



# LESSON PLAN

## LIFE CYCLES GRADES 3-5

### SUMMARY

All plants and animals are born, grow, change, reproduce, and die over time. Together all these stages form a life cycle. In this lesson students study the life cycles of several different plants and animals.

### DURATION

One to two 45-minute classroom periods

### PRE-ASSESSMENT QUESTIONS

Please see Discussion Questions located under the video. These can be discussed as a group or answered individually in student science notebooks.



### ENGAGE



### WATCH THE *GENERATION GENIUS LIFE CYCLES* VIDEO AS A GROUP

Then facilitate a conversation using the Discussion Questions.

### MATERIALS

- Life Cycle Diagrams (attached)
- Science notebooks & pencils
- Markers or colored pencils (optional)
- Internet or library for research (optional)

#### DIY Activity

- A ripe avocado
- Cutting board & Knife (Adult help)
- Bowl of water
- Clear plastic cup
- Toothpicks
- Water
- Flower pot
- Soil



## EXPLORE

Divide students into small groups of up to four. Give each group a set of copies of all the different life cycles explored in the video (chicken, butterfly, frog, plant, and avocado).

Students will explore the question: how are animal and plant life cycles similar? How are they different? In their science notebooks, students should create a page called “Animal and Plant Life Cycles.” On that page they should create a “T” chart. They should label on side “similarities” and the other “differences.” Students should now work together in their groups to list as many similarities and differences between the different animal and plant life cycles as possible.

For example:

Similarities	Differences
<i>The life cycles of butterflies, frogs and chickens all start out as eggs.</i>	<i>The life cycles of plants do not start out as eggs, they start out as seeds.</i>
<i>Both plants start out as seeds.</i>	
<i>Frogs and butterflies look very different from their young stage to their adult stage.</i>	<i>Chickens change somewhat, but always look like birds from their young stage to their adult stage.</i>
<i>All these living things go through different stages of life.</i>	



## EXPLAIN

Gather all the students back together. Facilitate a discussion about life cycles with student input. Work towards the understanding that:

- The life cycles of all plants and animals include the stages of birth, growth, reproduction, and death.
- Some plant and animal life cycles are shorter or longer than others.
- Some plant and animal life cycles include dramatic changes (metamorphosis).
- Understanding life cycles can help us predict patterns in the lives of animals and plants.



## ELABORATE

Using their knowledge of life cycles, students can create life cycle models (diagrams) for other animals from the video (gorillas, penguins, dogs), or they may research an animal or flowering plant of their choosing and create a life cycle diagram based on what they learn.





## EVALUATE

Evaluate student understanding by assessing the life cycle diagrams they create during the Elaborate portion of the activity.



## EXTENSIONS

As a class or individually, grow avocado plants using the DIY Activity.