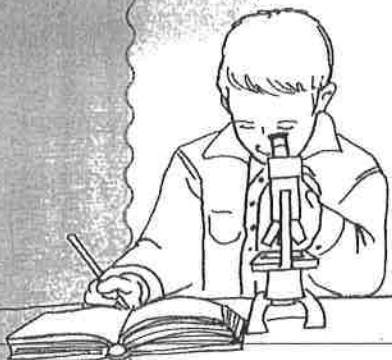


Due on 4-15-16

Unit 6 Mini-Lesson Science



Why do we study science?

Science helps us understand the world around us. To participate in society, one must know some science. As examples, to cook dinner you must understand hot and cold, chemical reactions, and the effects of combinations of ingredients. When you choose to eat an apple rather than a bag of chips, you have considered your nutrition. All of these decisions involve science understanding.

Why do we study life science?

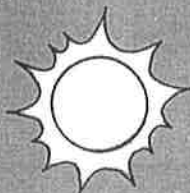
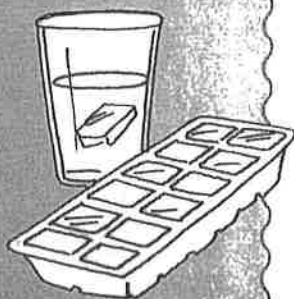
Earth is full of life, and life science studies the living things on Earth. Life science studies animals and plants and the environments and habitats where they live. Life science studies how living things meet their needs for water and food. And it studies the life cycles of living things.

Why do we study earth science?

Earth science is the study of the earth as well as things in outer space. For example, builders use earth science to protect their buildings against high winds and earthquakes. Everyone needs to understand some earth science in order to be a caretaker of our planet.

Why do we study physical science?

Physical science involves the study of nonliving things in our world. When you use a fan to cool yourself off, when you use a computer to send an e-mail, when you mix vinegar and water to clean windows, or when you use a magnet to pick up a tack, you are employing physical science.



Explains how the forces of motion work

Tells about matter, what makes up matter, and how matter affects us

Contains factual information about our planet and its neighbors in space



Science Text

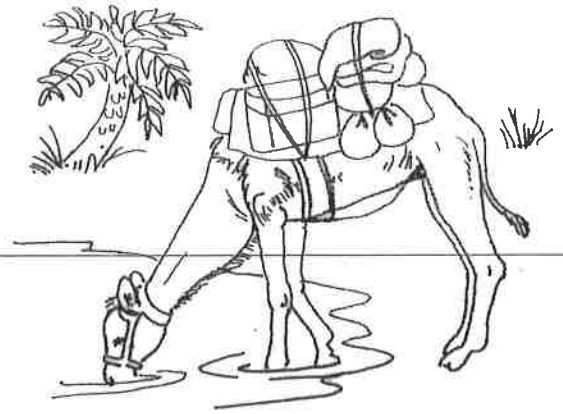
Includes explanations of scientific terms

Inspires us to think like a scientist

Includes special text features such as photos, labels, captions, diagrams, and sidebars

The Sahara Desert

What do you think about when you think of Africa? Camels making their way across a sandy desert? Elephants feeding on grassy plains? Monkeys swinging through trees?



Deserts, grasslands, and forests are all habitats of Africa. A habitat is where animals live. A habitat has the food, water, and shelter animals need to stay alive. The **Sahara** in Africa is a desert habitat. The Sahara is hot during the day and cold at night. The Sahara is the largest desert in the world. Very little rain falls in the Sahara.

Desert animals have special ways to live with these different conditions. Small animals protect themselves from the daylight sun by digging a burrow, or hiding place. The burrow might be under a large rock or deep under the sand. When the temperature drops at night, the animals come out to search for food.

Experiment: Be a Scientist!

Go outside in the early morning. Take a tissue with you. Run the tissue on some leaves. If the tissue gets wet, that's dew!

A camel's body helps it survive, or live, in the desert habitat. A camel can go many days without food or water. When it does find water, the camel might drink up to fifty gallons at a time!

Desert animals can get water at an **oasis**. At an oasis, water comes from underground springs. Some water bubbles up above the ground and forms lakes. A **wadi** is another source of water for desert animals. This dry valley collects water during the rainy season. Cold desert nights leave a wetness called **dew**.

Name _____ Date _____

Use what you read in the passage to answer the questions.

1. Where is the Sahara Desert?

2. How many gallons can a camel drink?

3. Where does water in the desert come from?

4. What is the purpose of the box of text in the passage?

5. What is the main idea of the passage?

6. How does this habitat compare with the habitat you live in? Describe the similarities and differences.

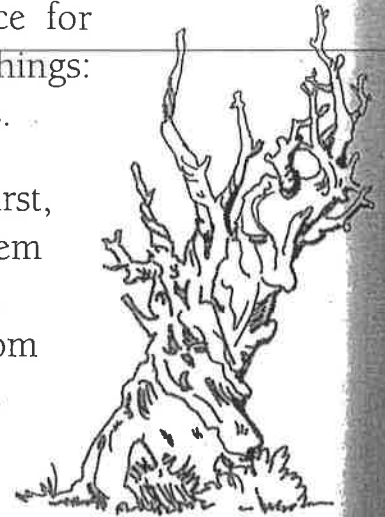
7. Name two or three features of a camel that help it live in the desert.

8. What words are boldfaced in the passage? Write the definition of those words based on the context of the sentences.

The Mighty Tree

What can live to be 1,000 years old and grow 300 feet tall? A tree! Trees have covered Earth's surface for billions of years. They provide many important things: oxygen, food, shelter, fuel, and building materials.

The life cycle of a tree begins with a seed. First, the **roots** form to anchor the plant. Then the stem begins to grow. As the stem grows, it develops a hard surface called bark. Later, branches grow from the trunk. Then branches grow needles or leaves. Finally, the tree spreads seeds. The seeds start to grow.



A **conifer** is one kind of tree. This tree has needles and cones instead of leaves, fruit, or nuts. Conifer means “having cones.” A pinecone holds the seeds of a pine tree. When the cones open, the seeds fall to the ground. Some of the seeds may begin to grow into new trees where they fell. Birds and other animals eat some seeds. Those seeds may be left in animal droppings far from where they fell. They can grow into new trees.

Conifers are known as evergreens because they keep their needles all year long. They are continuously losing and growing new needles at the same time.

The oldest living tree in North America is a pine tree. It is named Methuselah. It lives in the White Mountains of California. The tree is known to be over 4,600 years old. This means the tree is older than the Egyptian pyramids!

Trees have been around for billions of years. Trees are survivors, but they can be damaged and killed. Millions of acres are destroyed by wildfires each year. Extreme heat, drought, lightning, and people can cause fires.



Name _____ Date _____

Use what you read in the passage to answer the questions.

1. What is the meaning of **conifer** in the passage?

2. What can grow 300 feet tall?

3. Why are conifers called evergreens?

4. What is bark?

5. Who or what is Methuselah?

6. How long have trees been around?

7. Name three ways seeds get from place to place.

8. What is the meaning of **roots** in this passage?
