Science Grade 4 D

Grade Level Standard(s): Science 4 Life Science 2: Support an argument with evidence that in a particular habitat some organisms can survive well, while other organisms struggle or may even die.

Material(s) Provided for Science 4 D	Question(s)	Page Number
Science 4 D Pond Organisms Survival Chart	1	4
Science 4 D Attainment Task Questions for Student Use	1	5

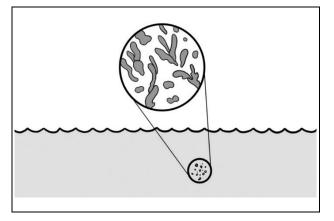
Response Code:

• Indicate the answer provided by the student.

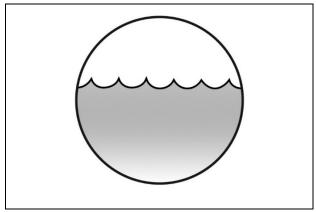
Text Coding:

- "Quotation marks" indicate the script that the teacher should read to the student.
- *Italicized text* provides further direction for the test administrator.
- Words in parenthesis () are optional; they may replace or be read in addition to the word(s) immediately preceding.

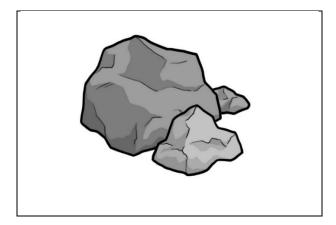
a. Algae



b. Fresh Water



c. Rocks for shelter



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Before beginning task administration, please ensure that all conditions specified in the testing protocol (starting on page 5 of the Administration Guidelines) have been met. Inform the student that the task is about to start by saying, "We are about to start the task, and I am going to ask you some questions."

All questions from this task are available for presentation to the student in the supplemental material <u>Science 4 D Attainment Task</u> Questions for Student Use.

Mrs. Smith's class is studying habitats. The school has a freshwater pond on the grounds. The students notice several organisms living in or around the pond: frogs, turtles, small fish (minnows), and crayfish."

Present the student with <u>Science 4 D Pond Organisms Survival Chart</u> and say, "Each organism has different characteristics which help it to survive in a pond habitat."

2. "According to the chart, which pond characteristic helps all organisms listed in the chart survive?"

Response Option	Response Rationale	
a. Algae	The student identified something that some organisms in the pond need to survive but not all organisms in the pond algae to survive well.	
b. Fresh water (Correct)	The student is supporting the argument that in the pond organisms can survive well by identifying the evidence that fresh water is needed by all organisms in the pond to survive.	
c. Rocks for shelter	The student identified something that some organisms in the pond need to survive but not all organisms in the pond need rocks to survive well.	
Depth of Knowledge (DOK) 3		

Science 4 D Pond Organisms Survival Chart

Things	Organisms Living in the Pond			
Needed for Survival	Frog	Turtle	Minnow	Crayfish
Food Source	insects, snails, slugs, and worms	dead animals, insects, worms, frogs fish, and water plants	algae, plant matter, insects, and larvae	plants, snails, small fish, and algae
Water Source	fresh water	fresh water	fresh water	fresh water
Shelter	vegetation and water banks	turtle shell	rocks and plants along the banks	burrows in the mud, under rocks and logs

Science 4 D Attainment Task Questions for Student Use

2. According to the chart, which pond characteristic helps <u>all</u> organisms listed in the chart survive?

Kentucky Academic Standard: Science 4 Life Science 2: Support an argument with evidence that in a particular habitat some organisms can survive well, while other organisms struggle or may even die.

Student Group	Number of Students*	Percent Correct
All students	428	49.07%
7 III Ottadomo	120	10.01 //
Gender		
Female	145	50.34%
Male	283	48.41%
Ethnicity		
African American	54	55.56%
American Indian or Alaska Native	<10	Not Reported
Asian	<10	Not Reported
Hispanic or Latino	29	37.93%
Native Hawaiian or Pacific Islander	<10	Not Reported
White (non-Hispanic)	320	48.44%
Two or More Races	20	55.00%
English Learner	27	44.44%
Economically Disadvantaged	343	48.40%

^{*}Number of students that attempted the item