

Grade 5 Science

Chapter 1 Practice Questions:

1. Hala is conducting an experiment to see if the height from which she drops a rubber ball will affect the height to which the ball bounces. Which is the independent variable in her experiment?

- A the rubber ball
- B the height from which the ball is dropped
- C the height the ball bounces
- D the mass of the ball

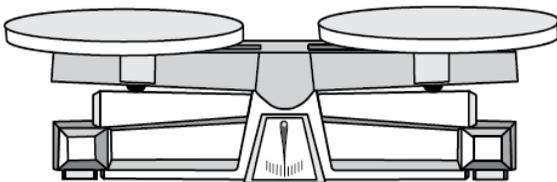
2. The table below shows the spring temperatures and rainfall averaged by month for two U.S. cities. Which conclusion can be drawn from the data?

New York	March	April	May
Average Temperature	42°F 6°C	53°F 12°C	67°F 19°C
Average Rainfall	17 in. 43cm	15 in. 38cm	3 in. 8cm

Seattle	March	April	May
Average Temperature	41°F 5°C	49°F 9°C	53°F 12°C
Average Rainfall	4 in. 10cm	28 in. 71cm	16 in. 41cm

- A New York has colder spring temperatures than Seattle.
- B The spring temperatures in New York do not vary as much as the spring temperatures in Seattle.
- C New York receives more rainfall than Seattle throughout spring.
- D Seattle has cooler spring temperatures than New York and receives more rainfall in April and May.

3. Faris is conducting a scientific investigation using the tool below.



Which metric system unit is Faris most likely to record with his data?

- A grams
- B pounds
- C meters
- D cubic centimeters

4. Which type of graph should be used to show the composition of gases in Earth's atmosphere?

- A line graph

- B scatter plot
- C bar graph
- D circle graph

5. Which is an accurate description of the liquids below?

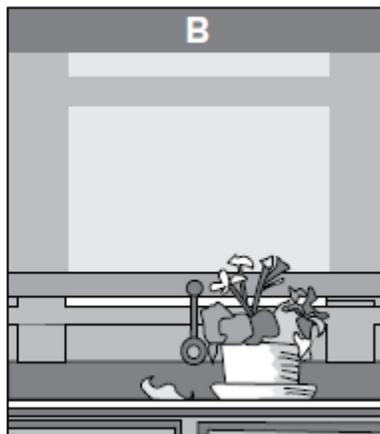
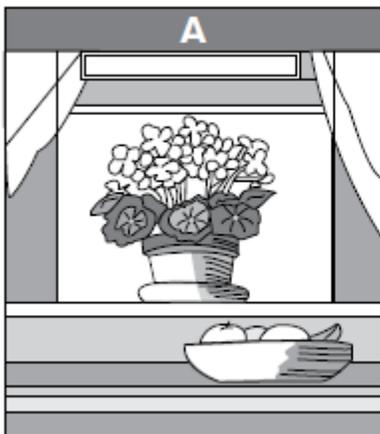


- A The liquid in the middle beaker is darker in color than the other liquids.
- B The liquid in the beaker on the right is lighter in color because the liquid is more concentrated.
- C The liquids all have the same mass.
- D The differences in color are a result of the different solutes in the liquids.

6. Why would scientists want to calculate the range of a set of data?

- A to identify the middle number in the data set
- B to understand the amount of variation in the data set
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7. Which was the independent variable in the experiment below?



