

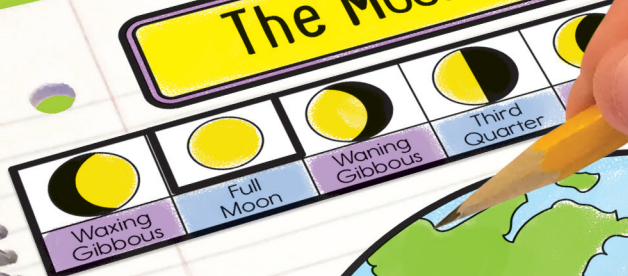
Interactive Notebooks

Grade
3

SCIENCE



The Moon and Earth



The number of days it takes the Moon to orbit Earth is about 28 days.

- Ideal for organizing information and applying learning
- Perfect for addressing the needs of individual learners
- Includes step-by-step instructions for each page
- Great for introducing new science topics

Plant Parts

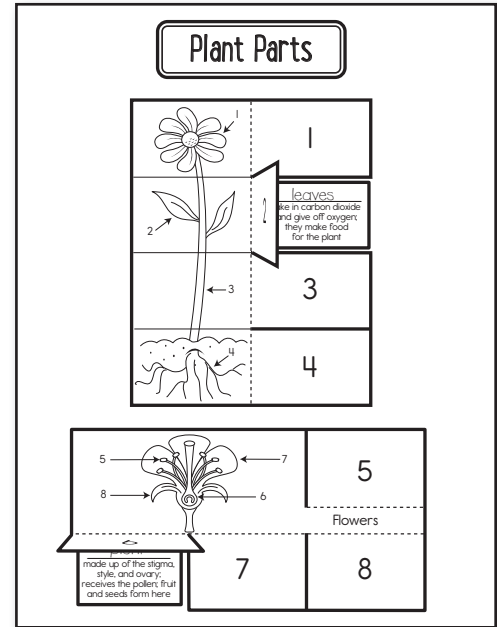
Introduction

Have students name the parts of a plant (flower, leaves, stem, roots, stamen, pistil, petals, and sepals). Write them on the board. Have a student describe a plant part without naming it and have the rest of the class guess which plant part the student is describing.

Creating the Notebook Page

Guide students through the following steps to complete the right-hand page in their notebooks.

1. Add a Table of Contents entry for the Plant Parts pages.
2. Cut out the title and glue it to the top of the page.
3. Cut out the tall flower flap book. Cut on the solid lines to create four flaps. Apply glue to the back of the left section and attach it below the title.
4. Cut out the *Flowers* flap book. Cut on the solid lines to create four flaps. Apply glue to the back of the flower section and right center section. Attach the flap book to the bottom of the page.
5. Cut out the definition pieces. Read each definition and decide which plant part it describes. Fill in the blank with the name of the correct plant part.
6. Glue each definition under the flap that corresponds to the correct plant part.

