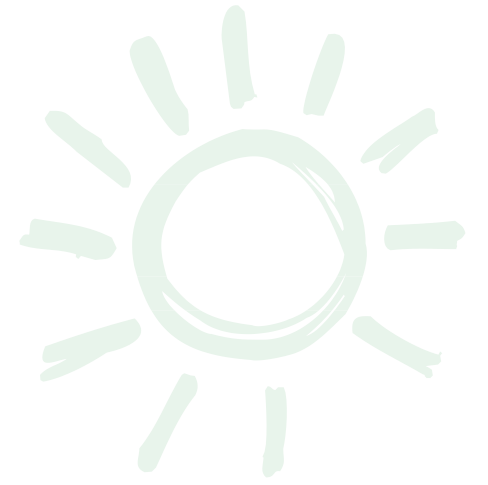




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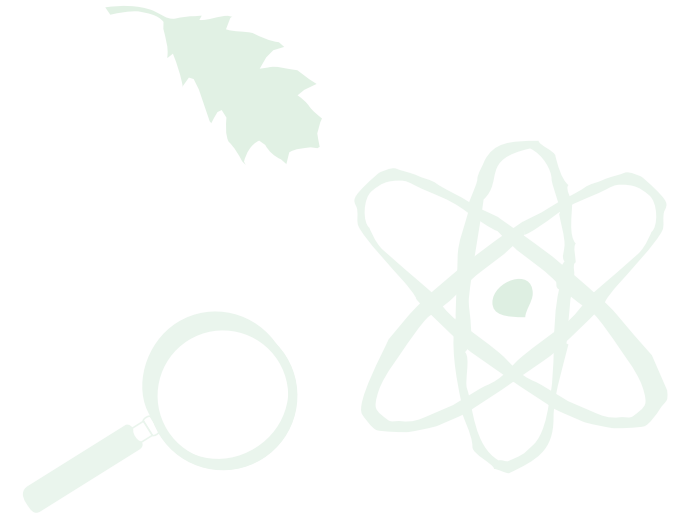
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Energy

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

- T F** a) The kind of energy the Sun sends to Earth is called energy of motion.
- T F** b) We get energy from an apple when we eat it.
- T F** c) Some animals get energy when they eat other animals.
- T F** d) Energy is a kind of force.
- T F** e) Plants store energy. Animals don't.

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

a) What is energy?

- A Force.
- B Power.
- C Very high speed.
- D What is needed to change things.

b) What kind of energy travels from the Sun to the Earth?

- A light
- B food energy
- C stored energy
- D energy of motion

c) Food energy is a kind of _____ energy.

- A heat
- B light
- C motion
- D stored



Energy



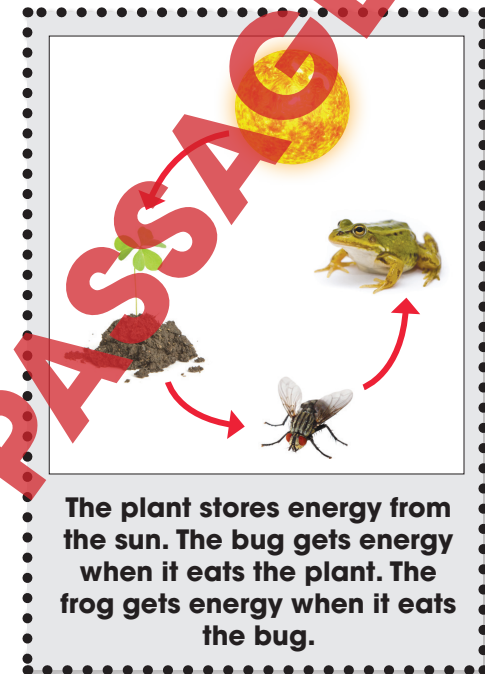
Energy is like happiness. It's hard to say what it is, but you know when you've got it. People say that energy is what you need to change things. But let's wait until we have looked at all the kinds of energy. That is the best way to get a feel for what energy is.

We need a lot of energy here on Earth. We need energy to get up in the morning. We need it to cook breakfast. We need it to travel to school. You may be surprised to learn that almost all of the energy we use came from just one place—the Sun! The Sun sends energy to Earth in the form of **light energy**.



These are called solar cells. The Sun beats down on them. They take in energy from the Sun. They change this into electricity.

get comes from what is stored in the animal. The animal got it from eating plants.



The plant stores energy from the sun. The bug gets energy when it eats the plant. The frog gets energy when it eats the bug.

