Grade 5 Reading OAT Authentic Questions

Acquisition of Vocabulary Standard

Independence Day Reading Passage Questions

1. "The nearer he got to Father, the more he **dreaded** asking for a nickel. He was sure Father would not give it to him."

   What does **dreaded** mean in these sentences?

   A. feared
   B. questioned
   C. avoided
   D. debated

Amber: The Forty-Million-Year-Old Trap Reading Passage Questions

2. "Forty million years ago, when the earth was much wetter and warmer, huge forests with many kinds of trees **thrived** in the far north."

   What does the word **thrived** mean in the sentence?

   A. became shorter
   B. died quickly
   C. grew well
   D. burned down

3. "Millions of years passed, and the climate of the earth **altered** dramatically. The northlands turned cold and icy."

   What does **altered** mean in the sentence?

   A. jumped
   B. raised
   C. stopped
   D. changed

In Time of Silver Rain Reading Passage Questions

4. In the poem, the earth and trees "put forth." What does the poet mean by that phrase?

   A. have
   B. forgive
   C. want
   D. produce

Emmaline's Pearl Reading Passage Questions

5. "It was as big as a pea."

   What figure of speech does the author use in this sentence?

   A. metaphor
   B. simile
   C. idiom
   D. personification

6. " 'Here's the key,' she would say, **retrieving** a small brass key from her pocket."

   What is a synonym for the word **retrieving**?

   A. getting
   B. turning
   C. locking
   D. polishing

7. "The school bus was another **unexpected** problem."

   How does the prefix **un-** change the meaning of the word **expected**?

   A. The prefix **un-** changes the meaning to **not expected**.
   B. The prefix **un-** changes the meaning to **expected again**.
   C. The prefix **un-** changes the meaning to **expected before**.
   D. The prefix **un-** changes the meaning to **over expected**.

Ancient Fuels, Modern Problems Reading Passage Questions

8. "One way is to **conserve** energy. If we burn less fossil fuel, we'll produce less carbon dioxide."

   What is a synonym for **conserve**?

   A. save
   B. ignore
   C. waste
   D. increase

Vision of Mars Reading Passage Questions

9. Mars is a frozen red desert whipped by tornadoes and **fierce** winds.

   Which word is an antonym for **fierce**?

   A. natural
   B. gentle
   C. ancient
   D. warm

10. Some think **jets** of a gas called carbon dioxide (CAR bun die OX ide) caused them.

jet /jĕt/ *n.* **1)** a forceful stream. **2)** a type of airplane. **3)** a very deep color black. **4)** a type of coal.

Which dictionary definition is used to define **jets** in the sentence above?

A. definition 1
B. definition 2
C. definition 3
D. definition 4

Katie Kyle and the Thunderhead Reading Passage Questions

11. The canal was so **parched** that the fish lined up with their towels to take turns swimming in the few remaining water holes.

What is the meaning of the word **parched** in this sentence?

A. The canal was getting bigger.
B. The canal was filling up with water.
C. The canal was very cold.
D. The canal was drying up.

Holding Hands Reading Passage Questions

12. What is the meaning of the word **tilled** in the poem?

A. defended
B. plowed
C. climbed
D. sold

Sneakers! The All Stars of Footwear Reading Passage Questions

13. It wasn't until the fitness **craze** of the 1970s that many people started taking sneakers seriously, though."

Which definition of **craze** is used in the sentence?

craze /krāz/ **1)** *v.* to annoy someone. **2)** *n.* a popular fashion or thing to do. **3)** *n.* a very thin crack. **4)** *v.* to cover in small thin cracks.

A. definition 1
B. definition 2
C. definition 3
D. definition 4

14. These were lighter than flat soles because of all the notches in the waffle pattern. Plus they gave better **traction**, or grip. A new model for sneaker soles hit the pavement."

What word helps define the word **traction**?

A. grip
B. sneakers
C. lighter
D. soles

Mr. No and Miss Rose Reading Passage Questions

15. 'She seemed especially fond of Bobby, though she complained there was too much **commotion** in our house with all the kids running wild."

Which word is an antonym for **commotion**?

A. calm
B. yelling
C. traffic
D. responsibility

16. "Rattling the screen, he jumped up and **batted** at the metal door handle with his paw."

What does **batted** mean?

A. screamed

B. laughed

C. swung

D. looked

Directions: Read the selection.

Independence Day

by Laura Ingalls Wilder

Father was a little way down the street, talking to Mr. Paddock, the wagon-maker. Almanzo walked slowly toward them. The nearer he got to Father, the more he dreaded asking for a nickel. He was sure Father would not give it to him.

He waited till Father stopped talking and looked at him.

"What is it, son?" Father asked.

Almanzo was scared.

"Father," Almanzo said, "would you—would you give me—a nickel?"

He stood there while Father and Mr. Paddock looked at him, and he wished he could get away. Finally Father asked:

"What for?"