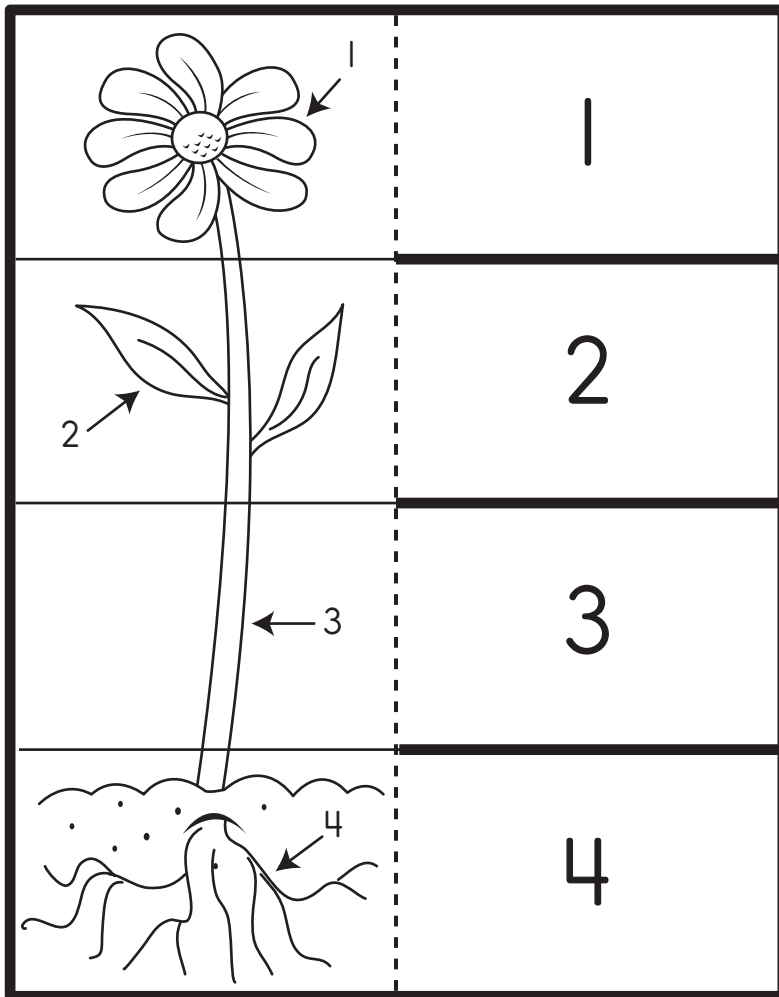


Reflect on Learning

To complete the left-hand page, have students use words from the right-hand page to write a paragraph summarizing how the parts of a plant help it grow.

