Read this passage. Then answer the questions.

Just Listen

by Kathleen Weidner Zoehfeld

1 Psssst! Your friend leans close and whispers a secret. Woof! Woof! His dog barks as a car zooms past. Beep beep! The driver honks her horn to say hello. People and animals and things are making sounds all the time. I hear birds singing. Is that rumbling sound thunder? Some sounds are as quiet as a leaf rustling in the breeze. Others are so loud you might cover your ears.

2 Pluck a guitar string or a rubber band stretched between your fingers. You see the string or rubber band go back and forth very fast. It is vibrating. You can't see it, but the vibration makes waves in the air, like you make waves in a bathtub of water when you waggle your hand up and down quickly.

3 Every sound is made by vibrations. Place your fingertips lightly on the front of your throat. Say or shout a few words. Feel the tiny, quick, shaking movements? That is the vibration of the vocal cords in your throat. It makes the sound of your voice.

4 Your ears are sound wave collectors. Sit very quietly. Listen to all the different sounds you can hear.

5 The sound waves your ear collects travel through your ear canal. At the end of the canal is a thin piece of skin called your eardrum. The sound waves make your eardrum vibrate. Special nerve hairs further inside your ear pick up the vibrations. They send signals to your brain. Your brain makes sense of all the sounds you hear. The faster your eardrum vibrates, the higher the sound you will hear. If the vibration is slower, you will hear a lower sound.

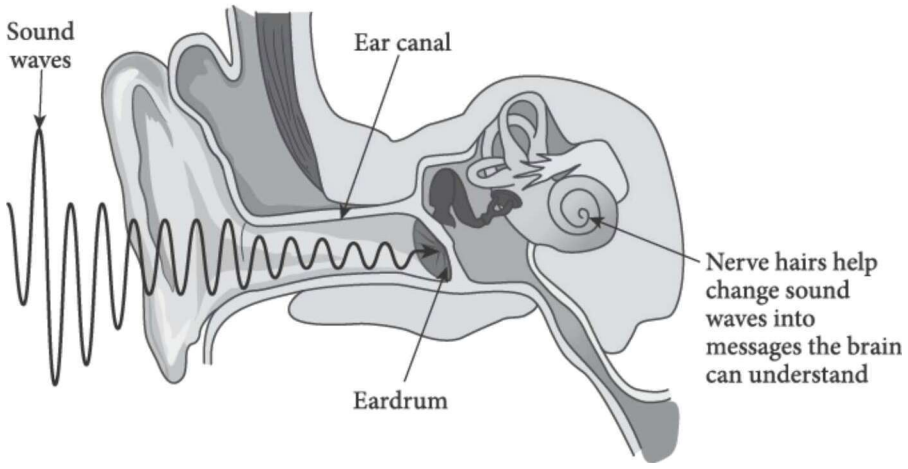
6 Sound waves travel not only through air but also through water. They can even travel through solid things, like wood. Knock on your table top. Listen to the sound. Now put one ear down on your table and knock again the same way. Does the knock sound different? Sound waves are traveling to your ear through the table top. They travel even faster through wood or metal than they do through air.

7 In outer space, there is no air. And guess what. There are no sounds, either, because there is nothing for sound waves to travel through. If an astronaut bangs a hammer on the outside of a spaceship, people inside the spaceship may hear it. But there will be no sound outside the ship—no matter how hard the astronaut hammers! Because there is no air, the hammering creates no sound waves. There is only silence.

8 Sometimes your ear collects a sound twice. If you make a wave of water in the tub, it will go to the edge and bounce back. Sometimes sound waves bounce back, too. If you clap your hands in an empty room, you hear the clap as soon as your hands come together. But you may hear it again, a split second later, as the sound waves travel to the wall and bounce back to your ear. It's called an echo.

9 The world is full of sounds. Just listen.

HOW EARS AND HEARING WORK



1. What question does paragraph 3 help to answer?

   a) How do ears take in sounds?

   b) What do eardrums do?

   c) How do noises travel?

   d) What do sounds feel like?