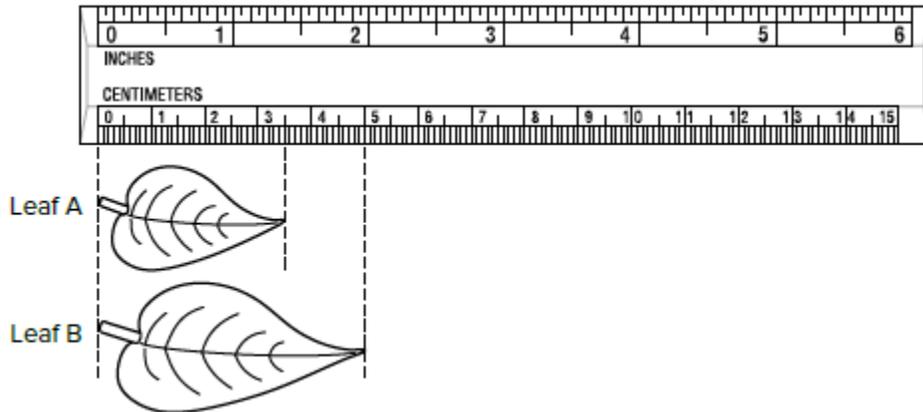
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8. Which tool would a scientist use to find the volume of a small amount of water?

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- C balance
- D computer

9. What is the length of Leaf B in metric system units?



- A 2 inches
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10. Which is an important safety rule to follow while conducting a scientific investigation?

- A Ask questions only after you have finished completing the investigation.
- B Read only the last step in an investigation.
- C Avoid washing your hands after an investigation.
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Section 2

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consistency mean data metric balance dependent variable
 scientific method hypothesis spring scale independent variable technology

1. The variable that is measured during an investigation is called the _____.
2. A series of steps that scientists use when conducting a scientific investigation is called the _____.
3. Information gathered during a scientific investigation is called _____.
4. Scientists use _____ to be sure that tasks and procedures can be repeated with minimal variation.
5. An object's mass is measured with a _____.

6. The of a set of numbers is the sum of the numbers divided by the number of entries in the data set.

7. The use of science to meet human wants and needs is called _____
8. The _____ in a controlled experiment is the variable that is changed.
9. A _____ in an investigation is a prediction that can be tested.
10. A _____ is used to measure weight.

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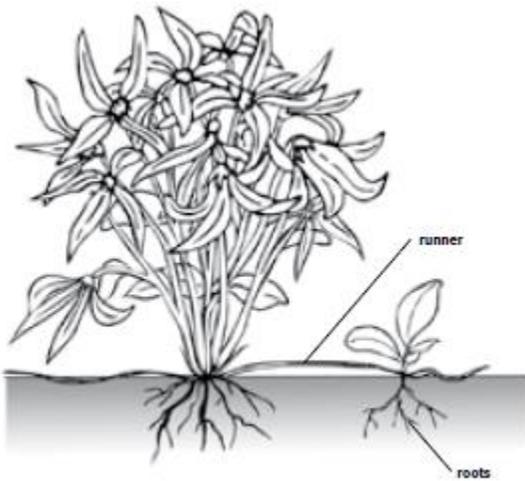
Grade 5 Science

Chapter 2 Practice Questions:

1. Which statement is true of sexual reproduction?

- A It involves only one parent.
- B Sex cells are not needed.
- C Offspring are copies of the parent.
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2. Study this picture.



This plant is reproducing using

- A seeds.
- B budding.
- C cones.
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3. Mosses and ferns reproduce using

- A seeds..
- B cones

- C spores
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4. When complete metamorphosis occurs, an animal

- A has the same structures in its adult and immature forms.
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- A It protects the embryo from drying out.
- B It contains food for the embryo.
- C It keeps the embryo safe from other animals.
- D It keeps the embryo warm.

7. Which diagram shows the pupa stage of the butterfly's life cycle?

A



B



C



D



8. The flowers of some plants are bright and colorful to

- A entice people to cut them.
- B warn other organisms that they are dangerous.
- C capture light from the Sun.
- D attract pollinators.

9. What do nest building, breathing, and web making have in common?

- A They are learned behaviors.
- B They are recessive traits.
- C They are dominant traits.
- D They are instincts.

10. Study the chart.

	Dimples	Earlobes
Mother's mother	no	unattached
Mother's father	yes	unattached
Father's mother	yes	unattached
Father's father	no	attached
Mother	yes	attached
Father	yes	attached

Dimples and unattached earlobes are dominant traits. Which trait is not possible for the offspring in the next generation?