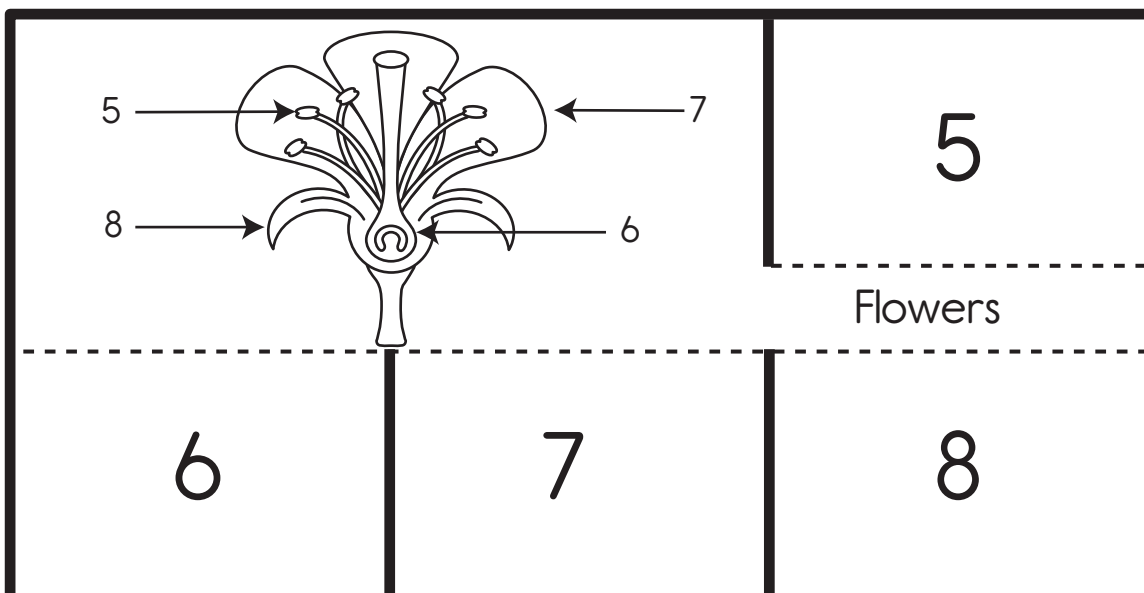
Answer Key

1. flower: where pollination takes place; creates seeds; 2. leaves: take in carbon dioxide and give off oxygen; they make food for the plant; 3. stem: gives a plant support; allows water and nutrients to get to other plant parts; 4. roots: absorb water and nutrients from the soil and draw them up to the rest of the plant; 5. stamen: made up of the anther and filament; produces pollen; 6. pistil: made up of the stigma, style, and ovary; receives the pollen; fruit and seeds form here; 7. petals: help attract pollinators; 8. sepals: protect the flower before it opens



give a plant support; allows water and nutrients to get to other plant parts	take in carbon dioxide and give off oxygen; they make food for the plant
helps attract pollinators	made up of the anther and filament; produces pollen
absorb water and nutrients from the soil and draw them up to the rest of the plant	made up of the stigma, style, and ovary; receives the pollen; fruit and seeds form here

where pollination takes place; creates seeds	protect the flower before it opens
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Plant Parts

Plant Adaptations

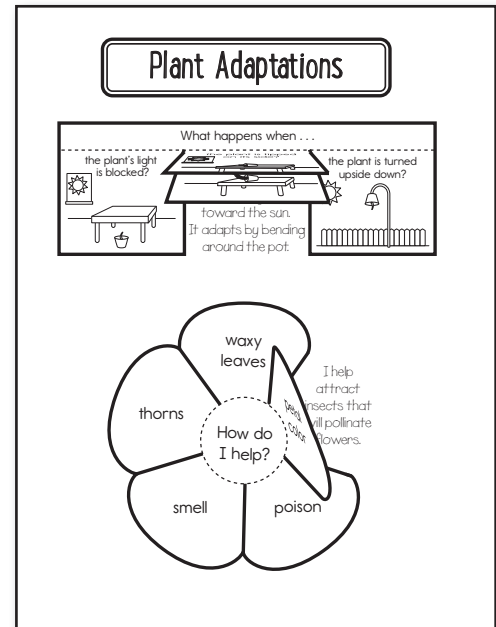
Introduction

Distribute self-stick notes. Have each student write a plant adaptation on a self-stick note. Then, give a scenario such as “There is a drought” or “a plant wants to be pollinated.” Have students who have adaptations that help with this hold up their notes.

Creating the Notebook Page

Guide students through the following steps to complete the right-hand page in their notebooks.

1. Add a Table of Contents entry for the Plant Adaptations pages.
2. Cut out the title and glue it to the top of the page.
3. Cut out the *What happens when . . .* flap book and the three scenes flap book. Cut on the solid lines to create three flaps on each. Apply glue to the gray glue section and place the *What happens when . . .* flap book on top to create a stacked six flap book. Apply glue to the back of the top section and attach the stacked flap book below the title.
4. Read the scenario on each flap. Under the flap, complete the scene by drawing the plant and how it would grow in order to adapt to the situation. Under the scenes flaps, write what happened and tell why.
5. Cut out the flower flap book. Cut on the solid lines to create five flaps. Apply glue to the back of the center section and attach it to the bottom of the page.
6. Under each flap, tell how the adaptation helps the plant.



Reflect on Learning

To complete the left-hand page, have students tell what adaptations different seeds have.

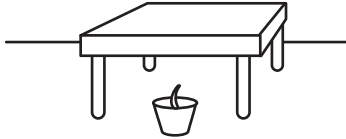
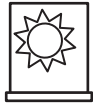
Answer Key

First frame: plant should bend around table toward sun; Second frame: plant should grow upward toward sun; Third frame: flowered end of plant should grow upward toward sun, while the roots should grow downward

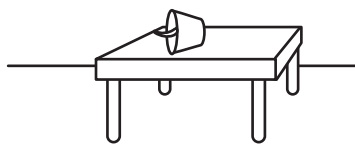
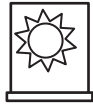
Plant Adaptations

What happens when . . .