2. Which sentence explains why there are no sounds in outer space?

   a) Sound waves cannot travel fast enough to be heard in space.

   b) Sound waves cannot bounce off things in space.

   c) There is no air in space for sound waves to travel through.

   d) There are no people or animals in space to hear sound waves.

3. What happens *right after* sound waves cause the eardrum to vibrate?

   a) The brain makes sense of what is heard.

   b) Nerve hairs send signals to the brain.

   c) Sound waves travel through the ear canal.

   d) Some sound waves cause lower sounds.

4. Which phrase from the passage *best* explains the meaning of "silence" as it is used in paragraph 7?

   a) " 'I here are no sounds" (paragraph 7)

   b) "Because there is no air" (paragraph 7)

   c) "sound waves bounce back" (paragraph 8)

   d) "clap your hands in an empty room" (paragraph 8)

5. Which sentence *best* states the main idea of the passage?

   a) Some noises are loud and others are quiet.

   b) Sound waves do not travel through all things the same way.

   c) Vibrations create sound waves that let us hear noises.

   d) There is no air or sound in outer space.

6. Based on the passage, what does the author *most likely* think about how people hear?

   a) Learning how people understand sounds is very interesting.

   b) It is strange that all sounds do not return to where they start.

   c) It is hard to find out how people make sense of sounds.

   d) The fact that there is no sound in space is a problem.

Pioneer Fun

by Kerrily Sapet

1 Can you imagine life without video games or trips to the mall? For pioneer children growing up in the 1800s, the nearest town could be days away by horseback or covered wagon. Trips to the town store were treats for children, as families might only visit them a few times a year. Inside the store, pioneer children glimpsed toys, but none that ran on batteries or electricity.

2 Town stores featured candy, jump ropes, marbles, books that were designed to teach children good behavior, china and paper dolls. But even these simple toys were expensive. Most pioneer families had little money for fun and games. Parents needed to spend their hard-earned money on items that they couldn't make themselves, such as tools, nails, and shoes.

3 Without store-bought toys, pioneer children made their own fun out of what they had. This could be difficult too, as pioneers wasted nothing. Families used every precious item. They braided small scraps of fabric into rugs, made jelly from apple peels, and wrote with homemade ink created from water and soot. Short on money and supplies, kids used their imaginations, creating toys out of stones, sticks, buttons, cornhusks, wood, broom straws, and scraps of fabric.

4 Pioneer children made dolls, simple wooden tops and whirling toys, shaped marbles and beads out of clay, and played counting games. They created their own fun, making stepping stone bridges, sliding on frozen streams, and inventing new games to play. Some of the games they played have been memorized and handed down from generation to generation and are still played today, like hopscotch, jump rope, hide and seek, and "Mother, May I?"

5 Today, pioneer crafts and games are just as much fun. Step back in time and try your hand at making these toys from over 100 years ago.

WHIRLIGIG

Pioneers were definitely handy with a needle and thread, as clothes, blankets, pillows, and most other items were made by hand. Frontier children made this toy if their mother had an extra button. If she didn't, they might have been lucky enough for their father to whittle them a button, and then the same toy was called a buzzsaw.

Stuff You Need

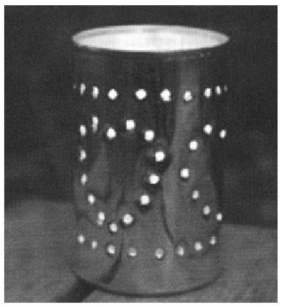
- piece of string twice as long as your arm
- large button with two holes

Make it:

1. Thread the string through the buttonholes. Tie the ends in a knot, forming a loop.
2. Hold each end of the string, so that the button is in the middle.
3. Swing the button in a circle to wind up the string.
4. Pull your hands apart and push them together again. The button will whirl and sing as it swings.

TIN CAN LANTERN

Pioneers had no electricity so after sunset and before sunrise they used candlelight. To carry candles they used lanterns, which lit the inside of their dark barns and cabins, but protected against fire.