- A dimples
- B no dimples
- C unattached earlobes
- D attached earlobes

Section 2

Fill each blank with the best term from the list.

embryo inherited trait fertilization metamorphosis gene pedigree germination pollination heredity pupa

1. The beginning of a new life form is called a(n) _____.
2. The stage in which a case like cocoon forms around the organism is called the _____.
3. The passing down of traits from one generation to the next is called _____.
4. Pollen is transferred from the stamen to the pistil of a flower during _____.
5. A characteristic passed down from parent to offspring is a(n) _____.
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7. A sperm cell and an egg cell join into a single new unit during _____.
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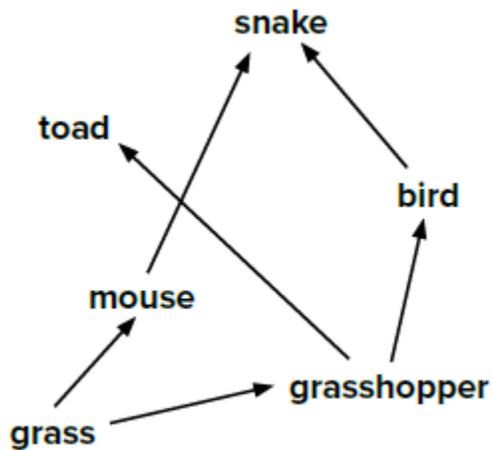
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Grade 5 Science

Chapter 3 Practice Questions:

Use the food web below to answer questions 1–2.



1. Based on the information in the food web, which two animals are in competition?

- A mouse and snake
- B toad and grasshopper
- C snake and bird
- D bird and toad

2. Which is an herbivore?

- A snake
- B toad
- C grasshopper
- D grass

3. Which shows how energy moves through a food chain?

- A robin blackberries bobcat
- B blackberries robin bobcat
- C bobcat blackberries robin
- D robin bobcat blackberries

Use the picture below to answer question 4.



4. The picture above shows part of an African ecosystem. Which best explains how these animals share the same ecosystem?

- A Both are carnivores that hunt the same prey.
- B Both are producers that make their own food.
- C Each is prey for predators, so they protect each other.
- D Each has a different food source, so they do not compete.

5. A pride of lions and a herd of elephants on a grassland in Africa are

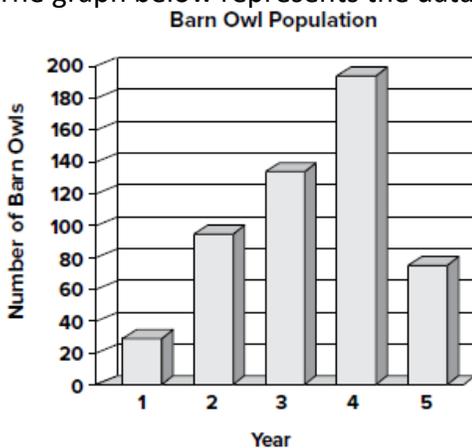
- A part of a population.
- B part of a community.
- C an example of commensalism.
- D groups of producers.

6. Decomposers are important to a food web because they

- A prey on carnivores.
- B break down plant and animal material.
- C are food for producers.
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7. Researchers in Buffalo tracked the barn owl population for five years.

The graph below represents the data they collected.



What conclusion is best supported by this graph?

- A The population has not reached its carrying capacity.
- B There were limiting factors in the barn owl's environment.
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- A commensalism
- B parasitism
- C mutualism
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camouflage photosynthesis deciduous forest prey ecosystem stomata
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1. All living and nonliving things in an environment make up a(n) _____
2. A relationship where one organism benefits and the other is harmed is . _____
3. The process of making food using sunlight is called . _____
4. Animals that are eaten by other animals are called . _____
5. Tiny pores in plant leaves are called . _____
6. A(n) is a cool forest of coniferous evergreen trees. _____
7. The path that energy and nutrients follow in an ecosystem is a(n) _____
8. Mutualism and commensalism are different types of _____
9. A(n) is an ecosystem with trees that lose their leaves in winter and regrow them in spring

10. Some organisms blend in with their environment using _____

Grade 5 Science

Chapter 4 Practice Questions:

1. Study the information about the endangered species in the table below.

What is the main threat to all of these species?