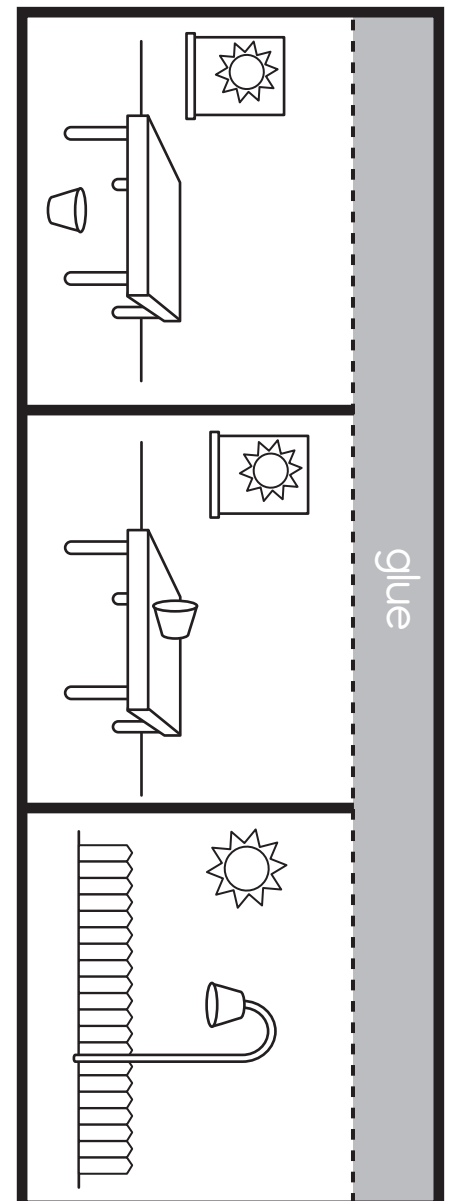
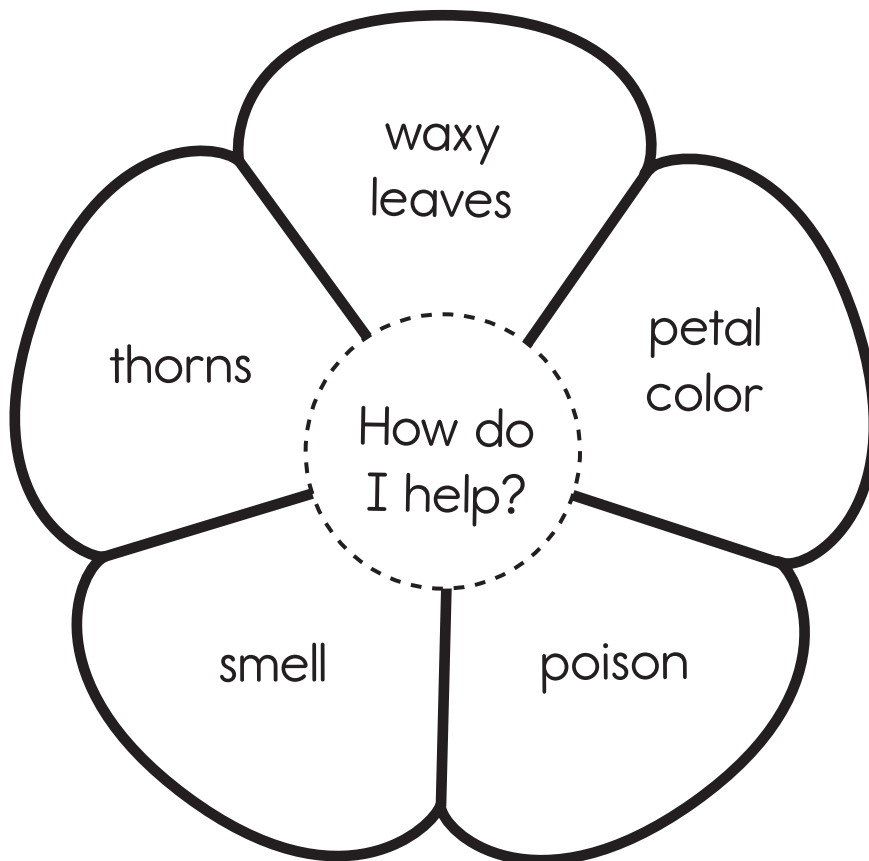
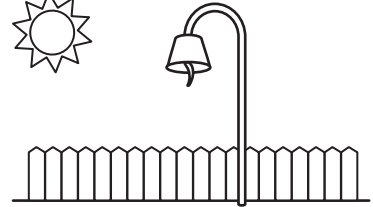
the plant's light
is blocked?