Stuff You Need (Adult help is suggested)

- empty tin can (any size will work, just make sure it doesn't have sharp edges)
- hammer
- different size nails
- 12-inch long piece of wire

Make it:

1. Fill a can with water and place it in the freezer until the water is frozen. The ice will give you a hard surface to hammer against.
2. Draw a pattern on the outside of the tin can.
3. Use the hammer to punch holes in the can with the nails, according to your pattern. The more holes you make, the more the candlelight can shine through.
4. Make two nail holes near the top of the can on opposite sides for stringing a handle.
5. String the wire through the holes at the top. Wrap the ends of the wire around the holes a few times to secure the handle.
6. Place a small candle or tea light on the bottom of your lantern. Watch for the interesting shadows it will create!

7. Which information *most* contributes to the organization of paragraph 1?

a) the comparison to the toys of today

b) the explanation of the problem of transportation

c) the mention of the cause for only a few trips to town

d) the use of words and numbers that indicate periods of time

8. Which sentence gives the *best* evidence that readers can relate the article to their own lives?

a) "Town stores featured candy, jump ropes, marbles, books that were designed to teach children good behavior, china and paper dolls." (paragraph 2)

b) "Without store-bought toys, pioneer children made their own fun out of what they had." (paragraph 3)

c) "Some of the games they played have been memorized and handed down from generation to generation and are still played today, like hopscotch, jump rope, hide and seek, and 'Mother, May I?' " (paragraph 4)

d) "Step back in time and try your hand at making these toys from over 100 years ago." (paragraph 5)

9. Which sentence *best* supports a main idea of the article?

a) "For pioneer children growing up in the 1800s, the nearest town could be days away by horseback or covered wagon." (paragraph 1)

b) "Most pioneer families had little money for fun and games." (paragraph 2)

c) "Without store-bought toys, pioneer children made their own fun out of what they had." (paragraph 3)

d) "Today, pioneer crafts and games are just as much fun." (paragraph 5)

10. In the "Whirligig" instructions, which step relates to positioning an object?

a) step 1 b) step 2 c) step 3 d) step 4

11. Step 1 for making a tin can lantern is helpful because

a) nails will not puncture the hard surface created by the ice inside

b) it allows the lantern maker to avoid smashing in the side of the can

c) a hard surface will allow the lantern maker to draw detailed patterns

d) it allows the lantern maker to avoid scratching the surface of the can

12. Which definition of "secure" *best* matches its use in step 5 of "Tin Can Lantern"?

a) to remove from danger

b) to get for oneself

c) to protect an area

d) to attach firmly

13. Which object was *most likely* useful for the entire family?

a) dolls

b) whirligigs

c) tin can lanterns

d) clay marbles and beads

Read this story. Then answer the following questions.

Yasmeen's Turn

by Carol Fraser Hagen

1 Yasmeen squirmed at her desk. She felt sweat beads forming along her neck.

2 Mrs. Cross, Yasmeen's third grade teacher, announced, "Boys and girls, you have been learning about world customs. Be ready to share one of your family's customs, tomorrow:'

3 After school, Yasmeen dragged her backpack along, thinking about the day's assignment. *"I'm the only Indian student in my class,"* she thought, *"what will everyone think about my family's customs?"*

4 At home, Yasmeen moped through the kitchen door. Her heart fluttered when she saw her *amma*, her mother, busily crushing henna leaves.

5 "How was school today?" her *amma* asked, in her soft Indian accent.

6 "Fine" Yasmeen said. She dropped her backpack and slid into a kitchen chair.

7 "Ready for *Eid-ul-Fitr* tonight?" Amma smiled.

8 Yasmeen shrugged. Normally, she'd be tickled with excitement inside when her aunts, uncles and cousins came to celebrate the end of Ramadan, the ninth month of the Islamic year. This holy month is observed with prayers and fasting during daylight hours.

9 Yasmeen slid down further in her seat. She twirled a strand of her long hair around her finger, while *Amma* crushed more leaves into a powder. *"What am I going to share tomorrow?"* Yasmeen wondered.

10 Later, Yasmeen explored the house, trying to find an idea for her assignment. She found her *abba's* Koran. She flipped through the worn pages of her father's leather-bound book. Maybe I'll take this to school, she thought.

11 But then she shook her head. The Koran isn't a custom. She carefully laid down the holy book. Anyway, *Abba* would never let me take it to school.

