

**Connecticut Alternate Science Assessment
Student Score Worksheet
Grade 11 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 11 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 June 4, 2021 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 should **only** be selected for very few students who are not able to demonstrate an observable response in any way to the first Activity in the first Performance Task of the first Storyline that the TEA chooses to administer. If you believe that your student qualifies for the Early Stopping Rule (ESR) refer to the *Guidance About Students Who Qualify for the Connecticut Alternate Science Early Stopping Rule*.

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 11 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-HS-ESS2-4 Use a model to describe how the sun’s energy and its distribution on Earth influence climate.	ACTIVITY 1 Core Extension 1: Using a model, describe the sun’s warming effect on the Earth. (CTAS-HS-ESS2-4)		NR ○	0 ○	1 ○	2 ○
CTAS-HS-ESS2-4 Use a model to describe how the sun’s energy and its distribution on Earth influence climate.	ACTIVITY 2 Core Extension 2: Use a model to describe the cause-and-effect relationship between the sun and the climate in different areas on the Earth (i.e., polar regions vs. regions near the equator). (CTAS-HS-ESS2-4)			0 ○	1 ○	2 ○
CTAS-HS-ESS2-4 Use a model to describe how the sun’s energy and its distribution on Earth influence climate.	ACTIVITY 3 Core Extension 3: Given a model, describe the cause and effect relationship between the amount of energy from the sun and the seasons on Earth. (CTAS-HS-ESS2-4)			0 ○	1 ○	2 ○
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.	ACTIVITY 4 Core Extension 4: Make an observation of change to Earth materials after water has flowed through. (CTAS-HS-ESS2-5)			0 ○	1 ○	2 ○
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.	ACTIVITY 5 Core Extension 5: Using the results of an investigation, make an observation and use data to draw a conclusion about how flowing water affects Earth materials. (CTAS-HS-ESS2-5)			0 ○	1 ○	2 ○

Earth Science
 Storyline 1: Earth Systems
 Grade 11 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-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.	ACTIVITY 6 Core Extension 6: From an investigation, identify the independent variable (the variable purposely changed) and a variable that was held constant. (CTAS-HS-ESS2-5)			0 ○	1 ○	2 ○
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.	ACTIVITY 7 Core Extension 7: Based on observations, make a claim about the relationship between water temperature and the physical change of an object (e.g., water freezing in cracks causes rocks to break into pieces or leads to potholes in roads). (CTAS-HS-ESS2-5)			0 ○	1 ○	2 ○

Earth Science

Storyline 2: Natural Resources

Grade 11 Performance Task

Connecticut Alternate Science Essence Statement	Core Extension	Teacher Activity/Scoring Notes	Score			
		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.	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-HS-ESS3-1 Construct an explanation based on evidence for how the availability of natural resources influences human activity.	ACTIVITY 1 Core Extension 1: From a picture, identify one natural resource (e.g., fresh water, land, fossil fuels) that affects human activity. (CTAS-HS-ESS3-1)		NR <input type="radio"/>	0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>
CTAS-HS-ESS3-1 Construct an explanation based on evidence for how the availability of natural resources influences human activity.	ACTIVITY 2 Core Extension 2: Complete a causal-chain (e.g., flow chart) explaining how the availability of a natural resource (e.g., fresh water, land, fossil fuels) may affect human activity. (CTAS-HS-ESS3-1)			0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>
CTAS-HS-ESS3-1 Construct an explanation based on evidence for how the availability of natural resources influences human activity.	ACTIVITY 3 Core Extension 3: Construct an explanation based on provided evidence (e.g., pictures) of how the availability of a natural resource (e.g., fresh water, land, fossil fuels) affects human activity. (CTAS-HS-ESS3-1)			0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>
CTAS-HS-ESS3-1 Construct an explanation based on evidence for how the availability of natural resources influences human activity.	ACTIVITY 4 Core Extension 4: Identify evidence supporting a cause-and-effect relationship between the availability of a natural resource (e.g., fresh water, land, fossil fuels) and human activity. (CTAS-HS-ESS3-1)			0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>
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.*	ACTIVITY 5 Core Extension 5: From a simple diagram, describe how electricity can be produced from flowing water (e.g., hydroelectric power). (CTAS-HS-ESS3-4)			0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>

