OAT Authentic Test Questions – 4th Grade Reading

Reading Applications: Informational Text

Putting the Sun to Work Reading Passage Questions

1. What is an example of cause and effect from the selection?

   - O A. While the charcoal fire is starting to burn in the cookout stove, you go for a swim.
   - O B. The word began with the Roman word for the sun, which is *sol*.
   - O C. Collecting sunshine isn't easy, and sunshine isn't easy to store, either.
   - O D. The longer it takes something to heat up, the longer that thing holds the heat.

2. Why do people burn their feet on the sand at the beach?

   - O A. Their feet are slippery.
   - O B. Their feet are wet.
   - O C. The sand absorbs heat.
   - O D. The sand is a solid.

3. Write a sentence to explain what is described in each section of the selection.

Solar Energy

_____

_____

Catching Sunshine

_____

_____

Storing Heat

_____

_____

Keeping Heat in One Place

_____

_____

4. Complete the chart with examples of cause and effect from the selection.

Cause and Effect Chart

Cause	Effect
She went through a year of training.	
	She received a scholarship to college.
She loved to learn.	
	She joined the Peace Corps.

5. Why did Mae Jemison go to Sierra Leone and Liberia?

- ○ A. She wanted to become an astronaut.
- ○ B. She wanted to go to another country.
- ○ C. She wanted to attend school there.
- ○ D. She wanted to help the people there.

6. What is the main idea of this selection?

- O A. Mae Jemison worked hard and became the first black woman in space.
- O B. Mae Jemison was the first black woman doctor to graduate from Stanford.
- O C. Mae Jemison was the first woman to join the Peace Corps.
- O D. Mae Jemison was the first woman doctor to go to Sierra Leone.

Rivers to the Sea Reading Passage Questions

7. What are two effects of the river's swiftly moving current?

a. _____

b. _____

8. Why did the author write this selection?

- O A. to encourage us to take part in water sports in rivers and streams
- O B. to entertain us with tales of his boyhood fun along the river
- O C. to tell what he learned about a river from its beginning to its end
- O D. to explain how a river becomes polluted and endangered

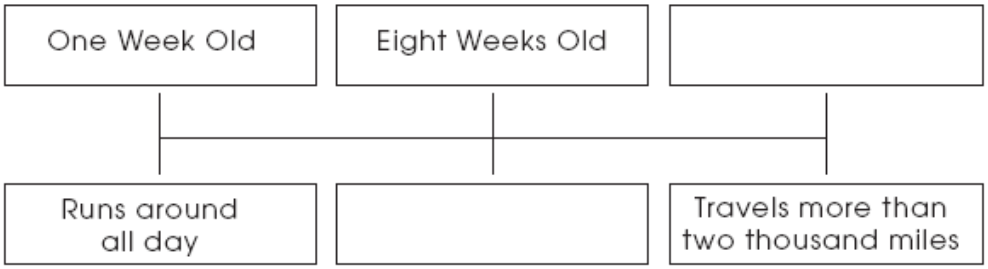
9. Which of these sentences is an opinion?

- O A. "As trickles follow the easiest paths down, they combine to form brooks."
- O B. "Rivers work hard. They're great diggers."
- O C. "Rivers are also carriers. They carry rocks and sand downstream."
- O D. "The Connecticut River flows out of Vermont, south into Massachusetts, then into Connecticut."

Little Caribou Reading Passage Questions

10. Jse information from the selection to complete the timeline below. Provide a title for the timeline.

Title: _____



11. Write a detail from the selection that supports the main idea of each section. The first one is done for you.

A Baby Caribou Is Born

The mother caribou urges the newborn calf to stand on shaky legs.

Winter in the Forest

_____

_____

The Journey Home

_____

_____

12. Use the selection to explain how John Chapman collected and prepared apple seeds.

_____

_____

_____

_____

Use the selection to explain how John Chapman planted and cared for apple trees.

_____

_____

_____

_____

13. Which of these statements is an opinion?

- O A. John Chapman had unusual ways.
- O B. John Chapman was born in 1774.
- O C. John Chapman left books with families.
- O D. John Chapman planted as far west as Indiana.

14. What is the main idea of this selection?

- O A. John Chapman was born in Massachusetts but moved west as a young man.
- O B. John Chapman spent his life helping people by planting apple orchards.
- O C. The Northwest Territory was an exciting place full of opportunity.
- O D. Apples are a delicious and an important food well-loved by Americans.

Directions: Read the selection.

Putting the Sun to Work

by Jeanne Bendick

It's a hot summer day. You, your family, and some friends decide to drive to a park near the beach for a cookout.

