

“Organisms”

Grade 1 – Summative Assessment

Assessed Understandings

Students will understand:

1. There is a wide diversity of living things on Earth that have basic needs, such as food, light, water, air, space, and shelter.
2. Organisms grow and develop, change, and die over time.
3. Each type of organism has general and specific needs (e.g., type of food, amount of water, amount of light, amount of space, and type of shelter).
4. Humans are also similar to other organisms performing similar life processes (e.g., growth and development, motion, digestion, excretion, respiration, and reproduction).

Teacher Notes for the “Organisms” Assessment

Introduction

These items are designed to provide an assessment of what students know and understand at the completion at the Science & Technology for Children (STC) “Organisms” module. This document includes teacher directions, response sheets for the individual students, and the analytic scoring rubrics for each question. A separate document contains the anchor papers for each question. **A close look at the rubrics prior to the administration of the assessment will be helpful to the teacher.**

Time and Preparation for the Assessment

This assessment should take **45 minutes** to complete. You are free to read aloud any or all portions of the assessment to your students. Without giving away a more appropriate response, please help students understand the intent of the question or task. This is not a test of reading, writing, or artistic ability. Students may be encouraged to use any and all resources available including material from classroom charts, vocabulary lists, and individual journals.

Prior to the assessment, the teacher will need the following materials:

- For the student:
 - Assessment
 - Pencil
- For each group:
 - Terrarium

Directions for Administration

Bolded print indicates the read-aloud teacher instructions to students.

Question 1: Teacher should make sure that each group has their terrarium on the table to observe. In this question, the student is asked to draw a picture of their terrarium and label two organisms in their drawing.

“We have been working with organisms, so I would like to find out how much you know and can do by yourself.” (Pass out the student assessment and a pencil.) **“We are going to begin by observing our terrariums.”** At the time of assessment, place the groups’ terrariums on their desks. Allow them a few minutes to look at the inside of their terrariums. Teacher reads the directions for Question 1. **“Please write your name on the *Name* line. Put today’s *Date* below it. Please point to number 1. Observe the terrarium on your table. Read the directions to yourself as I read them aloud. Draw a picture of what is in your terrarium. Label *two* different organisms.”**

Allow students time to make a drawing of their terrarium by Question 1.

1. Draw a picture of what is in your terrarium. Label two different organisms.

Question 2: **“Please point to number 2. Now read the directions to yourself as I read them aloud. What are *two* non-living things in your terrarium?”**

2. What are two **non-living** things in your terrarium?

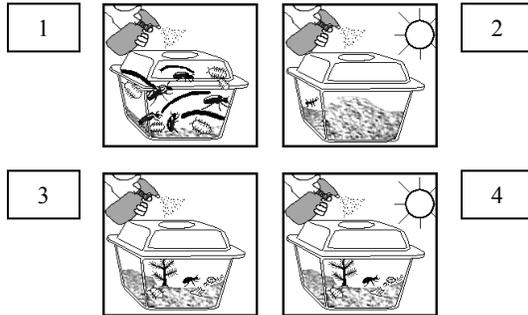
1. _____
2. _____

Question 3: **“Please point to number 3. Look at the living and non-living things in your terrarium. Now read the direction to yourself as I read it aloud. Name *one* change you have observed in the terrarium.”**

3. Name one change over time you observed in the terrarium.

Question 4: “Please point to number 4. During this investigation you have been observing your terrarium. Look at these terrarium pictures. Circle the picture that shows the best habitat for organisms.”

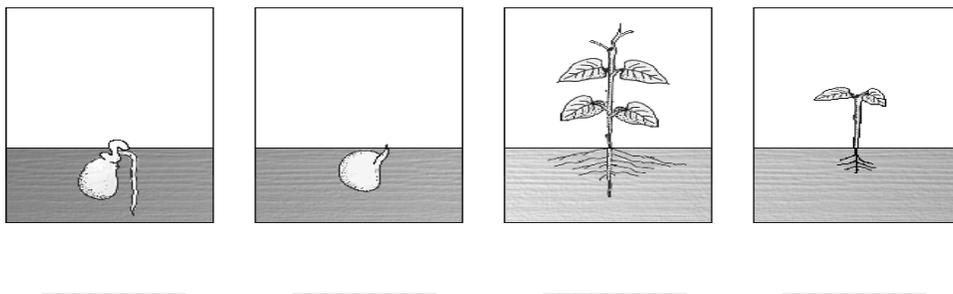
4. Look at these terrarium pictures. Circle the picture that shows the best habitat for organisms.



Please Note: Question 4 could also become an excellent formative assessment to use during the investigation. Teachers could show the students the pictures and ask them to explain WHY one terrarium would be a better habitat than the others or WHY one of the more pictures would be poor habitats.

Question 5: “Please point to number 5. Now read the directions to yourself as I read them aloud. Look at the pictures below. Show the order of how a seed grows into a plant. Write the numbers under the pictures.”

5. Look at the pictures below. Show the order of how a seed grows into a plant. Write the numbers under the pictures.



Question 6: “Please point to number 6. You are a living organism, just like other animals and plants. Write *three* ways you know you are a living organism.”

6. You are a living organism, just like other animals and plants.

Write **three** ways you know you are a living organisms.