12 A beautiful *salwar kameez* hung on Amma's bedroom door. *Salwar kameez* is a long-sleeved shirt and baggy pants, with a thin, silky shawl. All three are ornately decorated with sparkling beads, sequins and colorful embroidery, in a variety of colors. The colorful sequins and beads on *Amma's* dress and shawl glistened. Tonight, *Amma* would wear her new dress to the party.

13 *Maybe I'll wear my* salwar kameez *to school. Wrong! Everybody might laugh at me.* Tears filled Yasmeen's deep brown eyes as she tried to figure out what to share.

14 Yasmeen walked into the kitchen. Leaning in the doorway, she wiped a tear from her cheek. She watched *Amma* stir henna powder into a smooth paste, adding lemon juice and tamarind water. *Amma* then filled cones with the henna paste, to be used at the party.

15 Yasmeen coiled her hair around her pinkie. *I'll ask Tahira. She'll know what I can share*, she thought.

16 "I have to share a family custom tomorrow," Yasmeen said, peeking into her older sister's bedroom. Her eyes explored the top of Tahira's dresser. It overflowed with sparkling earrings and necklaces. Mixed among the other jewelry, golden bangles shimmered.

17 "Show some jewelry," Tahira suggested, jangling several shiny bangles on her wrist.

18 "I guess" Yasmeen said, tugging at strands of her hair. "Except, everybody wears jewelry."

19 That night at the party the aroma of herbs from the henna filled the living room. All the girls and ladies in their glittering dresses gathered around the sofa to visit and have their hands painted with *mehndi* (henna paste).

20 It was Yasmeen's turn. With a cone of henna paste, Amma painted tiny flowers, paisley designs, and intricate patterns on Yasmeen's hands.

21 Seconds later, Yasmeen sat straight up. "That's it," she blurted out, *"Mehndi!"*

22 At school the next day, Yasmeen waited for her turn to share. Her face didn't blush. She didn't even feel hot. *I'm not nervous anymore, she thought.* With a wide smile, Yasmeen stood before the class.

23 "On special Muslim holidays," Yasmeen explained, "it's an Indian tradition to paint women's hands with intricate *mehndi* designs. Last night, my mother painted my hands," Yasmeen proudly displayed the delicate curly cues, tiny flowers, and paisley patterns on her hands. Yasmeen also held up a bowl of crushed henna leaves and a henna-filled cone, for the class to see. Yasmeen then described how her mother prepared henna paste.

24 "Could you paint a *mehndi* design on my hand?" Mrs. Cross asked.

25 Yasmeen felt herself gasp at Mrs. Cross's question. Her mouth opened and stayed open as classmates held out their hands. "Me, too! Will you draw on my hands, too?"

26 "And mine!"

27 "Mine, too!"

28 Yasmeen's feet danced her home, her hands waving in the air to lead the way. The spicy scent of tamarind and henna filled her nose. "*Amma! Amma!* You will never believe what happened today."

"Yasmeen's Turn": From "Yasmeeu's Turn" by Carol Fraser Hagen. Reprinted with permission from Skipping Stones, May–August 2012, Vol. 24, issue 3. Photo credit: AlterStock/Alamy.

14. In paragraph 3, what does the phrase "dragged her backpack along" suggest about Yasmeen?

a) She is nervous about the upcoming holiday.

b) She treats her possessions carelessly.

c) She is in an unhappy mood.

d) She carries heavy books.

15. As her family prepares for the holiday *Eid-ul-Fitr*, how is Yasmeen's experience this year different from other years?

a) She feels proud of her family this year.

b) She feels worried about school this year.

c) She thinks about getting dressed up this year.

d) She wants to spend time with the other ladies this year.

16. Based on paragraphs 10 and 11, what does Yasmeen understand about her father?

a) He prefers old books over new books.

b) The Koran is very precious to him.

c) Reading is one of his favorite activities.

d) He thinks the Koran is too delicate to take to school.

17. What is the most important way that paragraphs 13 and 14 develop the story?

a) They show the process of making henna paste.

b) They provide additional details about the setting.

c) They present a hint about how the problem will be solved.

d) They provide information about the characters' appearance.

