and animals have structures that function to support survival, growth, and behavior.	**ACTIVITY 2** **Core Extension 2:** Match one structure (part) of a plant or an animal to its function (e.g., wings help a bird to fly). (CTAS-4-LS1-1)			0 ❍	1 ❍	2 ❍
CTAS-3-LS1-1 Compare simple models to describe the similarities and differences in the life cycle stages (birth, growth, reproduction, and death) of common organisms.	**ACTIVITY 3** **Core Extension 3:** Identify key stages (i.e., birth, growth, reproduction, death) of a plant or animal's life cycle. (CTAS-3-LS1-1)			0 ❍	1 ❍	2 ❍
CTAS-3-LS1-1 Compare simple models to describe the similarities and differences in the life cycle stages (birth, growth, reproduction, and death) of common organisms.	**ACTIVITY 4** **Core Extension 4:** Compare and contrast the life cycles of two plants or two animals to identify one similarity and one difference. (CTAS-3-LS1-1)			0 ❍	1 ❍	2 ❍
CTAS-4-LS1-1 Make and support a claim that plants and animals have structures that	**ACTIVITY 5** **Core Extension 5:** Make a claim about a structure that supports the survival or growth of a plant or an animal (e.g., stem of a plant transports water or food/nutrients to the plant; water and			0 ❍	1 ❍	2 ❍

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Life Science Storyline 3: Living Organisms Grade 5 Performance Task						
Connecticut Alternate Science Essence Statement	**Core Extension**	**Teacher Activity/Scoring Notes** Use this column to record student response(s) when administering activities. This information is for district internal purposes only and is not recorded in the online Data Entry Interface.	**Score** **Ratings:** **0 points** – The student **does not** demonstrate understanding. **1 point** – The student demonstrates limited understanding typically requiring additional support through scaffolding. **2 points** – The student demonstrates understanding independently without scaffolding.			
function to support survival, growth, and behavior.	nutrients/food allow plant to survive; stem is thick on a sunflower; thick stem allows sunflower to grow tall). (CTAS-4-LS1-1)					

Life Science Storyline 4: Healthy Ecosystems Grade 5 Performance Task						
Connecticut Alternate Science Essence Statement	**Core Extension**	**Teacher Activity/Scoring Notes** Use this column to record student response(s) when administering activities. This information is for district internal purposes only and is not recorded in the online Data Entry Interface.	**Score** **Ratings:** **0 points** – The student **does not** demonstrate understanding. **1 point** – The student demonstrates limited understanding typically requiring additional support through scaffolding. **2 points** – The student demonstrates understanding independently without scaffolding.			
CTAS-5-LS2-1 Use a simple model to describe the movement of matter among plants and animals in the environment.	**ACTIVITY 1** **Core Extension 1:** Given several examples, identify which are plants and which are animals. (CTAS-5-LS2-1)		NR * ❍	0 ❍	1 ❍	2 ❍
CTAS-3-LS4-3 Make and support a claim that in a given habitat, some organisms can survive well, some survive less well, and some cannot survive at all.	**ACTIVITY 2** **Core Extension 2:** Identify two traits that help an organism survive in a given habitat. (CTAS-3-LS4-3)			0 ❍	1 ❍	2 ❍
CTAS-3-LS4-3 Make and support a claim that in a given habitat, some organisms can survive well, some survive less well, and some cannot survive at all.	**ACTIVITY 3** **Core Extension 3:** Make and support a claim why some animals would not survive in a given habitat. (CTAS-3-LS4-3)			0 ❍	1 ❍	2 ❍
CTAS-5-LS2-1 Use a simple model to describe the movement of matter among plants and animals in the environment.	**ACTIVITY 4** **Core Extension 4:** Describe the role of plants as producers and animals as consumers in the environment. (CTAS-5-LS2-1)			0 ❍	1 ❍	2 ❍
CTAS-5-LS2-1 Use a simple model to describe the movement of matter among	**ACTIVITY 5** **Core Extension 5:** Use a simple food chain as a model to show the interactions of plants and animals in cycling matter. (CTAS-5-LS2-1)			0 ❍	1 ❍	2 ❍