Earth Science

Storyline 2: Natural Resources

Grade 11 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-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.*	ACTIVITY 6 Core Extension 6: Using a simple diagram, identify the impact of a change (e.g., increasing the amount of water that flows through a dam) in the design of a system used to generate electricity from flowing water. (CTAS-HS-ESS3-4)		0 ○	1 ○	2 ○
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.*	ACTIVITY 7 Core Extension 7: From provided information, compare and/or contrast the use of two sources of electricity (e.g., hydroelectric power and fossil fuels). (CTAS-HS-ESS3-4)		0 ○	1 ○	2 ○
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.	ACTIVITY 8 Core Extension 8: Identify two possible effects on an ecosystem of building a dam to produce hydroelectric power. (CTAS-HS-ESS3-3)		0 ○	1 ○	2 ○
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.	ACTIVITY 9 Core Extension 9: Analyze population data to describe changes in the populations of organisms before and after a dam is built. (CTAS-HS-ESS3-3)		0 ○	1 ○	2 ○

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

Life Science
 Storyline 3: Living Organisms
 Grade 11 Performance Task

Connecticut Alternate Science Essence Statement	Core Extension	Teacher Activity/Scoring Notes	Score			
		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.	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-HS-LS1-2 Use a model to show how the parts of a human organ system (e.g., nervous, muscular, circulatory, digestive, reproductive) and organ systems work together to perform functions.	ACTIVITY 1 Core Extension 1: Identify the basic function of one human organ system. (CTAS-HS-LS1-2)		NR <input type="radio"/>	0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>
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 organ systems work together to perform functions.	ACTIVITY 2 Core Extension 2: Use a model to show how two organ systems work together to perform a function. (CTAS-HS-LS1-2)			0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>
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 organ systems work together to perform functions.	ACTIVITY 3 Core Extension 3: Identify the human body system or system component and the way that it supports the human body (e.g., identify the system or organ that supports breathing, lungs/respiratory system). (CTAS-HS-LS1-2)			0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>
CTAS-HS-LS1-4 Use a model to show how cell changes (e.g., maintenance through division, differentiation, or multiplication) result in changes to the organism (e.g., growth, complexity).	ACTIVITY 4 Core Extension 4: Use a model to relate the number of cells to the size of an organism. (CTAS-HS-LS1-4)			0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>

Life Science
 Storyline 3: Living Organisms
 Grade 11 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-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).	ACTIVITY 5 Core Extension 5: Use a model to show that as the complexity of an organism increases, so does the number, type, and specialization of cells. (CTAS-HS-LS1-4)		0 ○	1 ○	2 ○
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.	ACTIVITY 6 Core Extension 6: Given an external change, identify the organism’s response to the change increasing opportunities for survival (e.g., humans sweat to cool body when it is hot). (CTAS-HS-LS1-3)		0 ○	1 ○	2 ○
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.	ACTIVITY 7 Core Extension 7: Provided the results of an investigation, make a claim about the body’s ability to maintain balance of a vital feature (i.e., temperature, heart rate, breathing rate). (CTAS-HS-LS1-3)		0 ○	1 ○	2 ○

