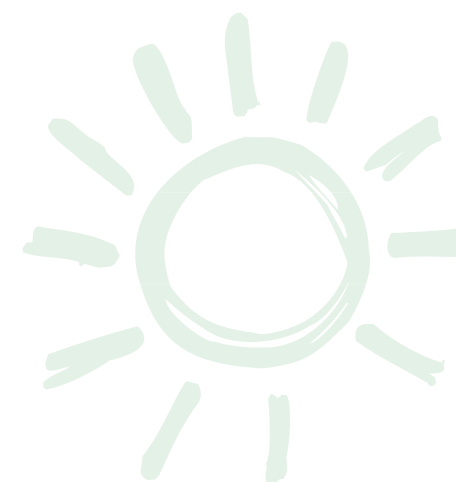




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Life Cycle

1. Put a check mark (✓) next to the answer that is the most right.

a) What is a life cycle?

- A Something you can ride on.
- B Like a food chain without decomposers.
- C The stages in the life of a plant or animal.
- D A survival trait that helps an animal live longer.

b) Frogs were once _____.

- A caterpillars
- B insects
- C seeds
- D tadpoles

c) All of these were hatched from eggs, except _____.

- A ant
- B bird
- C fish
- D mouse

2. Circle **T** if the sentence is True or **F** if it is False.

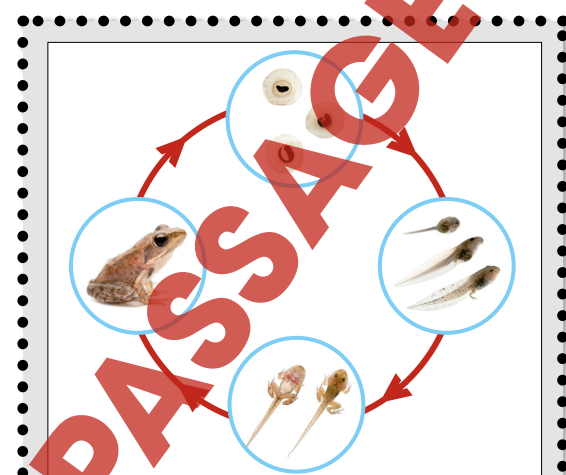
- T F a) An egg is a stage in the life cycle of a fish.
- T F b) A caterpillar is a stage in the life cycle of a frog.
- T F c) When a cat has kittens, all the kittens are exactly alike.
- T F d) Most plants grow from seeds.



Life Cycle

Frogs have a life cycle with a big change in it. They start as eggs too. They go through a very different stage between egg and grownup. The stage is called a **tadpole**. It looks more like a fish than a frog. They start to grow their frog legs before they lose their tadpole tail.

Plants have life cycles too. Let's start with the flower. The flower falls off, and a fruit grows in its place. The fruit has seeds inside. Seeds are a lot like the eggs in the animal life cycles. The fruit falls to the ground. The seed opens up and a baby plant starts to grow. If it grows up, it will have flowers, fruit and seeds too.



Tadpoles hatch out of eggs. The tadpoles change into frogs.

Each kind of plant or animal has its own life cycle. The cycles are the same. Babies grow up to be like their parents—but not exactly like their parents. Babies are not like each other either. Think about a cat having kittens. The babies are all cats, but they usually are not all the same color.



The life of a tomato plant.



Life Cycle

1. Below are five stages in the life cycle of a plant. Put them in order from first to last. Write the numbers **1, 2, 3, 4, or 5** beside each change. The first stage has been done for you.



- a) young plant
- 1 b) seed
- c) fruit
- d) flower
- e) grown plant

2. Put a check mark (✓) next to the answer that is the most right.

a) Egg is the first stage in the life cycle of a butterfly. Which is the pupa stage?

- A second
- B third
- C fourth
- D fifth

b) Which shows the stages in the life cycle of a frog in the right order?

- A egg, frog, tadpole
- B tadpole, egg, frog
- C egg, tadpole, frog
- D frog, tadpole, egg

c) In the life cycle of a plant, which stage comes just before the fruit stage?

- A seed
- B flower
- C grown plant
- D young plant



Life Cycle

3. Answer the questions in full sentences.

a) Tell about the life cycle of a butterfly. Start with egg.

b) Tell about the life cycle of a plant. Start with seed.

Extension & Application

4. Look outside for a place where ants live. It might be a little hill of dirt or just a hole in the ground. Look at the ants. What stage or stages of the life cycle do you see? Don't touch the ant hill. That would be mean.

Now go on the internet and find the life cycle of an ant. Notice an ant has a life cycle a lot like a butterfly. The stage that is called caterpillar in butterflies is called larva in ants.

Look at the graphic organizer on page 34. All the stages in the life cycle of an ant are shown. Write the name of each stage next to its matching picture.



Study a Terrarium

This experiment can be done in pairs, groups or alone. Study food and energy in a terrarium.

This is the next step in your terrarium experiment. In the first experiment, you saw how to make an ecosystem. In this part, you will see how energy and matter move through the ecosystem.

The terra- part of terrarium means earth or land. The aqua- part of aquarium means water. So a terrarium is a land ecosystem. An aquarium is a water ecosystem.

This is what you will need:
All you need is the terrarium you made in Experiment One.