the plant is tipped
on its side?



the plant is turned
upside down?



Animal Classification

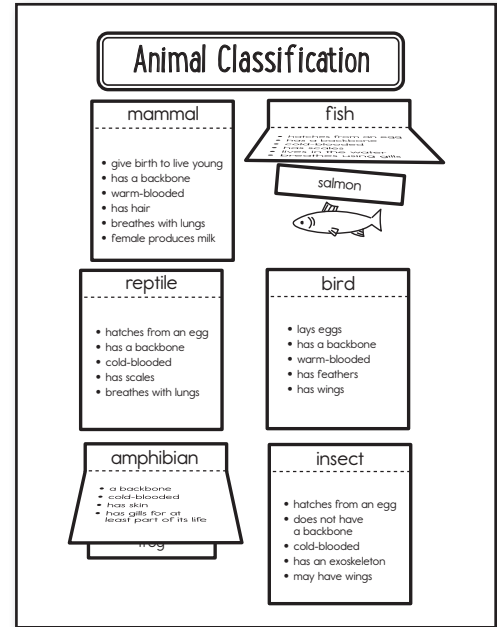
Introduction

Distribute self-stick notes so that each student gets two. Have students write the name of a kind of animal on each self-stick note. Have students work in small groups to sort their animals. Allow groups to discuss their sorting methods. Tell students that animals can be divided into groups based on characteristics. Discuss what characteristics are used to classify animals.

Creating the Notebook Page

Guide students through the following steps to complete the right-hand page in their notebooks.

1. Add a Table of Contents entry for the Animal Classification pages.
2. Cut out the title and glue it to the top of the page.
3. Cut out the six flaps. Apply glue to the back of the top sections and attach them to the page.
4. Cut out the six animal names.
5. Using the descriptions, decide which group each animal belongs to. Glue it under the correct flap, leaving room for drawing or writing.
6. Under each flap, write or draw a picture of the animal group that is being described: fish, mammal, reptile, amphibian, bird, or insect. (Note: There are exceptions to some characteristics for certain species. For example, although snakes are reptiles, some give birth to live young.)



Reflect on Learning

To complete the left-hand page, draw a three-circle Venn diagram on the board. Have students copy the diagram and use it to compare and contrast three animal groups.

Answer Key

amphibian: frog; bird: chicken; insect: dragonfly; mammal: human; fish: salmon; reptile: turtle