Almanzo looked down at his moccasins and muttered:

"Frank had a nickel. He bought pink lemonade."

Father looked at him a long time. Then he took out his wallet and opened it, and slowly he took out a round, big silver half-dollar. He asked:

"Almanzo, do you know what this is?"

"Half a dollar," Almanzo answered.

"Yes. But do you know what half a dollar is?"

Almanzo didn't know it was anything but half a dollar.

"It's work, son," Father said. "That's what money is; it's hard work."

Mr. Paddock chuckled. "The boy's too young, Wilder," he said. "You can't make a youngster understand that."

"Almanzo's smarter than you think," said Father.

Almanzo didn't understand at all. But Father had said that Almanzo was smart, so Almanzo tried to look like a smart boy. Father asked:

"You know how to raise potatoes, Almanzo?"

"Yes," Almanzo said.

"Say you have a **seed potato** in the spring, what do you do with it?"

"You cut it up," Almanzo said.

"Go on, son."

"Then you **harrow**—first you **manure** the field, and plow it. Then you harrow, and mark the ground. And plant the potatoes, and plow them."

"That's right, son. And then?"

"Then you dig them and put them down **cellar**."

"Yes. Then you pick them over all winter; you throw out all the little ones and the rotten ones. Come spring, you sell them. And if you get a good price son, how much do you get to show for all that work? How much do you get for half a **bushel** of potatoes?"

"Half a dollar," Almanzo said.

"Yes," said Father. "That's what's in this half-dollar, Almanzo. The work that raised half a bushel of potatoes is in it."

Almanzo looked at the round piece of money that Father held up. It looked small, compared with all that work.

"You can have it, Almanzo," Father said. Almanzo could hardly believe his ears. Father gave him the heavy half-dollar.

"It's yours," said Father. "You could buy a pig with it, if you want to. You could raise it, and it would raise a litter of pigs, worth four, five dollars apiece. Or you can trade that half dollar for lemonade, and drink it up. You do as you want, it's your money."

Almanzo forgot to say thank you. He held the half-dollar a minute, then he put his hand in his pocket and went back to the boys by the lemonade-stand.

Frank asked Almanzo:

"Where's the nickel?"

"He didn't give me a nickel," said Almanzo, and Frank yelled:

"Yah, yah! I told you he wouldn't. I told you so!"

"He gave me half a dollar," said Almanzo.

The boys wouldn't believe it till he showed them. Then they crowded around, waiting for him to spend it. He showed it to them all, and put it back in his pocket.

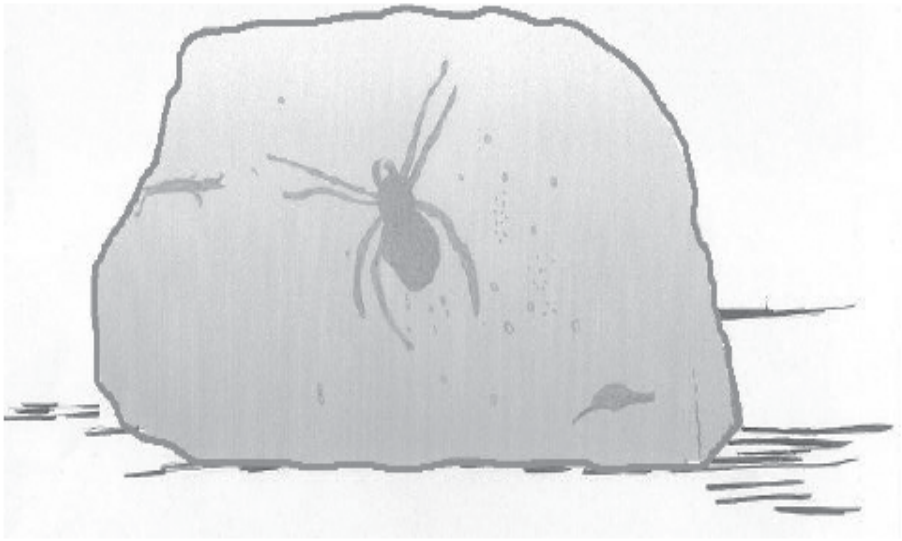
"I'm going to look around," he said, "and buy me a good little pig."

Word Bank
bushel — a measure of dry material
cellar — a room below ground, a basement
harrow — to smooth or break up soil
manure — to apply a material that fertilizes land
seed potato — a potato with buds from which new potatoes grow

Directions: Read the selection.

Amber: The Forty-Million-Year-Old Trap

by Marjorie Jackson



Forty million years ago, when the earth was much wetter and warmer, huge forests with many kinds of trees thrived in the far north. Out of some of these trees, stretching as tall as ten-story buildings, oozed a sticky **resin**. Mosquitoes buzzed through the forests, grasshoppers and crickets leaped, and ants and spiders scurried by the trees in search of food. If they carelessly let a leg or wing touch the resin—*zap!*—they were stuck.