18. In paragraphs 12 and 19, what does the reader learn about how Yasmeen's family celebrates *Eid-ul-Fitr*?

a) Jewelry is exchanged at the celebration.

b) Hand painting is done first at the celebration.

c) Herbs are used for cooking during the celebration.

d) Dressing in fine clothing is part of the celebration.

19. In paragraph 25, the narrator explains that Yasmeen "felt herself gasp" to show that Yasmeen feels

a) surprised by the teacher's response

b) nervous about what will happen next

c) confused by her classmates' requests

d) afraid to tell her parents about what happened

20. What is the *most* important lesson that Yasmeen learns in the story?

a) Family belongings should be treated with respect.

b) Sharing family traditions can be rewarding.

c) Sharing holidays with family is important.

d) Family traditions change over time.

Read this article.

Excerpt from The Bat Scientists

by Mary Kay Carson

From Nature Boy to Batman

1 Merlin Tuttle can't remember a time when nature didn't fascinate him. Even as a little kid he collected seashells, brought home toads, and kept a journal of his wildlife observations. "I happened to get especially interested in bats beginning when I was about nine," says Merlin. He came across some bats living in an old cabin. That started him researching and reading about bats. When Merlin was a teenager, his family moved to Tennessee. Their new home just happened to be near a bat cave. "I caught some and identified them in a book," remembers Merlin. They were gray bats. "The book said that this was a species that lived in the same cave year round and didn't migrate." After a year of watching when the bats entered and exited the cave, Merlin figured out that the books were wrong. These gray bats weren't there all year—they migrated.

2 Armed with what he'd learned, high school kid Merlin Tuttle convinced scientists at the Smithsonian Institution that they might be wrong. "They gave me several thousand bat bands and said, 'Why don't you go back and band them and see if you can figure out where they go,' " remembers Merlin. Bat bands are small metal clips with identification numbers on them. The bands fit around a bat's winged arm like a bracelet. Merlin Tuttle ended up studying gray bats for many years. He visited their caves all across the southeastern United States through college and after he became a bat scientist. "I eventually banded over forty thousand bats and traced some of the migrants all the way from Florida to the Virginia border," said Merlin. Because of his research, books had to be rewritten to say that gray bats not only migrate, but also often travel a really long way.

From Scientist to Conservationist

3 Merlin kept studying bats and other animals through college. He eventually got an advanced degree in mammalogy, the study of mammals, the kind of animals bats are. While Merlin became a respected bat scientist in the 1970s, bats themselves got very little respect. Merlin traveled around the world studying bats—Africa, Asia, Latin America, and North America. "Everywhere I went, people were killing bats in large numbers just out of ignorance," says Merlin. Many people are afraid of bats. Bats live in dark spooky places like caves and abandoned buildings, and only come out at night. Merlin saw bat caves dynamited or bulldozed shut. Misguided farmers told him they killed bats to protect their fruit trees or crops. Even the caves where Merlin studied gray bats were under attack. In 1976 Merlin visited an Alabama cave that was once home to 250,000 gray bats. What he found shocked him. All the bats were gone. Inside the cave were sticks, stones, rifle cartridges, and fireworks wrappers.

4 Merlin Tuttle decided he had to do something to help the bats he loved to study, so he started an organization in 1982. It wasn't easy. "When I started Bat Conservation International (BCI), most people would've rather paid to kill a bat than to save one" says Merlin. "They ranked between cockroaches and rattlesnakes in opinion polls." People misunderstand bats. They mistakenly believe that bats are blind, fierce, disease carrying, scary critters that want to bite. So Merlin set out to educate people about how gentle, amazing, and important bats really are.

5 Photography quickly became an important tool. "People fear most what they understand least" explains Merlin. Bats are misunderstood partly because they are hard to see. Bats fly at night and spend the day in dark places. When Merlin started writing books about bats, most photographs showed bats with snarling teeth held up by their wings. Merlin knew the bats in the photographs looked frightening because they were scared and stressed. So he started taking his own photographs of bats at ease—bats just being bats. His stunning natural photos soon showed up in magazines and books. The photos of bats flying, eating nectar, catching fish, and caring for pups helped people see bats for what they really are—and want to save them.