Endangered Species	Threats
pitcher plant	overcollecting by humans, habitat loss
Karner blue butterfly	overcollecting by humans, habitat loss
flying squirrel	habitat loss
hawksbill sea turtle	hunting, loss of nesting habitat, water pollution

- A overpopulation of other organisms
- B human activity
- C natural disasters
- D decreased reproduction

2. Trees were cleared from an area to use for lumber and paper. Nearby residents observed an increase in the mouse population. What can you infer about the impact this activity had on the organisms in the ecosystem?

- A The population of the owls who ate the mice declined due to a decrease in habitat.
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3. Which is an example of a positive impact humans have had on other organisms?

- A deforestation
- B ozone depletion
- C global warming
- D protection of endangered species

4. Which best describes the cause of acid rain?

- A Air pollution from factories combines with rain.
- B Water pollution from factories combines with rain.
- C Air pollution creates a hole in the ozone layer.
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5. In a water ecosystem, why are many producers found near the surface?

- A They require sunlight.
- B There are more organisms there for them to eat.
- C They need cooler and darker water.

D There is no threat from consumers.

Year	Number of Bats
2012	20,213
2013	16,696
2014	6,324
2015	3,789

6. A town used pesticides to control mosquitoes in the area in 2013, 2014, and 2015. Scientists observed the following trend in the bat population.

Which is the best conclusion you can draw from this information?

- A People overhunted the bats.
- B This type of bat ate mosquitoes.
- C The bats' habitat was destroyed.
- D The bats died from disease spread by the mosquitoes.

7. Fossil fuels are used to make

- A plastic.
- B paper.
- C cotton.
- D bricks.

8. Rivers and streams are different from lakes and ponds because they

- A contain freshwater.
- B are bodies of running water.
- C are shallow.
- D are home to algae.

9. What are the benefits of using alternative energy sources instead of fossil fuels?

- A It conserves resources and increases pollution.
- B It depletes resources and decreases pollution.
- C It conserves resources and decreases pollution.
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Section 2

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Deforestation pollution estuary natural resources nonrenewable resources plastic
Renewable resource synthetic textiles tundra

1. Caribou and musk ox are found in a treeless biome called a(n) _____
2. Synthetic materials called are made in the process of polymerization. _____
3. Polyester, acrylic, cotton, and burlap are examples of . _____
4. An ecosystem where freshwater meets salt water is called a(n) _____
5. Materials that are taken from Earth and used by people are _____
6. Because coal takes millions of years to form, it is a(n) _____
7. A material that is artificially made is called . _____
8. Water can be replaced naturally in a short period of time, so it is a(n) _____
9. When people cut down trees, it is called . _____
10. Adding harmful things to the air, water, or land is . _____

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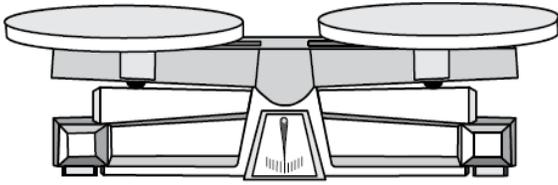
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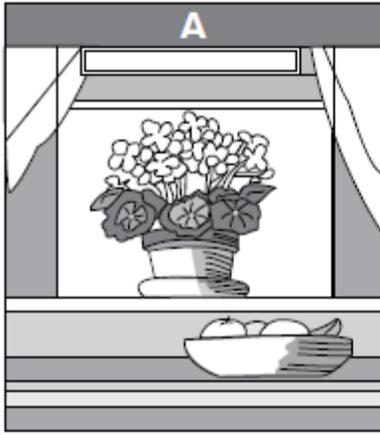