Millions of years passed, and the **climate** of the earth altered dramatically. The northlands turned cold and icy. The giant trees fell, buried under the salt water that now covered the land. Far beneath the water, the globs of resin slowly changed, hardening into solid, glowing pieces of amber.

Still millions of years later, storms at sea broke the amber free and tossed it onto beaches for early cave dwellers to find. The cave dwellers wondered if the strange golden stone, warm to the touch, could be solid sunlight. Using flint and bone tools, they carved pieces of amber into the shapes of animals or the sun and wore them on cords around their necks for protection.

For hundreds of years, people used amber in jewelry or to decorate warriors' weapons; some soldiers braided amber beads in their horses' manes to ensure success in battle. Amber was also ground fine and mixed with honey, oil of roses, and crabs' eyes or claws for use as medicine. Amber mixtures were believed to cure earaches, headaches, and any number of diseases. Even wearing buttons or beads carved from amber was thought to keep a person well.

In the early 1700s, King Frederick I of Prussia had an entire room built from 100,000 pieces of amber of many colors—yellow, orange, red, brown, and even blue and green—all fitted together like a giant jigsaw puzzle. When the sun shone through the windows, **nobles** said, they felt as if they were standing inside a jewel box. The room was used and admired for more than 200 years, but in the 1940s, during World War II, it was taken apart and loaded into boxes for storage in a safer place. The boxes were somehow lost, and where the amber room is today remains a mystery.

Some of the oldest pieces of amber are mined in Appalachia, in the eastern United States. The Baltic seacoast also has large deposits. But the Dominican Republic, in the Caribbean, yields the most pieces with insects, leaves, feathers, and other remains of life.

Some pieces of amber have air bubbles inside that keep the light from passing through, making it look cloudy, but many others are clear like glass. The pieces of amber with inclusions of early life or gas bubbles are the most valuable to scientists. They hold clues about the earth's **ecology** millions of years ago and enable scientists to compare early life forms with today's. More than a thousand kinds of insects have been found preserved in amber, from prehistoric flies that proved to be the ancestors of our houseflies to a 140-million-year-old weevil that lived at the time of the dinosaurs. Whole flights of insects were sometimes trapped in one glob of resin; one two-inch piece of amber has 2,000 ants in it! Although most of the preserved insects are now extinct, their **descendants** may still survive, sometimes in new places. A termite found in Mexican amber now lives only in Australia.

Many natural history museums have pieces of amber on display. Look for them during your next visit. These golden traps, 40 or more millions of years old, are the closest thing we have to snapshots of our ancient past.

Word Bank
climate — the usual weather conditions in a particular region
descendants — people or animals coming directly from an earlier, usually similar, type or individual
ecology — environment or habitat
nobles — people of high rank or birth
resin — a sap-like substance that some trees make to protect themselves when cut

Directions: Read the selection.

In Time of Silver Rain

by Langston Hughes

In time of silver rain
The earth
Puts forth new life again,
Green grasses grow
And flowers lift their heads,
And over all the plain
The wonder spreads
    Of life,
    Of life,
    Of life!

In time of silver rain
The butterflies
Lift silken wings
To catch a rainbow cry,
And trees put forth
New leaves to sing
In joy beneath the sky
As down the roadway
Passing boys and girls
Go singing, too,
In time of silver rain
    When spring
    And life
    Are new.

Directions: Read the selection.

Emmaline's Pearl

by Rhiannon Puck

It was as big as a pea, and when Julia looked at it long enough, it was like looking at the full moon on a clear night. The more she looked, the more Emmaline's pearl seemed to be made of liquid swirling inside a tiny crystal ball. It rested in the center of an old-fashioned silver ring finely **etched** with ivy and spiraling **acanthus** leaves.

There was nothing in the world that she wished to have more than Emmaline's pearl. And though Emmaline had promised to give it to her one day, that day seemed a hundred years away.

Julia and her mother visited Emmaline often, because Emmaline was her mother's **godmother** and the two were "close as nine is to ten," as Gammy Em liked to tell everyone with a smile.

When they visited Emmaline, they always sat in her sunroom and had tea, while Emmaline talked. But after a while, Julia always had to ask, "Can I see the pearl, Gammy Em?"

Julia's mother always shook her head, but on every visit Emmaline consented. "Here's the key," she would say, retrieving a small brass key from her pocket. "You know where it is. Bring it downstairs, dear."

And Julia would take the key upstairs, unlock the **armoire** drawer where Emmaline's pearl was kept, and run back down the steps with the velvet box in her hand. Just holding it felt special. When Emmaline opened the box, she always looked at the ring quietly for a moment before handing it to Julia. "Go on, then," she whispered. "Try it on."

Carefully, slowly, Julia plucked Emmaline's pearl from its satiny slot and slipped it onto her finger. Instantly, she felt different, as if the pearl had some kind of magic power.