21. Which statement represents a central claim of the article?

a) Environments often influence career choices.

b) Bats are misunderstood creatures who need protecting.

c) Photographs can help people overcome their fears of the unknown.

d) Bats often travel a great distance when they migrate.

22. What does the information presented in the last two lines of paragraph 3 illustrate?

a) People forced the bats to leave the cave.

b) Bats had already migrated to another place.

c) People enjoyed using the cave for activities.

d) Bats left the cave because of the amount of garbage.

23. Read this sentence from paragraph 3.

> "Everywhere I went, people were killing bats in large numbers just out of ignorance," says Merlin.

Which quotation from the article *best* explains the cause of the "ignorance" described by Merlin?

a) "... Merlin figured out that the books were wrong." (paragraph 1)

b) "Many people are afraid of bats." (paragraph 3)

c) "What he found shocked him." (paragraph 3)

d) "Bats fly at night and spend the day in dark places." (paragraph 5)

24. What is the *main* way paragraph 5 helps develop ideas in the article?

a) by explaining the habits of bats during daytime hours

b) by describing the stress bats often experience

c) by explaining why Merlin is interested in bat photographs

d) by describing how Merlin helps people better understand bats

25. Which detail would be *most* important to include in a summary of the article?

a) Merlin Tuttle studied bats and helped educate the public about their importance.

b) Farmers told Merlin Tuttle that bats were bad for their fruit trees and crops.

c) Merlin Tuttle earned a degree in advanced mammalogy when he was in college.

d) People told Merlin Tuttle they were afraid of bats when he talked to them.

26. How does the author develop an important idea in the article?

a) by describing Merlin's discovery of gray bat migration, which shows how ideas can change

b) by referring to traditional photographs of bats, which make bats appear to be threatening

c) by describing Merlin's effort to inform people about bats, which shows the importance of education

d) by referring to caves where bats live, which indicates that ideas may sometimes be based on fear

Asteroids, Meteoroids, Comets

by Kenneth C. Davis

Where do asteroids like to hang out?

Asteroids, or "minor planets," can be found all over the solar system, but most orbit the Sun in an *asteroid belt* between Mars and Jupiter. Asteroids are space rocks that never formed into a planet when the solar system was born. This is probably because of the gravitational effects of Mars and Jupiter. Even if the asteroids *had* become a planet, it would be less than one quarter the size of Earth.

How many asteroids are out there?

Astronomers have found more than 20,000 asteroids since 1801 and discover more every year. The largest asteroid, Ceres, was the first one found. Ceres is almost 600 miles (970 km) across, or about one quarter of the size of our Moon. But that's pretty unusual. Though a few asteroids are 150 miles (240 km) across or more, most are less than a few miles wide and many are smaller than a car. There are more small asteroids than large ones because the space rocks often crash into each other and break into smaller pieces. (The little pieces become meteoroids, some of which are sent on a path toward Earth.) That's also why most asteroids are lopsided and full of craters.

I have a head and a tail. I can move around, but you can't take me for a walk. What am I?

A comet. Comets are dirty, rocky snowballs that orbit the Sun. They spend most of their lives far away from us, but when a comet's orbit brings it near the Sun, part of its frozen "head" defrosts into a dusty, gaseous "tail" millions of miles long. Then the comet appears as a brilliant streak we can see in the sky for weeks or even months. Since the pressure of the Sun's radiation—which is what pushes the dust and gas away from the comet—always flows away from the Sun, the comet's tail always points away from the Sun, too. That means that sometimes the comet seems to travel backward, with the tail leading the head!

> The word *comet* comes from the ancient Greek word *kometes*, meaning "long-haired." People thought comets looked like heads with hair streaming out behind them. Comets have long inspired fear and awe because, unlike the predictable Sun, Moon, and stars, they appeared to come and go as they pleased. Ancient people believed the unannounced visitors were warnings of something unusual and terrible—war, flood, death, sickness, or earthquake.

Where do comets come from?

Most astronomers think that comets come from two places: the Oort Cloud, a huge icy ring around the edge of the solar system, and the Kuiper Belt, a ring of planetary leftovers inside the Oort Cloud. Comets that come in our direction have probably been pulled in slowly because of the gravitation tugs of planets or passing stars.