1. _____
2. _____
3. _____

Scoring Rubrics “Organisms” Summative Assessment

Question 1: Draw a picture of what is in your terrarium. Label two different organisms.

This question measures a student’s ability to observe a terrarium and label two organisms.

Criteria for a complete response:

1. Draws a picture of the terrarium showing at least two different organisms (e.g., millipede, Bess beetle, pillbug, seedling, moss, plants) in an appropriate habitat (e.g., soils, moss, tunnels, condensation in the container, plants).
2. Labels at least two different organisms living in the terrarium.

Code	Response
	<i>Complete Response</i>
20	Meets criteria.
29	Any other completely correct response.
	<i>Partially Correct Response</i>
10	Meets criterion one but not two.
11	Draws and labels only one organism.
19	Any other partially correct response.
	<i>Incorrect Response</i>
70	Omits living organism.
76	Repeats the substance or stem of the question.
79	Any other incorrect response.
	<i>Non-Response</i>
90	Crossed out, erased, illegible, or impossible to interpret.
99	Blank.

Question 2: What are two non-living things in your terrarium?

This question measures a student’s ability to identify non-living things found in a terrarium habitat.

Criterion for a complete response:

- 1. Identifies two non-living things in the terrarium (e.g., soil, sunlight, air, water).

Code	Response
	<i>Complete Response</i>
20	Meets criterion above.
29	Lists a non-living thing that was placed into the terrarium (e.g., paperclip, pencil).
	<i>Partially Correct Response</i>
10	Lists one non-living thing.
19	Any other partially correct response.
	<i>Incorrect Response</i>
70	Lists living thing(s) in response.
71	Combines living and non-living in their response.
76	Repeats the substance or stem of the question.
79	Any other incorrect response.
	<i>Non-Response</i>
90	Crossed out, erased, illegible, or impossible to interpret.
99	Blank.

Question 3: Name one change over time you observed in your terrarium.

This question measures a student’s ability to observe changes in a terrarium over time.

Criterion for a complete response:

- 1. Writes one change observed in the terrarium over time (e.g., millipede or Bess beetle has grown or died; the seedling is greener, bigger, has sprouts, is dead, or brown; the moss is dead or has spores; tunnels are made by the millipede; condensation is on the container; or plants are chewed by the insects).

Code	Response
	<i>Complete Response</i>
10	Meets criterion.
19	Any other completely correct response.
	<i>Incorrect Response</i>
70	Lists steps in building the terrarium.
76	Repeats the substance or stem of the question.
79	Any other incorrect response.
	<i>Non-Response</i>
90	Crossed out, erased, illegible, or impossible to interpret.
99	Blank.

Question 4: Look at these terrarium pictures. Circle the picture that shows the best habitat for organisms.

This question measures a student’s ability to identify the basic needs of organisms in a terrarium habitat.

Criterion for a complete response:

1. Circles picture number 4.

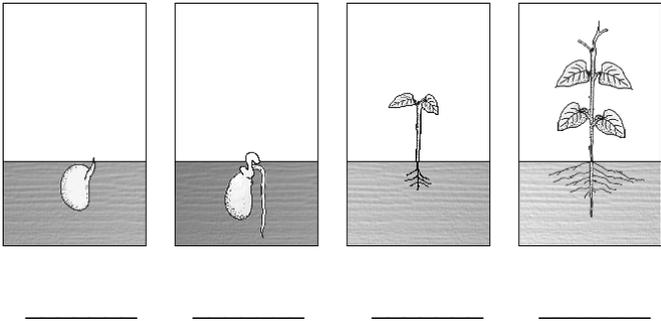
Code	Response
	<i>Complete Response</i>
10	Meets criterion.
	<i>Incorrect Response</i>
70	Incorrect response.
	<i>Non-Response</i>
99	Blank.

Question 5: Look at the pictures below. Show the order of how a seed grows into a plant. Write numbers under the pictures.

This question measures a student’s ability to sequence pictures of growth and development in an organism (plant) over time.

Criterion for a complete response:

1. Sequences all four pictures in the correct order.



Code	Response
	<i>Complete Response</i>
10	Meets criterion.
	<i>Incorrect Response</i>
70	Incorrect response.
	<i>Non-Response</i>
90	Crossed out, erased, illegible, or impossible to interpret.
99	Blank.

Question 6: You are a living organism, just like other animals and plants. Write three ways you know you are a living organism.

This question measures a student’s understanding of all organism’s basic needs for life.

Criterion for a complete response:

1. List three ways we know organisms are living (e.g., needs food; can move; produces waste; can reproduce; can grow, change, and develop; interacts with surroundings; has a life span from beginning to end; air, space, food, light, water, rest, sleep, and/or shelter).

Code	Response
	<i>Complete Response</i>
30	Meets criterion.
39	Any other completely correct response.
	<i>Partially Correct Response</i>
20	Lists two ways organisms live.
29	Any other partially correct response.
	<i>Minimally Correct Response</i>
10	Lists one way organisms live.
19	Any other minimally correct response.
	<i>Incorrect Response</i>
70	Lists organisms needs only, e.g., water, sun, air.
79	Any other incorrect response.
	<i>Non-Response</i>
90	Crossed out, erased, illegible, or impossible to interpret.
99	Blank.