"It's a shame your mother won't let you take it," Emmaline said. "But I understand."

Julia's mother reached for Emmaline's hand. "Julia doesn't need it, Em. She has you." That was what her mother always said.

Later, when they were home, Julia asked her mother why she never let her take the ring. Her mother smiled and shrugged. "Sometimes, wishing for something is more fun than having it," she said.

But that didn't make any sense to Julia. "Why?" she asked.

Her mother was thoughtful for a moment, then replied, "People always want what they don't have, but when they get it, it's never what they expect."

A few weeks later, Emmaline had to go to the hospital to have some surgery, and Julia's mother was frantic. The day before the surgery, Julia and her mother went to Emmaline's to help her pack and get things organized. There was no tea served in the sunroom that day, but something incredible happened. Emmaline gave Julia the ring.

"I know you love it, dear," Emmaline told her, "and it's time for you to have it."

"I'll wear it forever, Gammy Em!"

"I know you *want* to," Emmaline replied quietly.

That night was the first time Julia had ever worried about anything she owned. She was afraid to take the ring off because it could slip down the drain or disappear into the heating vent.

The school bus was another unexpected problem. At first, Julia was proud of wearing Emmaline's pearl, but she soon felt uncomfortable. One girl asked to borrow it, and another said it wasn't real and would turn Julia's finger all green by the end of the day. Julia tucked her hand in her jacket pocket and decided they were just jealous. But her best friends behaved the same way once she got to school.

Carrie accused her of being stuck-up when she saw the ring on Julia's finger. Miriam kept asking to try it on, but after a few times, Julia had to say, "If I keep taking it off, it'll get lost!"

Emmaline's pearl was a problem in her classes, too. In art class, Julia had to fake a stomachache so that she wouldn't get the ring all full of clay. She could have taken it off and slipped it in her pocket, but she was afraid she might lose it. In gym class, she pretended to have a headache, since there was no way to climb the parallel bars or use the monkey rings with Emmaline's pearl on her finger.

On the way home on the bus, she kept her hand deep in her pocket so no one would see the ring and tease her about it. When she got home, she was exhausted.

"What in the world happened today?" her mother asked when Julia came in and plopped down on the sofa.

"What good is having the ring if wearing it isn't any fun?" Julia complained.

Late that afternoon, they went to visit Emmaline at the hospital. "They said I can go home tonight!" Emmaline exclaimed as Julia and her mother came into the room.

"Since you're all right now, can I give the ring back?" Julia asked.

Emmaline looked at her steadily. "But I thought you wanted it more than anything," she said.

Julia shrugged. "I guess I changed my mind," she answered, slipping Emmaline's pearl from her finger. "All I really wanted was to be special," she confessed.

"But you are, dear!" Emmaline said as she took the ring and put it on. "And always *have* been. Now, let's go home and have some tea!"

Word Bank
acanthus — a type of herb or small shrub used in a design pattern
armoire — a large, often showy, cabinet or wardrobe
etched — pressed into or imprinted with
godmother — close family friend who is like or is a relative

Directions: Read the selection.

Ancient Fuels, Modern Problems

by Rebecca L. Johnson

Fossil fuels power our modern way of life. Coal-burning power plants produce much of the world's electricity. Cars and trucks burn gasoline and diesel fuel, which are made from oil. Natural gas heats many homes and offices, and electricity runs air conditioners that cool them.

Although fossil fuels can be very useful, burning fossil fuels adds billions of tons of **carbon dioxide** to the air each year. To slow down global warming, some people say we need to quickly reduce our use of these fuels. Other people think that reducing our use of fossil fuels would be a mistake.

Worldwide, some countries burn a lot more fossil fuel than others do. The high-demand energy users release large amounts of carbon dioxide into the world's atmosphere. The United States, for example, pumps out roughly one-fourth of the world's carbon dioxide emissions.

To Burn or Not to Burn

Most people agree that burning fossil fuels affects **global warming** and that global warming will affect Earth's climate. But what do we do about it? People have very different opinions. Some people think that the world should take a big step toward slowing global warming. How? By reducing the amount of carbon dioxide released into the atmosphere. They suggest several ways to do this.

One way is to conserve energy. If we burn less fossil fuel, we'll produce less carbon dioxide. A second way is to put special devices into power-plant smokestacks and car and truck exhaust systems. These devices capture more carbon dioxide before it is released into the air. A third way is to focus on developing **renewable energy sources**, such as solar energy and wind energy, that could replace fossil fuels and wouldn't add carbon dioxide to the air.

When should we take these actions? "Right now!" say people who want to reduce fossil fuel use. Even though questions remain about the effects of global warming, they say that it's better to act quickly before things get out of control.

Not everyone agrees, however. Those who oppose limiting our fossil fuel use argue that fossil fuels are plentiful and relatively cheap. Reducing the use of fossil fuels would cause unnecessary hardships. They say that fitting power plants and vehicles with carbon dioxide-trapping devices will drive up the cost of electricity and transportation. It also will cost hundreds of billions of dollars to develop renewable energy sources that can truly replace fossil fuels. Who will pay for all these changes?