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Life Science Storyline 4: Healthy Ecosystems Grade 5 Performance Task						
Connecticut Alternate Science Essence Statement	**Core Extension**	**Teacher Activity/Scoring Notes** Use this column to record student response(s) when administering activities. This information is for district internal purposes only and is not recorded in the online Data Entry Interface.	**Score** **Ratings:** **0 points** – The student **does not** demonstrate understanding. **1 point** – The student demonstrates limited understanding typically requiring additional support through scaffolding. **2 points** – The student demonstrates understanding independently without scaffolding.			
plants and animals in the environment.						
CTAS-3-LS4-3 Make and support a claim that in a given habitat, some organisms can survive well, some survive less well, and some cannot survive at all.	**ACTIVITY 6** **Core Extension 6:** Make a claim using evidence about two factors affecting the survival of an organism in a given habitat. (CTAS-3-LS4-3)			0 ❍	1 ❍	2 ❍
CTAS-3-LS4-4 Given evidence, compare possible solutions to a problem that causes changes in an environment affecting the plants and animals that live there.*	**ACTIVITY 7** **Core Extension 7:** When given an environmental problem, identify a way to help reduce the harmful effects on plants or animals. (CTAS-3-LS4-4)			0 ❍	1 ❍	2 ❍
CTAS-3-LS4-4 Given evidence, compare possible solutions to a problem that causes changes in an environment affecting the plants and animals that live there.*	**ACTIVITY 8** **Core Extension 8:** From two possible solutions, compare them and select one that may prevent environmental problems that affect plants or animals. (CTAS-3-LS4-4)			0 ❍	1 ❍	2 ❍

***Indicates a NGSS Standard Performance Expectation or Connecticut Alternate Science Essence Statement that incorporates engineering design.**

Physical Science Storyline 5: Forces and Motion Grade 5 Performance Task						
Connecticut Alternate Science Essence Statement	**Core Extension**	**Teacher Activity/Scoring Notes** Use this column to record student response(s) when administering activities. This information is for district internal purposes only and is not recorded in the online Data Entry Interface.	**Score** **Ratings:** **0 points** – The student **does not** demonstrate understanding. **1 point** – The student demonstrates limited understanding typically requiring additional support through scaffolding. **2 points** – The student demonstrates understanding independently without scaffolding.			
CTAS-3-PS2-1 Use the results of an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.	**ACTIVITY 1** **Core Extension 1:** Identify a force as a push or pull on an object. (CTAS-3-PS2-1)		NR × ❍	0 ❍	1 ❍	2 ❍
CTAS-3-PS2-1 Use the results of an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.	**ACTIVITY 2** **Core Extension 2:** Recognize that an unbalanced force can cause an object to move. (CTAS-3-PS2-1)			0 ❍	1 ❍	2 ❍
CTAS-3-PS2-1 Use the results of an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.	**ACTIVITY 3** **Core Extension 3:** Recognize that balanced forces do not cause an object to move or change motion. (CTAS-3-PS2-1)			0 ❍	1 ❍	2 ❍
CTAS-3-PS2-1 Use the results of an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.	**ACTIVITY 4** **Core Extension 4:** Use the results of an investigation as evidence that two or more unbalanced forces will cause an object to move. (CTAS-3-PS2-1)			0 ❍	1 ❍	2 ❍

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Physical Science Storyline 5: Forces and Motion Grade 5 Performance Task						
Connecticut Alternate Science Essence Statement	**Core Extension**	**Teacher Activity/Scoring Notes** Use this column to record student response(s) when administering activities. This information is for district internal purposes only and is not recorded in the online Data Entry Interface.	**Score** **Ratings:** **0 points** – The student **does not** demonstrate understanding. **1 point** – The student demonstrates limited understanding typically requiring additional support through scaffolding. **2 points** – The student demonstrates understanding independently without scaffolding.			
CTAS-3-PS2-2 Make observations and/or measurements to show the pattern of an object's motion in order to make predictions.	**ACTIVITY 5** **Core Extension 5:** Make one qualitative observation about the pattern of an object in motion. (CTAS-3-PS2-2)			0 ❍	1 ❍	2 ❍
CTAS-3-PS2-2 Make observations and/or measurements to show the pattern of an object's motion in order to make predictions.	**ACTIVITY 6** **Core Extension 6:** Make two quantitative observations to show the pattern of the motion of an object. (CTAS-3-PS2-2)			0 ❍	1 ❍	2 ❍
CTAS-3-PS2-2 Make observations and/or measurements to show the pattern of an object's motion in order to make predictions.	**ACTIVITY 7** **Core Extension 7:** Make a prediction about the effect of a change in one variable on the motion of an object. (CTAS-3-PS2-2)			0 ❍	1 ❍	2 ❍