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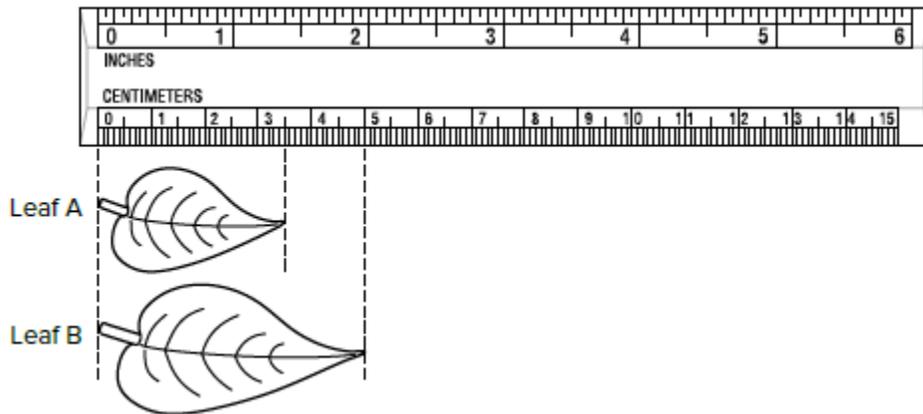


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1. The variable that is measured during an investigation is called the **dependent variable** .
2. A series of steps that scientists use when conducting a scientific investigation is called the **Scientific method**.
3. Information gathered during a scientific investigation is called **data** .
4. Scientists use to be sure that tasks and procedures can be repeated with minimal variation **consistency** .
5. An object's mass is measured with a **balance**.
6. The **mean** of a set of numbers is the sum of the numbers divided by the number of entries in the data set.
7. The use of science to meet human wants and needs is called **technology**
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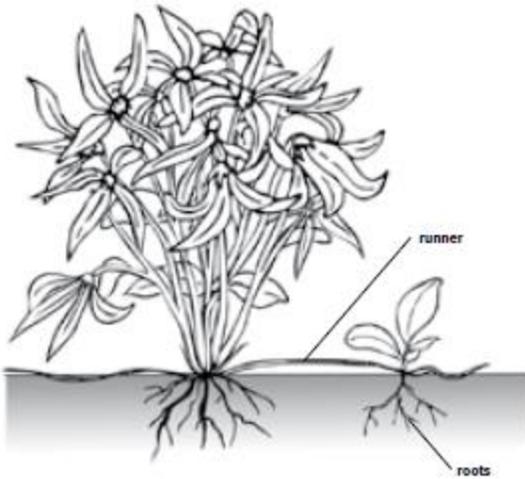
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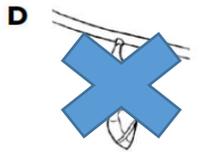
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A dimples