Animal Classification

amphibian	bird	insect
<ul style="list-style-type: none"> • a backbone • cold-blooded • has skin • has gills for at least part of its life 	<ul style="list-style-type: none"> • lays eggs • has a backbone • warm-blooded • has feathers • has wings 	<ul style="list-style-type: none"> • hatches from an egg • does not have a backbone • cold-blooded • has an exoskeleton • may have wings

mammal	fish	reptile
<ul style="list-style-type: none"> • give birth to live young • has a backbone • warm-blooded • has hair • breathes with lungs • female produces milk 	<ul style="list-style-type: none"> • hatches from an egg • has a backbone • cold-blooded • has scales • lives in the water • breathes using gills 	<ul style="list-style-type: none"> • hatches from an egg • has a backbone • cold-blooded • has scales • breathes with lungs

chicken	dragonfly
human	salmon
frog	turtle

Animal Adaptations

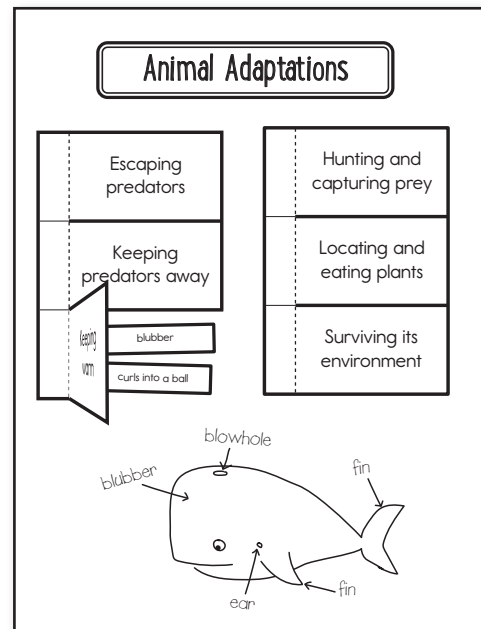
Introduction

Have students get into groups of about four and choose an animal. Have them think about and discuss the adaptations that animal has for finding food, escaping predators, and keeping warm. Students can then share with the rest of the class what they discussed about their animals' adaptations.

Creating the Notebook Page

Guide students through the following steps to complete the right-hand page in their notebooks.

1. Add a Table of Contents entry for the Animal Adaptations pages.
2. Cut out the title and glue it to the top of the page.
3. Cut out the two flap books. Cut on the solid lines to create three flaps on each. Apply glue to the back of the left section of the flap books and attach them side by side below the title.
4. Cut out the 18 adaptation pieces.
5. Read the six flaps. Decide how each adaptation might help an animal fulfill its needs. Glue each adaptation under the correct flap. Some adaptations may help in more than one way. You may write the adaptations under any other flaps they help with.
6. Write any other adaptations you think of so that each flap has at least five adaptations.
7. Draw a picture of an animal at the bottom of the page below the flap books. Label each of its adaptations.



Reflect on Learning

To complete the left-hand page, have students create a T-chart listing human adaptations and what they are useful for.

Answer Key

Answers will vary but may include: Escaping predators: quick, fins; Keeping predators away: spines/spikes; Keeping warm: curls into a ball, blubber; Hunting and capturing prey: quick, poison, sharp teeth; Locating and eating plants: good sense of smell, teeth for grinding food, can see ultraviolet light; Surviving its environment: sees in the dark, echolocation, fins, digs underground, thick skin, no spine, blubber

Animal Adaptations

quick	digs underground	poison
large ears	sharp teeth	hooves
curls into a ball	good sense of smell	spines/spikes
teeth for grinding food	stinger	can see ultraviolet light
sees in the dark	thick skin	echolocation
no spine	fins	blubber

Escaping
predators

Keeping
predators away

Keeping
warm

Hunting and
capturing prey

Locating and
eating plants

Surviving its
environment

Life Cycles

Each student will need a brass paper fastener to complete this page.

