

Unit | Handout |
2 | X |

SDRO Life Cycle Project

Purpose: Create a 3-5 minute video that explains the life cycle of our organisms in the context of the characteristics of life.

Guiding Questions: See requirement 1 below.

Project due date: Friday, December 11th at 11:59pm in Schoology. The assignment will lock out and you will not be able to submit past this time.

Work time: You will receive plenty of time in class to work on this project. We will work on the project and be conducting lessons throughout the two week period.

Project 1 vs. Project 2

If you have selected project 1, you only need to complete the following requirements for **one** organisms: either the Fast Plant or the cabbage white butterfly.

If you have selected project 2, you need to complete the following requirements for **both** the Fast Plant and the cabbage white butterfly. You will create a video that compares and contrasts the two organisms.

Requirements

1. Your video will need to address all of the following questions:
 - 1.1. How have the organisms grown and developed over time?
 - 1.2. How have the organisms obtained and used energy?
 - 1.3. How have the organisms reproduced, therefore continuing the life cycle to the next generation?
2. Your responses to these questions will be supported with evidence. Evidence includes citations from our resources (e.g. our textbook, our inquiries, and credible third party sources) and data from our investigations. Citations must be appropriately cited and all credit must be given to the author(s). Your data from your investigations will be either quantitative or qualitative.
 - 2.1. Quantitative Data: This is numerical data that you have collected on the organisms over time. When presenting this evidence, however, you will need to use tables, graphs, and/or charts. Present the data in an easy to view format that you can verbally explain in your video.
 - 2.2. Qualitative Data: This is non-numerical descriptive data. This includes pictures, videos, drawings, or rich text that describes the organisms and helps you answer the questions above.
3. Your responses go beyond a superficial level of understanding (i.e. if you say plants get their energy from photosynthesis, you're not wrong, but you're also missing a lot of detail in that answer).

4. Your responses include vocabulary from the lessons. A list of possible vocabulary terms is found in the next section.
5. Your video was created on your iPad and is between 3-5 minutes.
6. Your video is not simply a slideshow of text that is read to the viewer. You will be reading from a script.
7. Your video is clearly organized, flows well, and creates a factual presentation that responds to the questions on the previous page.
8. Information follows the mechanics of writing (i.e. appropriate grammar, spelling, and punctuation).
9. The project video and the script are submitted by one team member only. The script is provided in case there are any issues with the video.

Vocabulary

Below is vocabulary that may appear in your project. You do not need to use all of these terms.

Fast Plant	Cabbage White Butterfly
Cotyledon	Abdomen
Dicot	Adult
Embryo	Antennae
Endosperm	Chrysalis
Flower	Egg
Leaf	Exoskeleton
Monocot	Eye
Pistil	Frass
Pod (ovary)	Head
Roots	Instar
Seed (ovule)	Larva (plural: larvae)
Stamen	Leg
Stem	Metamorphosis
Vascular bundles (tissue)	Proboscis
	Pupa (plural: pupae)
	Silk
	Thorax
	Wing
Other Vocabulary	
Adaptation	Heterotroph
Anaphase	Interphase
Autotroph	Mitosis
Cell cycle	Photosynthesis
Cytokinesis	Sexual Reproduction

Grading

You will be graded in two general areas.

Area 1 of Grading

You will receive up to 5 points (project 1) or 10 points (project 2) based on your response to each question. Your response will be graded on:

- How thoroughly you supported your answer with specific citations and data/evidence.
- How evident your understanding of the topic is.
- The appropriate use of vocabulary.

Area 2 of Grading

You will receive up to 5 points (for either project 1 or 2) on your skills and mechanics.

Your responses will be graded on:

- Appropriate photos/videos
- Use of your own photos/videos or those from the class gallery. No photos/videos may be obtained from the internet.
- The organization of your video, it's flow, easy to follow, and is between 3-5 minutes.
- Video is mostly narrated.
- The video is not a wall of text that is read. Images, video, and text presented visually show what is being described or explained.
- Minimal errors in writing/Verbal spelling, grammar, punctuation, and language.

Total points on Project 1: 20

Total points on Project 2: 35

Frequently Asked Questions

1. Is there a specific app we need to use?

No. However most students have used Explain Everything.

2. Can we used pictures from outside of our class?

No. All pictures and videos must be yours, your partner's, or from the class gallery available on 7bscience.com. You may use pictures from the textbook. You will need to provide a citation for all images and videos. This is as simple as stating "This image/video by _____" and insert the name or source in the blank.

3. Do we need a bibliography?

Yes, you need to provide a bibliography for any resources that you have used.

4. We made a story board. Do we need to submit that?

No.

5. When is this due?

This is due by 11:59pm on Friday, December 11th.