Life Science
Storyline 4: Healthy Ecosystems
Grade 11 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-HS-LS2-1 Use data to explain the factors that affect the limits on plant and animal populations in an ecosystem.	ACTIVITY 1 Core Extension 1: Identify two factors that affect the limits on plant or animal populations in an ecosystem. (CTAS-HS-LS2-1)		NR ○	0 ○	1 ○	2 ○
CTAS-HS-LS2-8 Use evidence to show how group behaviors help animals survive and reproduce.	ACTIVITY 2 Core Extension 2: Recognize a group behavior (e.g., flocking, hunting in a pack) in animals. (CTAS-HS-LS2-8)			0 ○	1 ○	2 ○
CTAS-HS-LS2-7 Evaluate a possible solution for reducing the impact of human activities on the environment, including plants and animals.*	ACTIVITY 3 Core Extension 3: Describe two effects of a human activity on the environment. (CTAS-HS-LS2-7)			0 ○	1 ○	2 ○
CTAS-HS-LS2-1 Use data to explain the factors that affect the limits on plant and animal populations in an ecosystem.	ACTIVITY 4 Core Extension 4: Use data from a table or graph to explain how a factor limits a plant or animal population in an ecosystem. (CTAS-HS-LS2-1)			0 ○	1 ○	2 ○
CTAS-HS-LS2-7 Evaluate a possible solution for reducing the impact of human activities on the environment, including plants and animals.*	ACTIVITY 5 Core Extension 5: Given a solution for reducing human impact on the environment, identify a positive and negative aspect. (CTAS-HS-LS2-7)			0 ○	1 ○	2 ○
CTAS-HS-LS2-8 Use evidence to show how group behaviors help animals survive and reproduce.	ACTIVITY 6 Core Extension 6: Given a scenario, use evidence to show how a group behavior helps plants or animals survive and reproduce. (CTAS-HS-LS2-8)			0 ○	1 ○	2 ○

Life Science
Storyline 4: Healthy Ecosystems
Grade 11 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-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.	ACTIVITY 7 Core Extension 7: Given several traits, identify one that varies and is passed on to offspring within a population of organisms. (CTAS-HS-LS4-4/5)		0 ○	1 ○	2 ○
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.	ACTIVITY 8 Core Extension 8: Given an environmental change, determine which physical adaptation would ensure the survival of a population. (CTAS-HS-LS4-4/5)		0 ○	1 ○	2 ○
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.	ACTIVITY 9 Core Extension 9: Given a scenario, use a graph or table to identify a cause and effect relationship between natural selection and an adaptation. (CTAS-HS-LS4-4/5)		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 11 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-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.	ACTIVITY 1 Core Extension 1: Compare the speed of two objects under different conditions. (CTAS-HS-PS2-1)		NR <input type="radio"/>	0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>
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.	ACTIVITY 2 Core Extension 2: Compare the acceleration of objects (speeding up or slowing down) under different conditions. (CTAS-HS-PS2-1)			0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>
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.	ACTIVITY 3 Core Extension 3: Use observation and/or data to support a claim that a greater force will cause an object in motion to speed up faster. (CTAS-HS-PS2-1)			0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>
CTAS-HS-PS2-3 Test a device that minimizes the force on a common object during a collision.*	ACTIVITY 4 Core Extension 4: Gather data to investigate the force on an object during a collision. (CTAS-HS-PS2-3)			0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>
CTAS-HS-PS2-3 Test a device that minimizes the force on a common object during a collision.*	ACTIVITY 5 Core Extension 5: Make and support a claim about the modification to a device and its effect on reducing the force during the collision. (CTAS-HS-PS2-3)			0 <input type="radio"/>	1 <input type="radio"/>	2 <input type="radio"/>

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

Physical Science
 Storyline 6: Using Energy Every Day
 Grade 11 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-HS-PS3-3 Test a device that converts one form of energy into another form of energy.*	ACTIVITY 1 Core Extension 1: Identify two ways that different forms of energy (e.g., heat, motion, light, sound, electrical, mechanical, wind, kinetic) are used in everyday life. (CTAS-HS-PS3-3)		NR ○	0 ○	1 ○	2 ○
CTAS-HS-PS3-3 Test a device that converts one form of energy into another form of energy.*	ACTIVITY 2 Core Extension 2: Given examples of energy transformation, label the energy change from one form to another. (CTAS-HS-PS3-3)			0 ○	1 ○	2 ○
CTAS-HS-PS3-3 Test a device that converts one form of energy into another form of energy.*	ACTIVITY 3 Core Extension 3: Use the results of a test to show that energy is transferred using a device. (CTAS-HS-PS3-3)			0 ○	1 ○	2 ○
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).	ACTIVITY 4 Core Extension 4: Measure the temperature of water at two different temperatures. (CTAS-HS-PS3-4)			0 ○	1 ○	2 ○
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).	ACTIVITY 5 Core Extension 5: Use the results of an investigation to show that temperature equilibrium will be reached by combining water at two different temperatures. (CTAS-HS-PS3-4)			0 ○	1 ○	2 ○

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