Physical Science Storyline 6: Using Energy Every Day Grade 5 Performance Task						
Connecticut Alternate Science Essence Statement	**Core Extension**	**Teacher Activity/Scoring Notes** Use this column to record student response(s) when administering activities. This information is for district internal purposes only and is not recorded in the online Data Entry Interface.	**Score** **Ratings:** **0 points** – The student **does not** demonstrate understanding. **1 point** – The student demonstrates limited understanding typically requiring additional support through scaffolding. **2 points** – The student demonstrates understanding independently without scaffolding.			
CTAS-4-PS3-2 Make observations that light and heat are forms of energy that can be transferred from place to place.	**ACTIVITY 1** **Core Extension 1:** Distinguish between at least two examples of hot and cold. (CTAS-4-PS3-2)		NR × ❍	0 ❍	1 ❍	2 ❍
CTAS-4-PS3-2 Make observations that light and heat are forms of energy that can be transferred from place to place.	**ACTIVITY 2** **Core Extension 2:** Distinguish between at least two examples of light and dark. (CTAS-4-PS3-2)			0 ❍	1 ❍	2 ❍
CTAS-4-PS3-2 Make observations that light and heat are forms of energy that can be transferred from place to place.	**ACTIVITY 3** **Core Extension 3:** Identify two examples of how light and heat energy are used in everyday life. (CTAS-4-PS3-2)			0 ❍	1 ❍	2 ❍
CTAS-4-PS3-2 Make observations that light and heat are forms of energy that can be transferred from place to place.	**ACTIVITY 4** **Core Extension 4:** Make observations that heat is transferred from the sun to the Earth. (CTAS-4-PS3-2)			0 ❍	1 ❍	2 ❍
CTAS-5-PS3-1 Use a simple model to describe that light energy comes from the sun, and is used by plants to grow and produce food that is eaten by animals and/or humans that they use for various purposes.	**ACTIVITY 5** **Core Extension 5:** Use a simple model to show that plants need light energy from the sun to grow. (CTAS-5-PS3-1)			0 ❍	1 ❍	2 ❍

× ***The NR response option is for internal department use only***. Please do not mark this answer option on this worksheet or when entering scores into the DEI. Under no circumstance should NR be marked.

Physical Science Storyline 6: Using Energy Every Day Grade 5 Performance Task						
Connecticut Alternate Science Essence Statement	**Core Extension**	**Teacher Activity/Scoring Notes** Use this column to record student response(s) when administering activities. This information is for district internal purposes only and is not recorded in the online Data Entry Interface.	**Score** **Ratings:** **0 points** – The student **does not** demonstrate understanding. **1 point** – The student demonstrates limited understanding typically requiring additional support through scaffolding. **2 points** – The student demonstrates understanding independently without scaffolding.			
CTAS-5-PS3-1 Use a simple model to describe that light energy comes from the sun, and is used by plants to grow and produce food that is eaten by animals and/or humans that they use for various purposes.	**ACTIVITY 6** **Core Extension 6:** Use a simple model to describe that the food animals need was once energy from the sun. (CTAS-5-PS3-1)			0 ❍	1 ❍	2 ❍

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Appendix E. The Early Stopping Rule and Student Response Check

Most students eligible to participate on alternate assessments will be able to complete the assessments because they can access the test questions and communicate their responses when provided supports and accommodations that mirror those provided during instruction. However, a small percentage of students with the most significant cognitive and adaptive behavioral needs are reported by their teachers to have no observable way to communicate responses to participate in classroom or large-scale assessments. Trained TEAs should follow the procedures outlined in the Connecticut Alternate Assessment System Early Stopping Rule and Student Response Check to determine eligibility for the purpose of determining if a student has the necessary observable communication skills to participate fully on alternate assessments. For details and submission deadlines, refer to the Early Stopping Rule and Student Response Check guidelines.