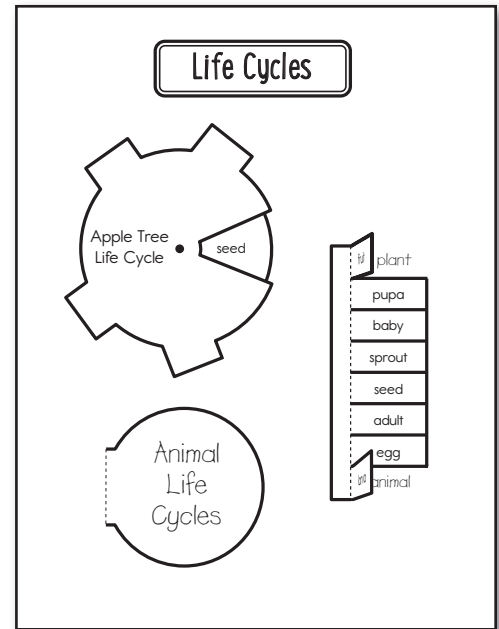
Introduction

Have a student tell about the life cycle of a dog (baby, pup, adult). Ask if all animal life cycles are the same. Have students give examples of any that are different from the dog's life cycle. Ask how a plant's life cycle is different from animals' life cycles.

Creating the Notebook Page

Guide students through the following steps to complete the right-hand page in their notebooks.

1. Add a Table of Contents entry for the Life Cycles pages.
2. Cut out the title and glue it to the top of the page.
3. Cut out the circle with six words. These are the stages of an apple tree's life cycle.
4. Cut out the *Apple Tree Life Cycle* piece. Push a brass paper fastener into the center of the *Apple Tree Life Cycle* piece and into the center of the circle with six words. It may be helpful to create the holes in each piece first. Apply glue to the back of the top piece's tabs and attach it below and to the left of the title. The brass paper fastener should not go through the page, and the piece underneath should spin freely.
5. Discuss the stages. If desired, draw a picture for each apple tree life cycle stage on the page.
6. Cut out the double circle book. Fold on the dashed lines to close the book. Apply glue to the back of the *Chicken Life Cycle* section and attach it to the bottom left of the page.
7. Write *Animal Life Cycles* on the front of the book. Label the stages of the *Chicken Life Cycle*.
8. Cut out the flap book. Cut on the solid lines to create eight flaps. Apply glue to the back of the left section and attach it to the right side of the page.
9. Under each flap, write whether the word relates to a plant or an animal's life cycle.



