



Essential Question

What Are Some Animal Life Cycles?



Engage Your Brain

Find the answer to the riddle in this lesson.

When is a frog not like a frog?

When it is a

_____.



Active Reading

Lesson Vocabulary

- 1 Preview the lesson.
- 2 Write the 6 vocabulary terms here.

_____	_____
_____	_____
_____	_____

Animal Start-Ups

A dog can have puppies. A cat can have kittens. Adult animals can **reproduce**, or have young. Animals such as puppies and kittens look like their parents. How does a kitten look like an adult cat?

Other young animals look very different from their parents. They go through changes and become like their parents.



A young butterfly does not look like its parents.



A young cat looks like its parents.



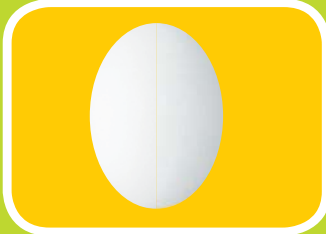








▶ **Name another animal that looks like its parents.**

What's in the Egg?

Many animals begin life by hatching from an egg. Animals change as they grow. The changes that happen to an animal during its life make up its **life cycle**.

▶ How are the animals in this chart alike?

Animal Life Cycles

Kind of Animal	Egg	Young	Adult
Chicken			
Turtle			
Rainbow Trout			

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1



Egg

A frog begins life inside a tiny egg.

2



Young Tadpole

A **tadpole** hatches from the egg. It lives in water. It takes in oxygen with gills.

Hatch, Swim, Hop

Did you know that a frog begins life inside a tiny egg? The young frog goes through changes to become an adult. These changes are called **metamorphosis**.

Active Reading

Circle the name of the body parts that a tadpole uses to take in oxygen. Underline the name of the body parts that an adult frog uses to take in oxygen.

3



Growing Tadpole

The tadpole gets bigger. It grows four legs. Later, it loses its tail.

4



Frog

The adult can live on land or in the water. It hops. It breathes with lungs.

Polar Parenting

It is late October. A female polar bear gets a shelter ready for her cubs. She digs a den in the snow. The den will keep her young warm and safe. She gives birth in winter.

▶ How is a polar bear's life cycle different from a frog's life cycle?

1



Newborn

A polar bear cub is born inside the den. It drinks milk from its mother's body.

2



Growing Cub

The cub begins to explore outside the den.



We'll stay with our mother for almost three years, until we're grown up.

3



Young Polar Bear

The young polar bear learns to swim and hunt.

4



Adult Polar Bear

The adult polar bear can live on its own. It can have its own young.

The Mighty Monarch

A monarch butterfly has a life cycle, too. An adult female butterfly lays a tiny egg. The egg is so small it is hard to see. This picture shows a close-up of an egg on a leaf.

1 egg



► Why do you think a butterfly egg is so small?

2**larva**

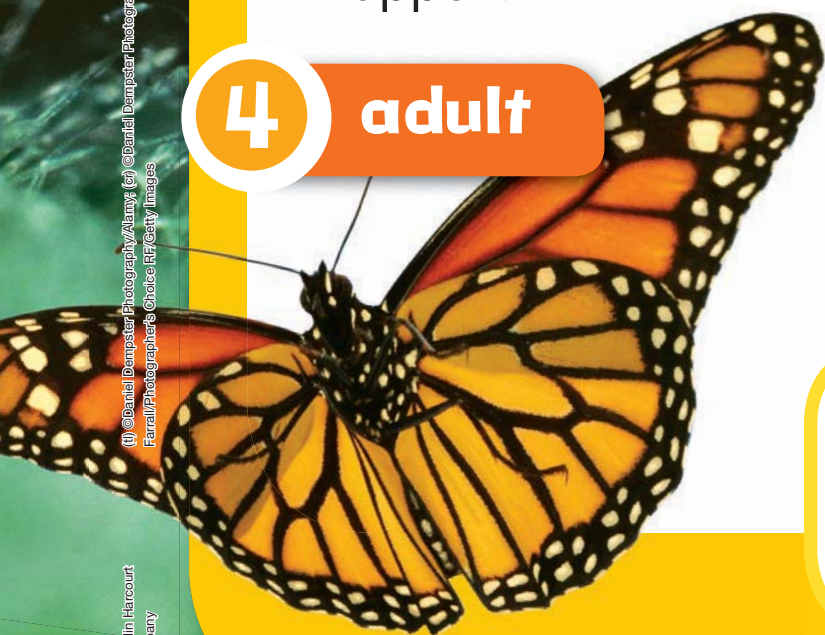
A tiny **larva**, or caterpillar, hatches from the egg. A caterpillar is a young butterfly. The larva eats a lot and grows quickly.

