

# Coherence and Alignment Among Science Curriculum, Instruction, and Assessment (CASCIA) Project

# Grade 5 Unit 3: Earth Systems and the Solution of Water Problems

Task 2 Prompt 2 Scored and Annotated Anchor Set

May 2025

Grade 5 Unit 3: Earth Systems and the Solution of Water Problems, Task 2 Prompt 2 Scored and Annotated Anchor Set was developed with funding from the U.S. Department of Education under the Competitive Grants for State Assessments Program CFDA 84.368A. The contents of this paper do not represent the policy of the U.S. Department of Education, and no assumption of endorsement by the Federal government should be made.

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# CASCIA Grade 5 EOU Assessment 3 Task 2: Searching for Freshwater Prompt 2 Score Point 4

**Prompt 2 Rubric** 

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2	No aspect of the response is correct	Response includes one (1) distinct interaction between two different spheres AND The distinct interaction includes both required aspects	Response includes two (2) distinct interactions between two different spheres AND At least one (1) of the two (2) distinct interactions includes both required aspects	Response includes three (3) distinct interactions between two different spheres AND At least two (2) of the three (3) distinct interactions include both required aspects	Response includes three (3) distinct interactions between two different spheres  AND  Each interaction includes the following aspects:  Identification of the components related to each sphere in the interaction  AND  Description of how one component interacts with the other

### Score Point 4 (3/3 aspects met)

- Includes three (3) distinct interactions between two different spheres.
- Identifies the components related to each sphere in the interaction.
- Includes a description of how one component interacts with the other.

	Prompt 2
1	iesh and his friends leave the meadow and continue hiking. They hear fast-moving water before they see a stream. When they reach the stream, they see sand and pebbles tumbling along the bettom. As the water moves downstream, it sarries twigs, leaves, and bits of soil, in sheltered water pools, insects hover in the air above the water. Toads are along the bank. A large lish is untunder the water's surface.
3	dentify three interactions among the Earth's spheres that Josh and his friends observe.
1	for each interaction:
٠,	<ul> <li>Identify two spheres that interact</li> </ul>
	<ul> <li>Describe the interactions of the remponents of the two softenss</li> </ul>
	Interaction 1,
1	The big 5 phase sinterror greature Mydro 5 phase
	the fish is in the water.
	Interaction 2.
	the liverestate statement of the sphere
,	when the water that is flowing moves
	the rocks and said down stream.
	Interaction 3.
	The Bill Sphere Islatered agents the Atmasphere
	when the insects are flying in the
	ALC:

## **CASCIA Grade 5 EOU Assessment 3 Task 2: Searching for Freshwater Prompt 2 Score Point 3**

**Prompt 2 Rubric** 

Pron	npt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prom	pt 2	No aspect of the response is correct	Response includes one (1) distinct interaction between two different spheres AND The distinct interaction includes both required aspects	Response includes two (2) distinct interactions between two different spheres AND At least one (1) of the two (2) distinct interactions includes both required aspects	Response includes three (3) distinct interactions between two different spheres AND At least two (2) of the three (3) distinct interactions include both required aspects	Response includes three (3) distinct interactions between two different spheres  AND  Each interaction includes the following aspects:  Identification of the components related to each sphere in the interaction  AND  Description of how one component interacts with the other

#### Score Point 3 (2/2 aspects met)

- Includes three (3) distinct interactions between two different spheres.
- Correctly identifies **two (2)** of the **three (3)** distinct interactions that include both required aspects.

**NOTE**: The second interaction does not describe the interaction of the toad, a component of the biosphere interacts with a component of the hydrosphere. Rater describes the toad's interaction with the bank (i.e., geosphere).

Prompt 2
Josh and his friends leave the meadow and continue hiking. They hear fast-moving water before they see a stream. When they reach the stream, they see sand and pebbles tumbling along the bottom. As the water moves downstream, it carries twigs, leaves, and bits of soil. In sheltered water pools, insects hover in the air above the water. Toads are along the bank. A large fish is just under the water's surface.
Identify three interactions among the Earth's spheres that Josh and his friends observe.
For each interaction:
Identify two spheres that interact
<ul> <li>Describe the interactions of the components of the two spheres</li> </ul>
Interaction 1.
The hydrogphere is interacting with the geographere (sphere) when the pewale are tumbling down the
when the pebble are tumbling down the
6 tran witch makes sand
Interaction 2.
The bio Sphere is interacting with the hydro Sphere (sphere)
when the toad is along the bank
Interaction 3.
The hydrosthere is interacting with the bothere (sphere)
when a large fish is In the Wate

### **CASCIA Grade 5 EOU Assessment 3 Task 2: Searching for Freshwater Prompt 2 Score Point 2**

**Prompt 2 Rubric** 

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt	No aspect of the response is correct	Response includes one (1) distinct interaction between two different spheres AND The distinct interaction includes both required aspects	Response includes two (2) distinct interactions between two different spheres AND At least one (1) of the two (2) distinct interactions includes both required aspects	Response includes three (3) distinct interactions between two different spheres AND At least two (2) of the three (3) distinct interactions include both required aspects	Response includes three (3) distinct interactions between two different spheres AND Each interaction includes the following aspects:  Identification of the components related to each sphere in the interaction AND  Description of how one component interacts with the other

### Score Point 2 (2/2 aspects met)

- Response includes two (2)
   distinct interactions between
   two different spheres.
- **Two (2)** distinct interactions that include **both** required aspects.