Some people who are against reducing fossil fuels also point out that global warming has been slow to happen. Why be hasty in making big, expensive changes? Scientists still can't say without a doubt what will happen as the world warms. Shouldn't we wait to take action until scientists know for sure, they ask?

Dramatic changes due to global warming may or may not be part of our future. While there's evidence that global warming is affecting our world, there are still many questions about how extreme those effects could be. Many questions also remain about what we should do about global warming. Should we reduce

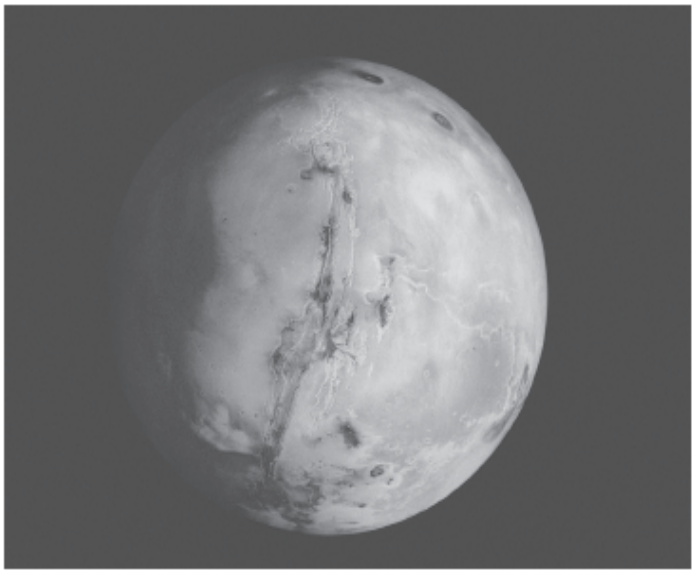
the amount of carbon dioxide in the air as quickly as possible? Or will cutting back on fossil fuel use be too costly? Scientists continue to search for answers to these questions. In the meantime, the debate surrounding global warming keeps heating up!

Word Bank
carbon dioxide *(KAR-buhn die-AHK-side)* **—** a heat-trapping (greenhouse) gas in the atmosphere produced by living things and by burning **fossil fuels —** fuels, such as coal, oil or natural gas, that are formed from the remains of ancient plants and animals **global warming —** an increase in the Earth's average surface temperature **renewable energy sources —** sources of energy, such as solar or wind energy, that do not get used up

Directions: Read the selection.

Visions of Mars

by Nancy Finton



What's happening on Mars? It's hard to tell. After all, Mars is more than 35 million miles from Earth. That makes it difficult to study. People can only catch glimpses of the planet through telescopes and in photos shot from spacecraft. Then—using science, imagination, or both—they try to figure out what's going on out there. Throughout history people have come up with different ideas about Mars.

Peering through a telescope in the 1800s, an astronomer thought he saw lines crisscrossing Mars. People decided that these lines were canals, or waterways, built by intelligent creatures to direct water across the planet's dry soil.

Other Mars watchers noticed that the red planet sometimes faded to brown, then grew red again. What could cause this? Some figured they were looking at **Martian** plants blooming and dying as the seasons changed.

Today: A Red Dusty Desert and a Big Mystery

NASA has been exploring Mars for nearly 40 years. Spacecraft have orbited, or looped, the planet to take pictures. And robots have explored the Martian surface and sent back electronic information. Based on these findings, scientists

can agree on this: Mars is a frozen red desert whipped by tornadoes and fierce winds. Craters and ancient volcanoes spot its surface.

Experts also agree that the "canals" people thought existed are actually natural peaks and valleys, seen from millions of miles away. And the "plant blooms" are colorful dust storms.

To see scientists disagree, just ask about water on Mars. Water is a huge question because it could be a sign of Martian life. "On Earth, almost wherever there is liquid water, there is life," says NASA's Pascal Lee.

Until a few years ago, most scientists agreed that water had flowed over Mars, but not for millions or billions of years. New photos, however, have changed some minds.

Around 1996, a spacecraft called Mars Global Surveyor (sir VAY er) snapped photos as it began to orbit Mars. The Global Surveyor images showed unusual **gullies**, or narrow valleys, often created by flowing water. Scientists had seen ancient Mars gullies. But these gullies looked newer. They weren't marked by ancient craters or worn down by wind.

Some experts think that streams of water carved the gullies. That means that Mars may have experienced some sort of liquid water flowing on the surface in more recent times. "Thus the question of life on Mars even at present cannot be ruled out," Lee says.

Not everyone agrees with Lee. The problem is, water wouldn't stay liquid on today's Mars. The average temperature of minus 27°F would turn liquid water to ice. Or Mars's low air pressure would quickly turn the liquid into a gas.