When you walk over to the beach, the sand and the rocks are so hot that they hurt your bare feet. You put on sneakers in a hurry.

While the charcoal fire is starting to burn in the cookout stove, you go for a swim. The water feels good. It is warm at the top, but cooler down around your toes. After you swim, you dry yourself with a towel.

For lunch there are hot dogs, corn, salad, rolls, and fruit. By the time the corn and hot dogs are cooked, all the towels are dry. You had spread them out on the rocks, in the sun.

While you were having fun at the beach, work was being done. Energy from the sun was doing the work.

Heat energy from the sun dried the towels. It heated the sand, the rocks, the water, and the air.

Solar Energy

As long as the sun shines, the earth will not run out of energy. The sun pours more energy onto earth than we can ever use. Most of that energy comes to us as heat and light.

Energy from the sun is called solar energy. Anything to do with sun is called "solar." The word began with the Roman word for the sun, which is *sol.*

Solar energy is a safe kind of energy. It doesn't cause pollution or have dangerous leftovers. That is why scientists and inventors are trying different ways to capture and use the sun's energy. They hope to find a way for the sun to do some of the jobs other types of fuels have been doing for a long time.

To make the sun do work like that, scientists have to solve some problems. They have to collect the sun's energy. Collecting sunshine isn't easy, and sunshine isn't easy to store, either.

Catching Sunshine

Is it possible to catch the sun's heat in a house? Yes, it is. Some houses collect the sun's heat on the roof, move the heat indoors, and store some of it to use later. A house like that is called a solar house.

People who build solar houses have learned how to do those things by noticing how the earth itself uses solar energy.

Remember the beach we talked about earlier? Remember the hot sand and the hot rocks? Some materials take in heat energy from the sun and hold it. These materials absorb the heat. Sand and rocks do this. So do some other solid materials, such as metals. Water absorbs the sun's heat, too.

Storing Heat

The longer it takes something to heat up, the longer that thing holds the heat. Materials that heat up fast also cool off fast.

If you were to go back to the beach in the evening after sunset, the sand and the rocks, which heated up fast, would be cool. The water, which heated up slowly, would still be warm.

Heat always moves from a warmer place or thing to a cooler one.

Remember when the hot sand on the beach burned your feet? Heat from the sand was moving into your cooler feet! Once you understand how heat moves into things, through things, and out of things, it is easy to see how a solar house works.

Keeping Heat in One Place

Once the house is warm, what keeps the heat from moving out of the warm house into the cool outside air?

Remember the sneakers you put on when the hot sand was burning your feet? They kept the heat from moving from the sand into your feet. The sneakers were insulation. Insulation is any material that keeps heat (or other kinds of energy) from moving from place to place.

Insulation in a house keeps heat from moving out of the house in the winter. It also keeps heat from moving into the house in the summer.

It does not take a lot of heat to make a house comfortable. Solar energy can do that job in many areas of the world.

Directions: Read the selection.

Mae C. Jemison

by Wade Hudson

At the Kennedy Space Center in Florida, scientists got ready for an exciting launch. The space shuttle *Endeavour* was on the launch pad. Its nose pointed straight up toward the clouds. Inside, seven astronauts sat very still in their seats. Each waited for *Endeavour* to blast off into space. One of the astronauts was Mae C. Jemison.

Mae was born in Decatur, Georgia. Her family moved to Chicago when she was very young. Her parents told her to study hard and learn as much as she could. Mae loved to learn. She spent many hours in the library reading books about science and science fiction.

Mae grew up in the 1960s. The whole country was excited about space travel and space exploration. Like many other girls and boys, Mae wanted to be an astronaut. But there were no women astronauts in America then. There were no black astronauts, either. So what were *her* chances? Mae just kept on dreaming about exploring in space. Nothing was going to stop her.

When she was sixteen, Mae graduated from high school. Her grades were very good. Stanford University gave her a scholarship and she went there. Mae

wanted to be a doctor, so she went to medical school. Later Mae joined the Peace Corps to help needy people in other countries. She went to Sierra Leone and Liberia in West Africa. She used what she had learned in medical school to help the people there.

But Mae still dreamed of becoming an astronaut. She returned to the United States in 1985. She applied to the astronaut program at the National Aeronautics and Space Administration (NASA).

One day, in August 1987, a man from NASA called Jemison with great news. Jemison had been chosen for the astronaut program. She was very happy. Nearly two thousand people had applied to the program. Only fifteen had been selected. Mae Jemison felt really special.

The training program was hard. Astronauts must be strong and fit, so they exercise. They study mathematics, earth resources, meteorology, guidance and navigation, astronomy, physics, and computers. There is much to learn to get ready for space travel.