When light energy meets the ground, some of it changes into **heat energy**. That is how Earth stays warm enough for us to live here. Some of the light energy is also changed into **food energy** by green plants. This is a kind of **stored energy**. It is stored in plants until we eat them. Then, we have energy to do things. If we eat meat, the energy we



Energy



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

- T F** a) A falling leaf has energy of motion.
- T F** b) Food energy is energy of motion.
- T F** c) Light energy can change into heat energy.
- T F** d) A bird in the sky has energy of motion but not stored energy.
- T F** e) Coal has stored energy.

2. Five energy changes are shown. Put the changes in order from **1** to **5**.

- a) A man gets energy by eating meat from the cow.
- b) Light travels from the Sun to the Earth.
- c) The man uses energy stored in his body to run.
- d) Grass changes light into stored energy.
- e) A cow eats the grass.



Energy



3. Answer the questions in full sentences.

- a) A raindrop falls from the sky into a lake. The stored energy and energy of motion changes as the drop falls. Explain how.

- b) Explain what keeps the Earth warm enough for us to live here.

Extension & Application

4. a) Find a place where stored energy is changing into energy of motion. Look for the place around your house or outside. Tell about the change.

- b) Find a place where energy of motion is changing into stored energy. Look for the place around your house or outside. Tell about the change.



Study Adaptations in Birds

- Nine birds are shown here.
- The eagle and the owl eat small animals.
 - The sparrow eats seeds.
 - The flamingo and the heron stand in the water as they look for fish to eat. The kingfisher and the pelican fly over water as they look for fish to eat.
 - The hummingbird eats nectar from flowers.
 - The woodpecker eats bugs and worms that live in the trees.



These birds all have adaptations that help them get their food.

1. Can you see how each beak is adapted to get the food they like?
2. How are their legs adapted to get the kind of food they like?
3. How are their feet adapted to get the kind of food they like?

Option A: Go to a place where you will see wild birds. Look at the kind of place they live. Do they swim and dive in water? Do they live in trees? Try to see what they eat. Do they eat plants or animals? Can you see any adaptations that help them live where they live and eat what they eat?

Option B: Go to a zoo with a group of students. Ask your teacher to call the zoo first. Have the teacher find out when they feed each kind of bird. At the zoo, watch the birds eat. Look for adaptations that help each bird eat. Look for adaptations that help each bird catch food.



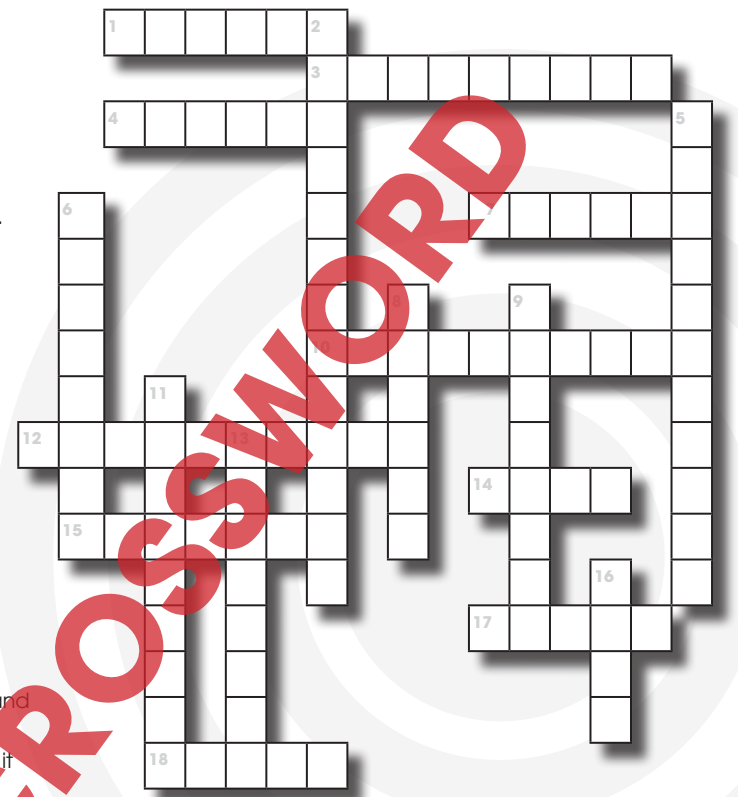
Crossword Puzzle!

Across

1. Bees spread it from plant to plant.
3. A group of plants and animals working and living together.
4. The stuff things are made of.
7. What you become when you turn to stone.
10. Your nose is one.
12. It brings nutrients back to the ground.
14. What is inside a chrysalis.
15. Future frog.
17. Something you can pass on to your babies.
18. It sends messages to and from your brain.