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1. The beginning of a new life form is called a(n) **embryo**
2. The stage in which a case like cocoon forms around the organism is called the **pupa**
3. The passing down of traits from one generation to the next is called **heredity**
4. Pollen is transferred from the stamen to the pistil of a flower during **Pollination**
5. A characteristic passed down from parent to offspring is a(n) **inherited trait**
6. The chemical instructions for inherited traits are carried in a(n) **gene**.
7. A sperm cell and an egg cell join into a single new unit during **fertilization**
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9. A chart used to trace the history of a trait in a family is called a(n) **pedigree**
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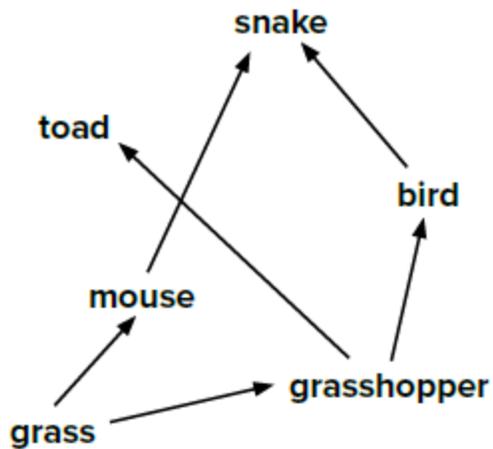
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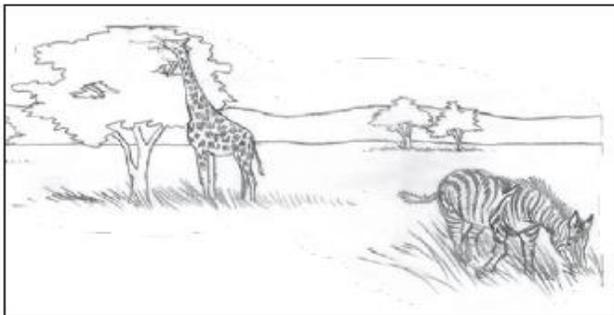
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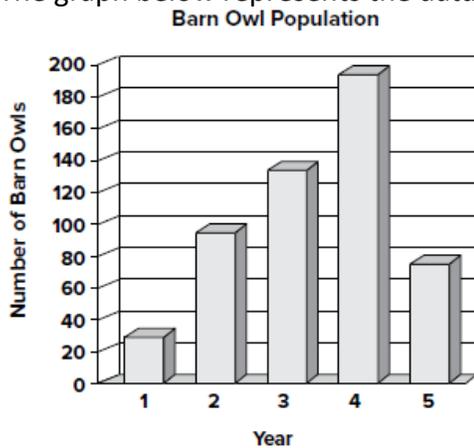
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Section 2

camouflage photosynthesis deciduous forest prey ecosystem stomata
food chain symbiosis parasitism taiga

1. All living and nonliving things in an environment make up a(n) **ecosystem**
2. A relationship where one organism benefits and the other is harmed is **parasitism**
3. The process of making food using sunlight is called **photosynthesis**
4. Animals that are eaten by other animals are called **prey**
5. Tiny pores in plant leaves are called **stomata**
6. A(n) is a cool forest of coniferous evergreen trees. **taiga**
7. The path that energy and nutrients follow in an ecosystem is a(n) **food chain**
8. Mutualism and commensalism are different types of **symbiosis**
9. A(n) is an ecosystem with trees that lose their leaves in winter and regrow them in spring **deciduous**
10. Some organisms blend in with their environment using **camouflage**

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Chapter 4 Practice Questions:

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What is the main threat to all of these species?

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- A People overhunted the bats.
- B This type of bat ate mosquitoes.
- C The bats' habitat was destroyed.
- D The bats died from disease spread by the mosquitoes.

7. Fossil fuels are used to make

- A plastic.
- B paper.
- C cotton.
- D bricks.

8. Rivers and streams are different from lakes and ponds because they

- A contain freshwater.
- B are bodies of running water.
- C are shallow.
- D are home to algae.

9. What are the benefits of using alternative energy sources instead of fossil fuels?

- A It conserves resources and increases pollution.
- B It depletes resources and decreases pollution.
- C It conserves resources and decreases pollution.
- D It depletes resources and increases pollution.

Section 2

Fill each blank with the best term from the list.

Deforestation pollution estuary natural resources nonrenewable resources plastic
 Renewable resource synthetic textiles tundra

1. Caribou and musk ox are found in a treeless biome called a(n) **Tundra**

2. Synthetic materials called are made in the process of polymerization. **Plastic**
3. Polyester, acrylic, cotton, and burlap are examples of .**Textiles**
4. An ecosystem where freshwater meets salt water is called a(n) **Estuary**
5. Materials that are taken from Earth and used by people are **natural resources**
6. Because coal takes millions of years to form, it is a(n) **nonrenewable resource**
7. A material that is artificially made is called .**synthetic**
8. Water can be replaced naturally in a short period of time, so it is a(n) **renewable resource**
9. When people cut down trees, it is called . **deforestation**
10. Adding harmful things to the air, water, or land is . **pollution**