All comets orbit the sun in a predictable *period*, or amount of time. Short-period comets orbit at least once every 200 years and probably come from the Kuiper Belt. Long-period comets take more than 200 years and most likely come from the Oort Cloud.

Edmond Halley (1656–1742)

As a student at Oxford University in England, Edmond Halley (rhymes with valley) was so excited about astronomy that he left school to map the stars in the Southern Hemisphere's skies. Halley is best known for his groundbreaking work on comets, especially the one that bears his name. Halley was the first to say that comets sighted in 1531, 1607, and 1682 were actually the same comet returning every 76 years. He predicted the comet's return in 1758, though he knew he wouldn't live to see the prediction come true. When it did, the comet was named in his honor. Astronomy was just one of Edmond Halley's many strengths. Among countless other things, he developed the first weather map and studied Earth's magnetic field. The multitalented Halley was England's Astronomer Royal from 1719 until he died in 1742 at Greenwich Observatory in England.

Who's coming to visit in 2062?

Halley's Comet, the most famous of them all. Halley's visits have been connected to several historic events. The Chinese saw the comet in 240 B.C. and blamed it for the death of an empress. The Romans recorded it in 12 B.C. and thought it was connected to the death of one of their statesmen. In 1066, the Normans of France believed the comet marked the invasion of England by William the Conqueror. (The comet is even shown on the Bayeaux Tapestry, which records William's victory.) Halley's Comet also came through the years the famous American writer Samuel Clemens—also known as Mark Twain—was born and died.

27. Based on the information in lines 6 through 13, which statement is the *most likely* conclusion?

a) A minimum of 20,000 additional asteroids will be found in the next few years.

b) The fastest moving meteoroids are the ones that are sent on a path toward our planet.

c) Scientists were able to compare the sizes of our Moon and Ceres because of their proximity to each other.

d) An unusual characteristic of Ceres made it possible for it to be found more easily than other asteroids.

28. What is the impact of the phrase "planetary leftovers" in lines 29 and 30?

a) It gives a connotation of something saved from a previous use.

b) It suggests the importance of the planets' gravitational pull.

c) It provides more detail about the appearance of the comets.

d) It gives a scholarly sound to the sentence.

29. The information in the text box on Edmond Halley offers support for which claim made by the author?

a) Comets are predictable.

b) Comets are affected by radiation from the Sun.

c) Comets come from the edge of the solar system.

d) Comets warn of important and sometimes terrible events.

30. Which sentence *best* states the main idea of the text box about Edmond Halley?

a) "As a student at Oxford University in England, Edmond Halley (rhymes with valley) was so excited about astronomy that he left school to map the stars in the Southern Hemisphere's skies."

b) "Halley is best known for his groundbreaking work on comets, especially the one that bears his name."

c) "Halley was the first to say that comets sighted in 1531, 1607, and 1682 were actually the same comet returning every 76 years."

d) "The multitalented Halley was England's Astronomer Royal from 1719 until he died in 1742 at Greenwich Observatory in England."

31. Read this sentence from the text box on comets.

> **Ancient people believed the unannounced visitors were warnings of something unusual and terrible—war, flood, death, sickness, or earthquake.**

Which section of the article supports this claim?

a) How many asteroids are out there?

b) Where do comets come from?

c) Edmond Halley

d) Who's coming to visit in 2062?

32. The purpose of the article's structure is to

a) provide a guide to the topics that are discussed

b) indicate the vocabulary that may be unfamiliar to readers

c) provide a historical background for the scientific discussion

d) show readers what major questions still puzzle the scientific community

Read this story.

Dad is in the U.S. Army. Each Saturday he leads his two children, Esme and Ike, on a mission to make the best pancakes in the world.

Excerpt from 100 Days and 99 Nights

by Alan Madison

1 I am best at beating the batter, Ike is best at greasing the griddle, and Dad is, of course, far and away the finest flipper between here and just about anywhere. While we are working, Mom sits sipping coffee and reading the *Drum & Bugle*. She makes sure there are no mistakes in either the newspaper or the manner in which we prepare pancakes. Dad says she is a "super supervisor."