So how could water flow? "It's possible that Mars was warmer a few hundred thousand years ago," Lee says.

Other scientists still doubt that there was water less than a million years ago. They are seeking new reasons for the gullies. Some think jets of a gas called carbon dioxide (CAR bun die OX ide) caused them. The answer may come from Odyssey (AH dah see), a spacecraft now orbiting Mars. Its instruments are designed to detect signs of water and other chemicals near the surface of Mars.

2017 and Beyond: A Home Away from Home?

When will humans reach Mars? It's anyone's guess. "A long time ago I bet that the first landing would happen in 2017. I'm sticking to that," Lee says. "Scientifically, it's still possible."

During the next 10 years, NASA plans to send robots to move across the dusty surface of Mars. Robots may even collect the first rock samples to be rocketed back to Earth. But many think that robots can't solve the mysteries of Mars. "Humans are the explorers. They ask the questions," Lee says. "Robots are just some of their tools."

Yet people aren't rushing to Mars. For one thing, getting there takes six months. And once there, people would need to guard against dangers such as poisonous air and temperatures falling to minus 160°F.

Still, some scientists dream of building a research station on Mars. Astronauts would live in inflatable houses and grow food in greenhouses. They would wear airtight suits and explore the planet in vehicles called **rovers**.

While on Mars, astronauts could make breathable air with a machine that pulls oxygen out of the thin Martian atmosphere. They could also use chemicals in the atmosphere to make fuel. "Even the first Mars mission might make rocket fuel to return to Earth," Lee says.

In the more distant future, others hope that humans will be able to live and vacation on Mars. There are even ideas for warming up the planet and giving it a more breathable atmosphere. Will you ever be able to buy a ticket to Mars? For the moment, you'll have to wait and see.

Word Bank
gullies — long, shallow ditches or valleys
Martian — something that exists on or comes from the planet Mars
NASA — National Aeronautics and Space Administration
rovers — vehicles, like cars, that are used on the moon and planets to get around

Directions: Read the selection.

Katie Kyle and the Thunderhead

by Carol Ottolengh-Barga

Who was Katie Kyle? Do you mean to say you've never heard of the bravest, most fantastic canal-boat captain ever to navigate the Miami-Erie Canal?

Why, she could outswim, outjump, outclimb, and outpull anyone without even getting out of bed in the morning.

No one knows where Katie came from. She just appeared one day, floating up the canal on her **barge**, *The Freedom*. Her hair was like a bright orange sunset, and she was as strong as any six ordinary boaters put together.

She was tender-hearted, too. Many a night, when the mules were worn out from hauling *The Freedom* up the canal, Katie would go down the **towpath** after them. She'd carry them back to the boat, snuggled up in her arms like little babies. Then she'd tuck each mule in its stall and sing its favorite towing song to put it to sleep.

Her lead mule, Sal, was the biggest, strongest, smartest mule on the canal. Sal stood fifteen feet high at the shoulder, and she ate a wagonload of hay every day. Her towing **harness** was so heavy that it took three crew members to put it on her. Once she was harnessed, well, Sal could outpull any four teams of ordinary mules combined.

Well, with Sal as lead mule, *The Freedom* was the fastest boat on the canal. Everyone knew that Katie and her crew always delivered their cargo on time. But once, during the hot, dry summer of 1849, *The Freedom* came mighty close to being late.

That was the summer it didn't rain for forty-three weeks. The canal was so parched that the fish lined up with their towels to take turns swimming in the few remaining water holes. Boats were **mudlarked**—that's stuck in the mud—all the way from the Ohio River up to the four Great Lakes. (There were only four Great Lakes back then; little Lake Ontario hadn't been formed yet.)

Katie was worried. If it didn't rain soon, *The Freedom* couldn't deliver the lumber and steel that folks up north needed to build that **newfangled** railroad they were all talking about. Every once in a while storm clouds appeared on the horizon, but the wind always pushed the clouds away from the canal. It didn't rain, and *The Freedom* stayed mudlarked.

One morning after Katie had finished eating a small breakfast—a dozen apples, thirty-two pancakes, fifty-three pieces of bacon, and six pots of coffee—she called her crew together.

"It's time we got moving," she told them. "But that won't happen until we get some rain. So I'm gonna go find a rain cloud and bring it back here."

Katie mounted Sal, and the two galloped along until they came to a forest. Katie looked at the trees and sighed.

She climbed the tallest tree she could find, a scruffy little pine that only reached a mile or so into the sky. There she stayed, waiting for a likely looking rain cloud to come along.

Katie sat in the tree for four days, watching the sky and fighting off mosquitoes the size of small cows. One of her crew finally brought her an extra-

large frying pan to swat them with. At last, she spotted a cloud. It was a **humdinger** of a thunderhead, dark and billowing and bursting with rain. But the wind was pushing it north, away from *The Freedom*.