After training for a year, Mae C. Jemison was officially an astronaut. She was eager to travel into space, but she had to wait her turn. Finally, in 1991, she was selected for the space flight on the *Endeavour*.

Now Mae had to train for the trip. She was chosen to be the science mission specialist. She had experiments to do while in space.

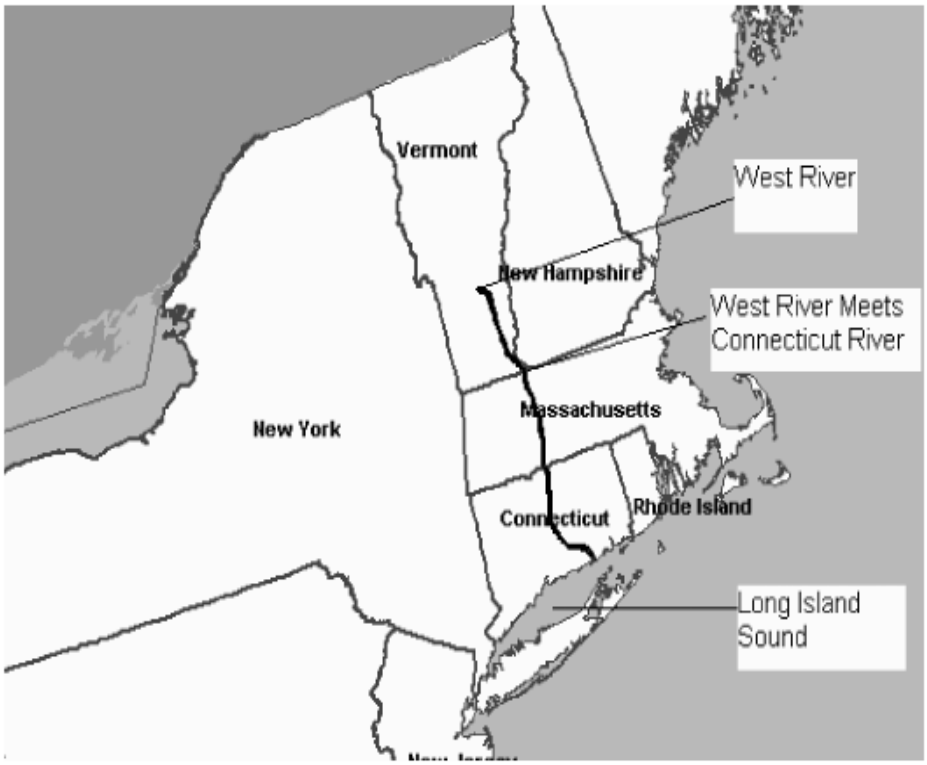
The day finally arrived. As *Endeavour* sped away from Earth, Mae C. Jemison became the first black woman to explore space.

It was a great day for this proud American. She was very happy. Her dream had come true.

Directions: Read the selection.

River to the Sea

by Stephen R. Swinburne



I live beside the West River in Vermont. It's deep enough to swim in and as wide as a two-lane road. I've fished and skimmed stones on the West River. But I didn't know where it began or where it ended. I decided to find out.

Rivers often start in the mountains with no more than a trickle. Rain, melting snow, and water from springs have nowhere to go but down. As trickles follow the easiest paths down, they combine to form brooks. Brooks join to become streams, and streams meet to become rivers. As more and more water joins a river, it gets wider and deeper and faster.

That's what happens to the West River. I followed a map to learn this. I drove into the wooded hills about fifteen miles north of my house. I saw that the West River begins as a dribble, skinny as a pencil. By the time it reaches my town, it has become a river.

Rivers work hard. They're great diggers. The swift current of a river is a watery shovel digging up pebbles, silt, and sand. Rivers are also carriers. They carry lots of rocks and sand downstream.

Rivers are great places to see fish, insects, and other wildlife. Lots of animals and birds live near rivers because there's a good food supply, plenty of drinking water, nesting places, and shelter. To see wildlife, I step quietly. I never know what might be around the next bend—a deer and fawn drinking, a family of ducks, a dragonfly skimming the water hunting mosquitoes. Rivers are a source of life to many creatures.

Most rivers eventually empty into the sea. Once again, I got into my car with a map, this time to see where the West River goes. I followed it through the countryside of southern Vermont to find that it merges with the wide Connecticut River. The Connecticut River flows out of Vermont, south into Massachusetts, then into Connecticut. It finally joins Long Island Sound and the Atlantic Ocean.

The river outside my door is connected to faraway places. It's neat to know that if I launched a sturdy boat into the river by my house, someday it might reach the open sea. That's the best thing about a river. It's water on the move, and it knows just where to go.