Then the larva stops eating and moving. The larva becomes a pupa. It makes a hard covering.

A **pupa** goes through metamorphosis inside the covering. It grows wings. Many other changes also happen.

3**pupa**

Finally, an adult butterfly comes out of the covering. It can have its own young.

4**adult**

Active Reading

Clue words can help you find the order of events. Draw a box around the clue words **then** and **finally**.

Sum It Up >>

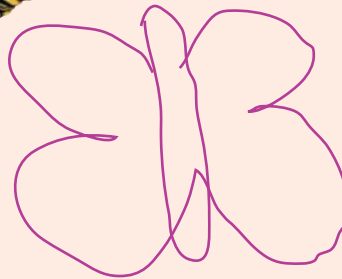
1 Mark It!

Draw an X on the animal that does not look like its young.



2 Draw It!

Draw a picture of this animal's mother.



3 Solve It!

Answer the riddle.

I am little now.
I will change and grow.
Someday I will be
an adult cat.

What am I?

4 Think About It!

Is a  most like

a  , a  , or

a  ? Why?

(t) ©Scott Bell/Alamy; (c) ©Getty Images/PhotoDisc; (c) ©Thomas & Pat Leeson/Photo Researchers, Inc.

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Name _____

Vocabulary Review

Use these words to complete the puzzle.

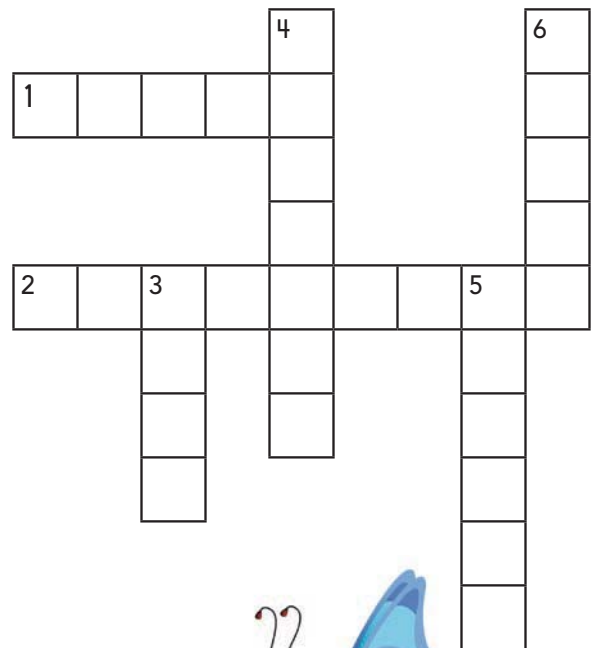
tadpole change pupa larva reproduce cycle

Across

- 1 The stage in a butterfly's life cycle after the egg
- 2 To make more living things of the same kind

Down

- 3 The stage in a butterfly's life between larva and adult
- 4 A young frog that lives in water
- 5 This takes place during metamorphosis in frogs and butterflies
- 6 All the stages of an animal's life make up its life _____.



Apply Concepts

How is the life cycle of a butterfly different from the life cycle of a polar bear? Use this chart to show your answer.

Life Cycles

Butterfly	Polar Bear
A butterfly hatches from an egg.	<hr/> <hr/>
<hr/> <hr/>	A polar bear cub drinks milk from its mother's body.
<hr/> <hr/>	A polar bear cub looks a lot like its parents.
A butterfly larva does not stay with its parents.	<hr/> <hr/>

Take It Home  

Family Members: See *ScienceSaurus*[®] for more information about living things.