Suddenly, another mosquito buzzed by. "Not so fast!" Katie yelled, grabbing it. "We're going after that rain!" The mosquito squirmed and bucked and tried to bite, but Katie jumped onto its back and twisted its ears until it realized who was boss. Then Katie and her mosquito flew after the cloud.

Sal galloped along behind them. Her hoofs pounded the ground so loudly that people nine miles away thought they heard thunder and ran to bring their laundry in.

Katie caught up with the cloud and gently looped Sal's reins around it. Then she and Sal towed it back to *The Freedom*. When the crew saw that huge thunderhead, they cheered and threw their hats high into the air. Some of the men were so happy that they did a little dance right there on the deck of *The Freedom*.

Katie began to squeeze the thunderhead just like it was a giant sponge. It began to rain—tiny drops at first, then huge sheets of water. The rain soon filled the canal, and the extra water sloshed over the sides. Katie wrung so much rain out of that cloud that Lake Erie overflowed and formed the fifth Great Lake, Lake Ontario.

When she'd squeezed every drop from the cloud, Katie let it go. She and Sal boarded *The Freedom* and sailed up the canal with their cargo of lumber and steel for the railways. The railroaders were so delighted to see Katie on time that they threw a barn dance in her honor. There was dancing and laughing and fiddle playing, and so much food on the tables that the whole state of Ohio sagged from the weight.

The next day, Katie and her crew waved good-bye to the railroaders and loaded *The Freedom* with new cargo. They then floated off downstream in search of more adventures.

Word Bank
barge — a flat-bottomed boat
harness — the straps by which you can pull a load
humdinger — one that is extraordinary
mudlarked — a boat grounded because the water level is low
newfangled — of the newest style
towpath — a path traveled by people or animals towing boats

Directions: Read the selection.

Holding Hands

by Ann Whitford Paul

Grandfather's fingers
wrap around my hand
and warm me like a mitten.
I feel his fat knobbed knuckles
and see his veins scribble
all the way into his sleeve.

Walking along,
I listen.
He talks about his life on the farm.
His voice grows soft—
so soft—
I cannot hear all the words.
But, in his hand,
I can feel
each cow he milked,
each bale of hay he tied,
and each row of earth he tilled.

Directions: Read the selection.

Sneakers!

The All-Stars of Footwear

by Patrick Joseph

Look down at your feet. What are you wearing on them? Odds are the answer is sneakers. Sneakers are everywhere. But how much do you know about this popular footwear? How were sneakers invented? What are they made of? And why are they called "sneakers" anyway?

Rooted in Rubber

The story of sneakers started about 500 years ago. That's when European explorers in Central and South America noticed Native Americans playing with an unusual ball. The ball was made from a milky, white liquid that oozed out of the *cahuchu* (ka OO choo) tree. The liquid, known today as latex (LAY tex), hardened as it dried.

Native Americans had practical uses for latex too. They spread the sticky liquid on their feet. Once it dried, it formed a very thin "shoe" that protected their feet from water. They also made waterproof bottles with latex.

When explorers brought latex samples back to Europe in the early 1700s, scientists started searching for their own ways to use it. In 1770, an English chemist named Joseph Priestley discovered that the gummy stuff could rub out pencil marks. People dubbed it "rubber," and the name stuck.

The Right Stuff

By the early 1800s, manufacturers in the United States and Europe had found many uses for rubber. They used the stretchy, waterproof stuff for raincoats, hoses, elastic bands, and more. But rubber wasn't very good for making most things. It got too brittle in the cold and too sticky in the heat.

That changed in 1839. An inventor named Charles Goodyear mixed rubber and a smelly yellow chemical called sulfur. Then he accidentally spilled the mixture onto a hot stove. The resulting glop stayed firm and stretchy whatever the temperature. It was called vulcanized (VUL can ized) rubber, named after Vulcan, the Roman god of fire.

Sneaking Around

A few years later, manufacturers teamed vulcanized rubber soles, or shoe bottoms, with a tough fabric called canvas. The result was comfortable, lightweight shoes. Up until then, almost everyone wore leather shoes with hard soles that clomped loudly with each step. The new rubber-soled shoes were very quiet. You could easily sneak around in them, so people started calling them "sneakers."

At first, sneakers weren't very popular. For one thing, they were expensive. And people were more excited about using vulcanized rubber to make tires for bicycles—and, later, cars. But in 1916, a rubber company introduced a simple sneaker called Keds. Its price was low, so many people could afford a pair. Keds were a huge success.

A year later, another company called Converse created the first basketball sneaker. The All Star model featured rubber soles that kept players from slipping on the court. They also had canvas tops that went up around the ankle for good support. Sneakers were off and running.

Stepping Up Design

It wasn't until the fitness craze of the 1970s that many people started taking sneakers seriously, though.

Track coach Bill Bowerman was one of these people. He realized that if he could create lighter sneakers, his runners would save energy. In fact, shaving just

one ounce off the shoes would help. The runner's legs would lift 200 fewer pounds over the course of a mile. That could help his athletes win races.

