

What 3-Dimensional Learning is this Task Intending to Measure?

Learning Performance: Students develop or revise a model to show similarities in the life cycles of different plants and animals, using patterns they have identified.

We measure this Learning Performance by gathering evidence of student proficiency on the following:

- **Integrated Proficiency 1:** Ability to revise a model showing similarities in life cycles of different plants and animals that includes the key elements based on patterns that they see.
- **Integrated Proficiency 2:** Ability to use patterns to explain similarities in life cycles of different plants and animals with a model that specifies key relationships among model elements.

Blue = Science & Engineering Practices | Orange = Disciplinary Core Ideas | Green = Crosscutting Concepts

How to Navigate this Document?

1. This document provides information at the Integrated Proficiency Level since we are gathering evidence of student learning at this level.
2. For each **Integrated Proficiency**, the information is presented in two parts:
 - a. **Part 1: Evaluation of Student Responses.** Here you will use the listed criteria to determine if a student response meets or does not meet the listed criteria..
 - i. The 'Tally' column can be used to document how many students in your class have a criteria 'Present' or 'Absent' in their responses.
 - ii. The 'Group Consensus' column can be used to determine where your class is as a whole with respect to meeting a given criteria.
 - iii. Simply total the number of 'present' criteria from the Group Consensus column to get at the total criteria met for a given Integrated Proficiency.
 - b. **Part 2: Determination of Student Proficiency.** Here you will use the sum of the criteria met (# of 'Present' responses) to determine the level of proficiency, which includes areas of success and the areas of support.
3. For a complete understanding of student learning on the Learning Performance, student responses should be evaluated for all the Integrated Proficiencies listed above.

EVALUATION OF STUDENT RESPONSES

Integrated Proficiency 1 is the ability to revise a model showing similarities in life cycles of different plants and animals that includes the key elements based on patterns that they see.				Integrated Proficiency 2 is the ability to use patterns to explain similarities in life cycles of different plants and animals with a model that specifies key relationships among model elements.			
Criteria #	Criteria	Tally	Group Consensus (Circle)	Criteria #	Criteria	Tally	Group Consensus (Circle)
1	Includes all pictures of organisms at similar life cycle stages in three groups.[from Question 1] <i>Example:</i> - Group 1: butterfly eggs, plant seeds, bird eggs - Group 2: caterpillar, young plant, baby birds - Group 3: butterfly, adult plant, bird	Present	Present	3	Explains how the pictures were sorted in the three groups. [from Question 2] <i>Examples:</i> - I put all young in Group 1, all adults in Group 2, and all eggs in Group 3. - I put all young in Group 1, all grown ups in Group 3 and the remaining in Group 2.	Present	Present
		Absent	Absent			Absent	Absent
2	Labels for life cycle stages on each of the three arrows.[from Question1] <i>Example:</i> - Arrow A: Reproduction(connecting adult organisms to eggs/seeds) - Arrow B: Birth (connecting eggs/seeds to young) - Arrow C:Growth (connecting young to adult)	Present	Present	4	Explains how the arrows were labeled for stages of the life cycle [from Question 2] <i>Example:</i> - I put ‘reproduction’ on Arrow A because the adults give birth. - I labeled Arrow B as ‘birth’ because it shows that the plants and animals are born and growing up. - I labeled Arrow C as ‘growth’ because it shows young plants and animals becoming adults.	Present	Present
		Absent	Absent			Absent	Absent
Total ‘Present’ for Integrated Proficiency 1: (use group consensus column)				5	Explains how the model shows the similarities in the life cycles of sunflowers, plants, and birds. [from Question 3] <i>Examples:</i> - My model shows that birds, butterflies, and plants all are born and all grow and all have babies.	Present	Present
						Absent	Absent
Total ‘Present’ for Integrated Proficiency 1: (use group consensus column)				Total ‘Present’ for Integrated Proficiency 2: (use group consensus column)			

DETERMINATION OF PROFICIENCY

Integrated Proficiency 1				Integrated Proficiency 2				
Level:	Beginning	Developing	Proficient	Level:	Beginning	Developing		Proficient
# of criteria present:	0	1	2	# of criteria present:	0	1	2	3
Demonstrated Success	N/A	Has successfully described model components (i.e., sorting pictures) OR relationships between components (i.e. labeling arrows)	Has successfully described model components (i.e., sorting pictures) AND relationships between components (i.e. labeling arrows).	Demonstrated Success	N/A	Has successfully explained ONE of the following: 1. How model components were chosen 2. How arrows were labeled 3. How the model shows similarities in the life cycle.	Has successfully explained TWO of the following: 1. How model components were chosen 2. How arrows were labeled 3. How the model shows similarities in the life cycle	Has successfully explained how the model was developed by describing how the model elements were chosen to show the similarities in the life cycles of different organisms.
Area of Support	Needs support in revising a model that includes model components and relationships between components to show how different organisms have similar life cycles.	Needs support in including all key elements of the model such as, model components(i.e., sorting pictures) or relationships between components (i.e. labeling arrows) to show how different organisms have similar life cycles.	N/A	Area of Support	Needs support in explaining how the model shows the similarities in the life cycle of different organisms by describing all three: (1) how the model components (i.e., pictures) and (2) model relationships (i.e., labels) were chosen and (3) how these model elements together demonstrate the similarities in the life cycle of different organisms.			N/A