Down

2. It is made up of your brain and your nerves.
5. Plants need it, and bees do it for them.
6. Decomposers take it back to the ground.
8. Plants get it from the Sun.
9. It eats producers.
11. Where energy is passed from consumer to producer.
13. It stores food energy.
16. Egg, tadpole, frog, egg. This is the _____ cycle of a frog.



Word List

consumer	life	pollen
decomposer	matter	producer
ecosystem	nerve	pupa
energy	nervous system	sense organ
food chain	nutrient	tadpole
fossil	pollination	trait



Comprehension Quiz

Part A

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

- 1) Clouds are a gas that we can see.
- 2) Summer comes after spring.
- 3) A Mediterranean climate has rainy winters.
- 4) The Moon is a planet.
- 5) All places on Earth get about the same amount of rain.
- 6) Erosion is a problem for farmers.
- 7) A city can get all its energy from the Sun.

Part B

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

a) Which is precipitation?

- A evaporation
- B lava
- C shadow
- D snow

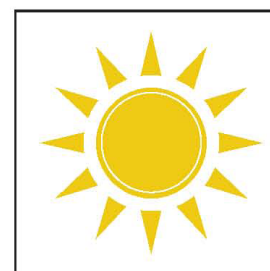
b) Most of Earth's water is _____.

- A frozen
- B in rivers
- C in the oceans
- D under the ground

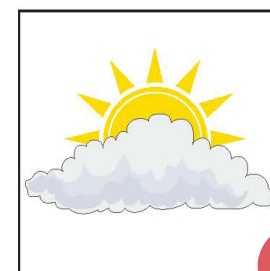
SUBTOTAL: /9

Weather Forecast

You might see these pictures on a map that tells what the weather is going to be like.



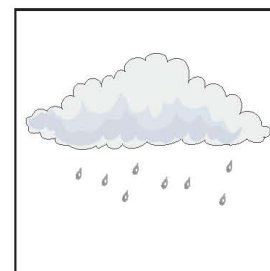
Sunny



Partly Cloudy



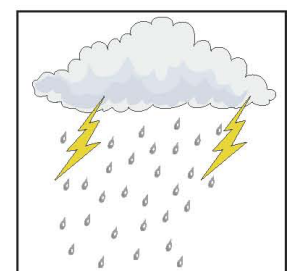
Cloudy



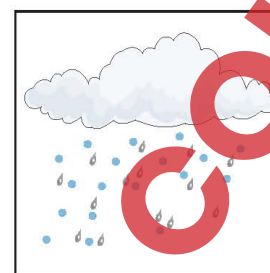
Light Rain



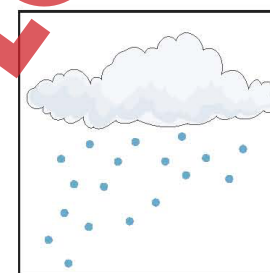
Heavy Rain



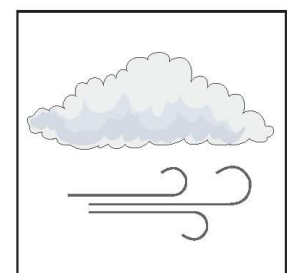
Thunderstorm



Snow & Rain



Snow



Windy



Adaptations

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

a) Which animals live in groups?

- A ants
- B cats
- C snakes
- D spiders

b) No one teaches a spider how to make a web. Web building is an example of _____.

- A a trait
- B survival
- C an instinct
- D spiders

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

- T F a) A baby bird learns how to build a nest from its parents.
- T F b) Bees can tell each other where the best flowers are.
- T F c) Some animals hunt in groups.
- T F d) Giraffes get long necks from stretching to reach high leaves.
- T F e) If you learn how to swim, your kids will know how to swim without learning.
- T F f) Plants have survival traits.

1.

a) A

b) C

3.

a) Answers will vary, but may include: Wolves live in groups. It is better to hunt in a group.

b) Answers will vary, but may include: Giraffes have a long neck to help reach more leaves. A well-fed giraffe will live longer and have babies that will live longer.

1.

a) C

b) D

c) D

2.

a) F

b) F

c) T

d) F

e) F

f) T

72

4.

Answers will vary.

73

2.

a) T

b) F

c) F

d) T

74

Egg, caterpillar, pupa (or chrysalis), butterfly.

75



EASY MARKING ANSWER KEY