One day in 1971, inspired by his breakfast, Bowerman poured liquid rubber into his wife's waffle iron, and let it harden. The experiment ruined the waffle iron. But it resulted in the first "waffle soles." These were lighter than flat soles because of all the notches in the waffle pattern. Plus they gave better traction, or grip. A new model for sneaker soles hit the pavement.

Modern Wonders

Today, sneakers are big business. In 2000, people in the United States spent more than $15 billion on them. That means they purchased more than 405 million pairs. Modern sneaker designs jump far beyond the first canvas-and-rubber model.

Whether you wear sneakers to play sports or for fashion flair, the choices today are endless. So the next time you get a new pair of sneakers, take a good look at how they're made. Think about what goes into them and all the history behind them. Then slip them on and take off!

Directions: Read the selection.

Mr. No and Miss Rose

by Amy Gerstin Coombs

Bobby came to live with us the same week we moved. He was a boy of five who never laughed. When I talked to him, he'd stare at me with dark eyes, absorbing every word but saying nothing. He seemed to feel even sadder and more lost than I felt.

At first Bobby and I spent our time sitting on the gray front steps and feeding bread to the pigeons. Eventually, though, I made new friends, too. While we hopscotched and jumped rope on the sidewalk, Bobby watched from the stoop.

In the house to our right lived an older woman I was told to call Miss Rose. I waved to her every morning as she caught the bus to her job, yet she never invited me into her home, and I never saw anyone visit her on weekends.

One morning I was sitting outside with Bobby when the front door opened and a large, black-and-white tomcat limped out. The cat managed to jump up onto the porch railing. Bobby gave a small gasp of excitement.

"You want to pet the cat?" I asked. He nodded his head yes. "Go slowly so you don't scare him," I said.

The cat sat there eying us as we approached, but as soon as Bobby lifted his hand, the animal leaped off the railing and scuttled behind a geranium pot. Just then the front door opened again, and out came Miss Rose.

"That there's Mr. No," she said. "Might take him awhile to cotton to you."

"Why do you call him Mr. No?" I asked.

"Used to tell him, 'No, no, don't do them naughty things' but he just turned a deaf ear! Stubborn old mule." She laughed.

"How old is he?"

"Bless me, how old . . .? Thirteen come this July, I believe."

Miss Rose laughed again, a loud, warm, ringing laugh like a song. "Well, we are old, we two! But he keeps me good company. Mr. No's like my own child."

"Yes, sirree, Mr. No thinks he's just like people—it's broiled fish or nothing for dinner every night!" She clapped her hands together. "Now how'd you like to pet him?" She scooped up Mr. No and held him out to Bobby and me.

We were friends with Mr. No after that, and Miss Rose began visiting Sunday afternoons. She seemed especially fond of Bobby, though she complained there was too much commotion in our house with all the kids running wild. Also, she complained about Mama playing the piano every night while we sang along.

"I like music," Miss Rose would say. "But your piano's smack-dab up against the wall to my bedroom, and I have to get my rest."

Pop figured Miss Rose was just used to quiet living and set in her ways. So he moved the heavy piano to another wall.

One Sunday during Miss Rose's usual visit, Mr. No came nosing around the back screen door. We called hello, and Bobby went outside to pet him. It was hot, and soon Bobby came in for some lemonade, leaving Mr. No meowing at the door.

But meowing wasn't enough for Mr. No. Rattling the screen, he jumped up and batted at the metal door handle with his paw.

Mama laughed and said if Mr. No wanted to come in that badly, so be it.

Bobby ran to open the screen door, and Mr. No slunk in. He sniffed the chair and rugs, then examined the corners. Bobby sat on the floor and solemnly observed the cat's progress.

We turned our attention back to Miss Rose, who had been telling a story about her childhood in the Blue Ridge Mountains.

Suddenly I heard Bobby give one of his excited gasps. Mr. No had jumped onto Mama's piano. I looked at Mama quickly to see what she would do, but she sat there with an amused expression on her face.

Mr. No took one step onto the D key. *Plink!* Then another onto the A key. *Plink! Then plink plink plink plink*—he skittered across the keys.

Mama and Miss Rose burst out laughing.

"He's playing the piano!" Mama said.

We all laughed, but one laugh rose above everyone else's. It was Bobby's, high-pitched and jagged, as though rusty from lack of use.

He laughed and echoed Mama, "Mr. No's playing the piano!"

Miss Rose and Mama looked at Bobby, and then they looked at each other

"I'll make you a deal," Mama said to Miss Rose. "You let me move my piano back to its rightful spot, and I'll let Mr. No come over and play the piano anytime he wants."

Miss Rose's eyes narrowed. "I need my peace and quiet," she said. "But I suppose a little less quiet is worth it to hear Bobby laugh."

Bobby ran over and kissed Miss Rose on the cheek.