Directions: Read the selection.

Little Caribou

by Sarah Fox-Davies

A Baby Caribou Is Born

In the far north, at the edge of the frozen Arctic Ocean, is a land without trees called the tundra. There in early spring, a little caribou calf is born. Her mother, Cow Caribou, urges her to stand on her shaky new legs.

Life in the Tundra

The tundra is bitterly cold. There is no shelter from the howling wind, but Little Caribou drinks her mother's warm milk and grows strong. When she is one week old, Little Caribou is strong enough to run around all day.

A huge herd of caribou cows roams the tundra, and with the cows are lots of other calves for Little Caribou to play with.

Soon the sun shines day and night. Even at midnight it is still light. The grass grows fresh green leaves, and flowers bloom. Cow Caribou eagerly eats the young plants.

The Journey South for the Winter

When Little Caribou is eight weeks old, the summer heat begins to fade. Sharp frosts turn the tundra to red and gold. Soon the tundra will be covered with

ice. It is time for the caribou to move south, toward the forests where they will spend the winter.

Little Caribou has grown small antler spikes, and she is strong like her mother. Together they walk, day after day, and swim through deep, fast-flowing water.

Cow Caribou leads her calf across steep mountain slopes and down sheltered valleys where small trees grow. The herd walks along trails worn deep and smooth by countless caribou that have gone this way before.

When winter comes, thick snow covers the ground. The days get shorter and shorter, until there is almost constant darkness.

Winter in the Forest

Icy winds blow across the frozen lakes, but Little Caribou is warm in her dense fur coat. Cow Caribou digs craters in the snow with her hooves to find plants for them to eat. For many months they roam the forest always moving in search of food.

Then, slowly, light returns to the forest. Cow Caribou senses that spring is coming. It is time to show Little Caribou the way back through the mountains to the tundra. From every part of the forest, other cows and calves are traveling north.

The Journey Home

For days and days, the caribou travel through the mountains. Blizzards blow, hiding the sun, and there is hardly anything to eat.

At last they reach the tundra. Soon the snow melts and grass starts to grow. In a quiet place, Cow Caribou gives birth to a new baby calf.

Little Caribou is almost fully grown. She has survived the long winter in the forest and learned to find food for herself. In her first year she has walked more than two thousand miles. Born to travel, Little Caribou will spend her whole life on the move. Her home is the herd.

Directions: Read the selection.

The Apple-Seed Man

by Paula Appling

Imagine sleeping on a bed of earth with the sky as your roof. Imagine birds and wolves and snakes as your only companions for weeks. Imagine eating nuts and berries and roots that you've freshly harvested and prepared.

John Chapman chose this life for most of his seventy-one years.

John Chapman was born in 1774 in the village of Leominster, Massachusetts, just before the Revolutionary War for independence from Britain began. It was autumn, the time of year when apples are harvested and cider is made.

When he was about six, John's family moved southwest to Longmeadow, Massachusetts. The young boy probably learned his letters in a one-room schoolhouse.

In the 1790s, the United States included the eastern states and land south of the Great Lakes and west to the Mississippi River. The Northwest Territory—the land west of Pennsylvania between the Ohio and Mississippi rivers—was just opening up for settlement. Men who had fought in the Revolutionary War were seeking new opportunities and heading west. John Chapman, now a young man, decided to join them.

John took with him little more than his knowledge of planting apple orchards and his faith.

John dedicated his life to helping people. He planted apple orchards so families who followed him out west would have food. He read to families he visited, or left books with them. He loved children and would talk to them and listen to their stories. He gained the respect of the Indians he met as he traveled the woods and rivers of the new territories.

John gathered apple seeds whenever he could. Sometimes he collected them from **cider mills**. He would separate the seeds from the apple pulp, then wash and dry them. He walked the land that pioneers would eventually come to and planted orchards for their benefit.

If John came upon a pioneer family at a time that was not right for planting, he might leave a bag of seeds with them. The children would always want to know how long it would be until the seeds turned into apples.

John planted trees wherever he went, usually in clearings near rivers or streams. He surrounded his plantings with natural fences of brush and branches to keep animals away.

Sometimes he let the trees grow right where he had planted them. But usually he'd return after two years and take the **saplings**, pack them carefully, and leave them at a **way station**, with a family, or at an inn, in exchange for clothing, food, or money. Sometimes he gave the trees away.

John Chapman planted thousands of apple trees as far west as Indiana. His unusual ways, kindness, and giving heart made him known to pioneers he had never met. You might know him by his other, more popular name: Johnny Appleseed.

Word Bank

cider mills — factories for making apple cider

saplings — young trees

way station — a station or stopping place along a line of travel