**NOTE**: The third interaction describes an interaction between the hydrosphere and geosphere, not the biosphere.

Prompt 2	
they see a stream. When they reach	ow and continue hiking. They hear fast-moving water before the stream, they see sand and pebbles tumbling along the tream, it carries twigs, leaves, and bits of soil. In sheltered
	above the water. Toads are along the bank. A large fish is
Identify three interactions among th	he Earth's spheres that Josh and his friends observe.
For each interaction:	
Identify two spheres that interactions	ct politice riserial el 2010 (
<ul> <li>Describe the interactions of the</li> </ul>	components of the two spheres
Interaction 1.	
The Atmosplere (sphere)	is interacting with the Biosphere (sphere)
	oxide in the air feeds the grass
to help it grow.	
Interaction 2.	antamatica n. ser
The Bio solere (sphere)	is interacting with the Hydrosplete (sphere)
when the step drin	k the water out of a freshwater
Spring.	No. 2
Interaction 3.	
The Hydrosplete - (sphere)	is interacting with the Biosphere (sphere)
when the Snow affect	s plank and anierals by making the
ground wet and	cold.
9	ACT CONT. SHALL

## **CASCIA Grade 5 EOU Assessment 3 Task 2: Searching for Freshwater Prompt 2 Score Point 1**

**Prompt 2 Rubric** 

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2	No aspect of the response is correct	Response includes one (1) distinct interaction between two different spheres AND The distinct interaction includes both required aspects	Response includes two (2) distinct interactions between two different spheres AND At least one (1) of the two (2) distinct interactions includes both required aspects	Response includes three (3) distinct interactions between two different spheres AND At least two (2) of the three (3) distinct interactions include both required aspects	Response includes three (3) distinct interactions between two different spheres  AND  Each interaction includes the following aspects:  Identification of the components related to each sphere in the interaction  AND  Description of how one component interacts with the other

#### Score Point 1 (2/2 aspects met)

- Response includes at least one (1) distinct interaction between two different spheres (i.e., hydrosphere and geosphere).
- The one distinct interaction identifies and describes how the components interact with the other (i.e., "the river picks up the rocks").

Prompt 2		
they see a stream. When they re bottom. As the water moves do	eadow and continue hiking. They heach the stream, they see sand and wnstream, it carries twigs, leaves, as air above the water. Toads are also	pebbles tumbling along the nd bits of soil. In sheltered
Identify three interactions amor	ng the Earth's spheres that Josh and	his friends observe.
For each interaction:		
<ul> <li>Identify two spheres that int</li> </ul>	eract	
Describe the Interactions of	the components of the two sphere	
Interaction 1.	is interacting with the	geo sphere
(sphere)	is interacting with the	(sphere)
when the river	picks up the roc	ks.
Interaction 2. The Hydrosphere	is interacting with the	
(sphere)	is interacting with the	(sphere)
when		
Interaction 3.		
The	is interacting with the	
		(sphere)

# CASCIA Grade 5 EOU Assessment 3 Task 2: Searching for Freshwater Prompt 2 Score Point 0

**Prompt 2 Rubric** 

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2	No aspect of the response is correct	Response includes one (1) distinct interaction between two different spheres AND The distinct interaction includes both required aspects	Response includes two (2) distinct interactions between two different spheres AND At least one (1) of the two (2) distinct interactions includes both required aspects	Response includes three (3) distinct interactions between two different spheres AND At least two (2) of the three (3) distinct interactions include both required aspects	Response includes three (3) distinct interactions between two different spheres  AND  Each interaction includes the following aspects:  Identification of the components related to each sphere in the interaction  AND  Description of how one component interacts with the other

#### Score Point 0 (0/2 aspects met)

- Does **NOT** include a distinct interaction between two different spheres.
- Does **NOT** identify and describe how any component interacts with the other.

Prompt 2	
Josh and his friends leave the meadow and operative hiking. They hear they see a giggage. When they much the firmen, they see <u>sind and flish</u> bottom. As the water moves downstream, it can less fleigh, leaves, and leater pools, insects hover in the air above the water. Tooks are along to just under the water's surface.	oles turching along the http://primin shebered
Identify three interactions among the Earth's spheres that Josh and his	friends observe.
For each interaction:	
<ul> <li>Identify two spheres that interact.</li> </ul>	
Describe the interactions of the components of the two spheres	
Interaction 1.	
The fact moving worken is increasing with the Str. (sphere)	eam
when the water moves downstream	(upherv)
when the president special residents	
Interaction 2.	
The sand is interesting with the 1966 (	des
(Martin)	(suhers)
mentumbling along the bottom	
Interaction 3.	
The forcing and leaves a interacting with the 501	
wan shellord water pools, insec	(uhere)
when Their Kred was as proof , Three	At a street of the contract of
above the water, toads are all	my the book a very
fill is suit under the w	aters service