This is what you do:

- How does energy flow through your terrarium?
 - Where does it come from?
 - Who gets it first?
 - What becomes of it?
- Watch the plants for a few days. How fast are they growing?
- Try leaving a light shining all day and all night for a while.
 - Did the plants grow faster with more light?
 - Did they grow slower?
 - Explain what you saw.
- Where are the bugs getting their energy? How can you tell?
- If there are no dead leaves on the top of the dirt, put some there. Watch what happens to the leaves over many days.
 - Are the leaves turning to dirt?
 - Are the worms helping turn the leaves to dirt?



Word Search

Find all of the words in the Word Search. Words are written across, up, down, on an angle, and some are even written backwards.

- adaptation
- chrysalis
- consumer
- decomposer
- ecosystem
- energy
- fossil
- life cycle
- matter
- nerve
- nervous system
- nutrients
- pollen
- pollination
- producer
- pupa
- sense
- sense organ
- survival trait
- tadpole
- trait

A	E	L	O	P	D	A	T	A	R	B	L
S	D	C	D	E	P	N	R	E	S	F	I
E	E	A	G	U	E	E	C	R	T	H	F
N	C	I	P	L	T	U	S	E	N	S	E
S	O	J	L	T	D	M	K	M	E	U	C
E	M	O	A	O	A	E	E	U	I	R	Y
O	P	M	R	L	M	T	N	S	R	V	C
R	O	P	O	L	S	S	I	N	T	I	L
G	S	P	Q	Y	I	Y	R	O	U	V	E
A	E	S	S	D	L	S	T	C	N	A	U
N	R	O	V	E	A	S	S	W	X	L	V
Z	C	A	B	T	S	U	C	O	D	T	E
E	N	E	R	G	Y	O	F	G	F	R	E
H	I	A	J	W	R	V	K	L	M	A	V
N	I	O	P	X	H	R	Q	R	S	I	R
T	T	U	V	Y	C	E	Z	A	B	T	E
C	P	O	L	L	I	N	A	T	I	O	N



Comprehension Quiz

Part A

22

Circle **T** if the sentence is TRUE or **F** if it is FALSE.

- T** **F** 1) Fossils can be brought back to life.
- T** **F** 2) People are part of an ecosystem.
- T** **F** 3) Almost all ecosystems get their energy from the Sun.
- T** **F** 4) Producers eat consumers.
- T** **F** 5) A survival trait is an adaptation that helps a plant or animal live.
- T** **F** 6) A pupa is a stage in the life cycle of a frog.
- T** **F** 7) The tongue is a sense organ.

Part B

Put a check mark (✓) next to the answer that is the most right.

- Which tells what an ecosystem is?
 - A part of the body that helps an animal live.
 - An animal that gives back nutrients to the ground.
 - What's left of a plant that has turned to stone.
 - A group of plants and animals that live together.
- A boy is walking in the woods and sees a bear. He decides to run away from it. To which body part does his brain send a message?
 - bones
 - eyes
 - muscles
 - skin

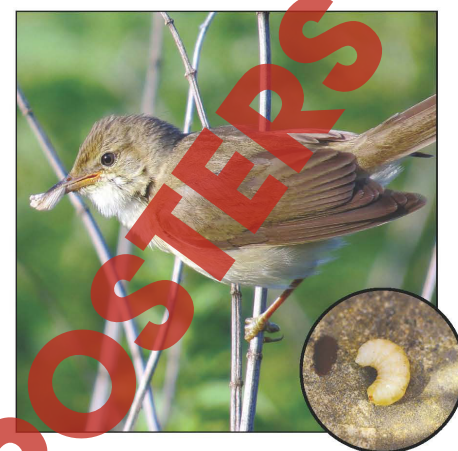
2

SUBTOTAL: /9

Finches and Food Adaptations



Ground Finch



Warbler Finch



Tree Finch



Cactus Finch



Ecosystems

1. Put a check mark (✓) next to the answer that is the most right.

a) Plants and animals work together. What is this called?

- A An ecosystem.
- B A family.
- C A fossil.
- D A herd.

b) There were ecosystems that lived on Earth a very long time ago. How can we learn about them?

- A By looking at fossils.
- B By talking to old people.
- C By reading history books.
- D By looking at animals.

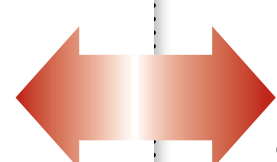
c) Which would be part of an ocean?

- A deer
- B sand
- C bees
- D pine trees

2. Use the words below to finish each sentence. Use each word once.

water plants rock sun animals

- a) Fossils are what's left of animals that turned into _____.
- b) Plants get energy from the _____.
- c) Plants need sun, air, and _____ to make food.
- d) The living things in a place are either _____ or _____.



1.

a) A

b) A

c) B

3.

a) A group of plants and animals that live on each other.

b) Answers will vary, but may include: They change when weather changes. The fish died when the weather was wet and cool. Then it changed to dry and hot.

1.

a) T

b) T

c) F

d) F

e) T

2.

a) C

2.

- a) rock
- b) Sun
- c) water
- d) plants, animals

10

4.

Answers will vary, but may include:
Plants - Grass, Tree, Fern.
Animals - Rabbit, Robin, Grasshopper.
Things Plants and Animals Need - Sunlight, Water, Dirt.

11

b) C

c) B

13

ANSWER KEY

Plants need air, water and sunlight to make food.

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