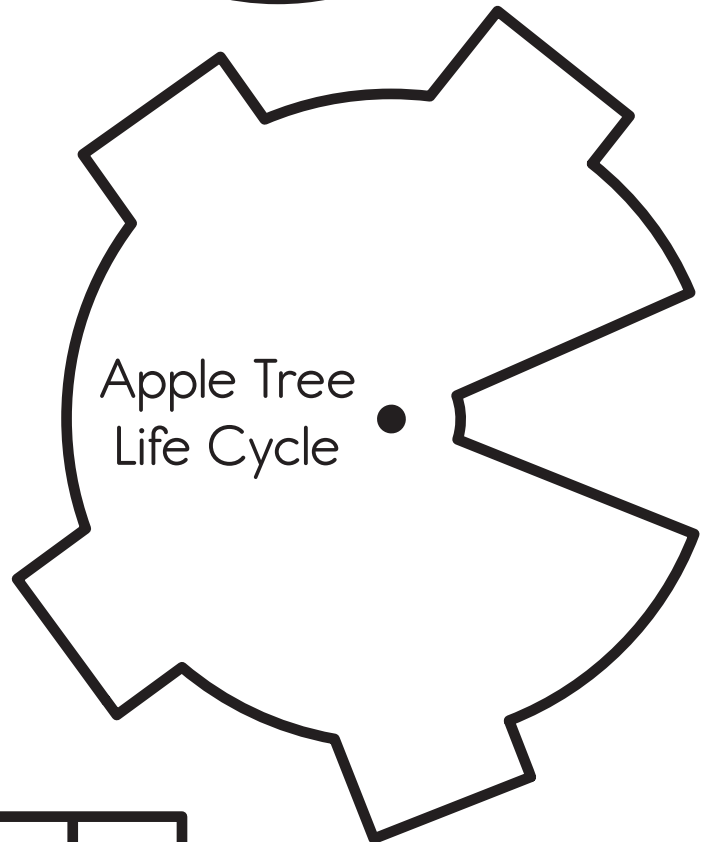
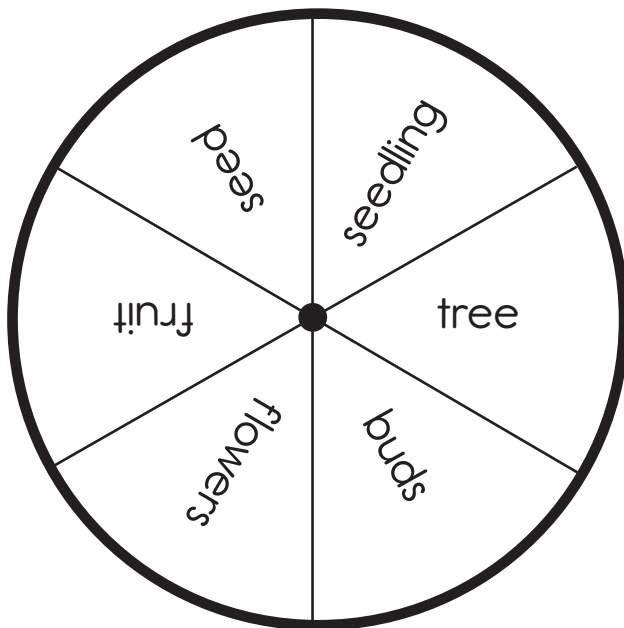
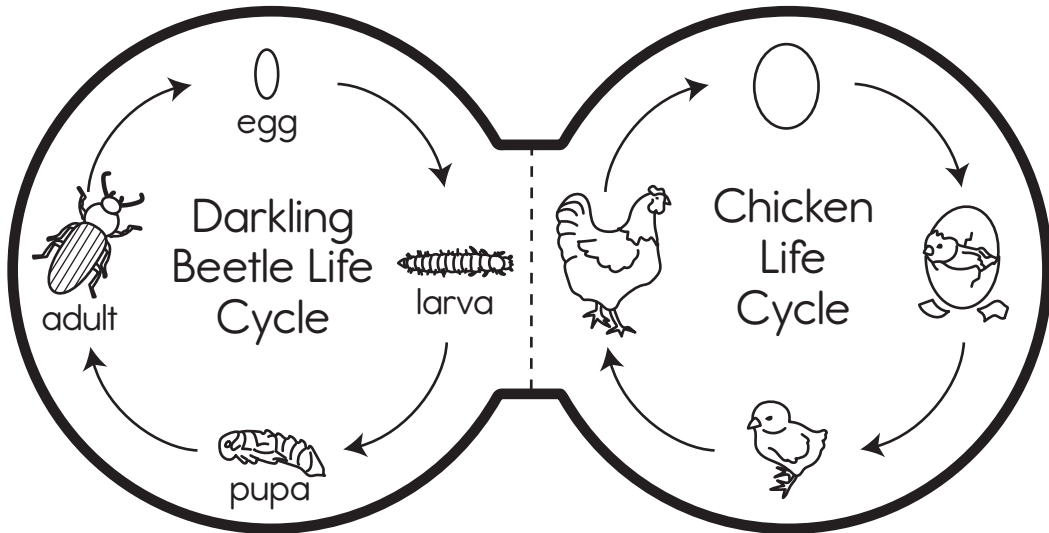
Reflect on Learning

To complete the left-hand page, have students answer the following questions: What is similar about the beetle and the chicken life cycles? What is similar about the chicken and the apple tree life cycles?

Answer Key

Chicken Life Cycle: egg, chick, adult (chicken); fruit: plant; pupa: animal; baby: animal; sprout: plant; seed: plant; adult: animal; egg: animal; larva: animal

Life Cycles



fruit	pupa	baby	sprout	seed	adult	egg	larva
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