2 To make sure our pancakes come out consistently top-dog tasty, it is extremely important to do everything precisely the same way it was done the Saturday before, the Saturday before that, and before that. To do that, we follow Dad's pancake rules. . . .

3 Saturday mornings, when the cuckoo clock begins the first of eight cuckoos, Ike and I slip downstairs, drop our aprons over our heads, and tie the string over our bellies, each with the exact same double-looped bow. We try to finish before the mechanical bird sticks its tiny red-tufted head out to deliver the final high-pitched cuckoo.

4 While we wash our hands in the kitchen sink, Dad, in his green-and-yellow-squared flannel robe, rubbing the top of his buzz-cut head, pounds down the stairs. Blinking the sleep from his eyes, he inspects our cooking uniforms. When satisfied, he yawns, "Okay, troops, we are ready to cook."

5 We salute, bringing our open right hands sharply to our foreheads and then karate chopping them down. This is military speak for "ready, willing, and able" Dad says we should always end it with "sir, yes, sir," to show the proper respect for a commanding officer.

6 "Sir, yes, sir!" Ike and I cry in unison.

7 "One cup flour," he commands.

8 "Flour is made from flowers," Ike states as usual.

9 Dad smiles and I roll my eyes around my head because *every* week Ike always swears that flour (F-L-O-U-R) is made from flowers (F-L-O-W-E-R-S) and that is why they are spelled differently. This makes zero sense, which is exactly Ike Sense, because then they should be spelled exactly the same! . . .

10 Under Dad's watchful eye, we exact-measure and combine the salt and baking soda into the bowl. Then, trying not to make too much of a mess, we carefully measure out the wet ingredients: water, oil, and the top secretest ingredient—"Yogurt!" Ike yells. "Yogurt, yoooguurt!" he screams. Ike feels that *yogurt* is the absolute funniest word he has ever heard and as soon as dad starts spooning out the glistening white goo, he starts giggling and rolling the word out of his mouth, either drawing out the soft-sounding "yo" or cutting off the hard-syllabled "gurt" and sometimes even attempting to do both. "Yoooogrt!" Mom chuckles from behind the spread-open *Drum & Bugle* as Ike goes through his word acrobatics while I remain silent because I feel *llama* is an even funnier word.

11 Dad knows a lot of funny words, but during pancake making he is always partial to *spatula*. . . .

12 I wooden-spoon-mix together all the ingredients, from the Ike Sense-spelled flour to the somewhat funny-named yogurt, while Ike quick-drops pats of butter onto the hot griddle. Mom super-supervises this part, letting out an *aaahh* sound of approval each time Ike places a pat correctly and an *ooo-ooo-ooo* sound of disapproval each time his hand comes down too close to the stove.

13 Dad big-spoons batter onto the burning black metal. It flattens and soon little bubbles begin bursting. After we count out five of these tiny explosions, Dad does the famous fancy McCarther flip. He skillfully slides his "spaaatuulaaa" under one round and snaps his wrist, revealing both the colorful tattoo on his wide forearm and the brown cooked side of the perfect pancake.

14 A most definite Dad cooking rule is: "Neither a borrower nor a lender be." This means that when it comes to a particular pancaking post, whether it is buttering, mixing, or flipping, you have your very own job to do, and you should never ever trade or even ask to trade—you just do your job. Our cooking tasks have become total no-brainers and given the excellent eating results, I have to say that Dad's pancaking rules most definitely do work.

15 The short stacks are piled high on each of our plates, the maple syrup slow-flowed, and the only sounds heard are the rushed clicks and clacks of forks on plates and the rumble of satisfied *ummms*. . . .

16 This is an absolute authentic account of how every Saturday we, the Swishback McCarthers, would cook the tastiest pancakes in the whole world.

Read this poem.

Rain Check

by Catherine Alene

Dad had to work
Straight through the day and into the night
Ringy cows[1] wouldn't load
Raced across the mesa[2] with their heads in the air

I'd finally decided what I was going to make
Pizza
His favorite
Heavy with meat and American cheese
His side
Veggies
No cheese
On mine

But it's okay
He didn't make it home
I hadn't even started cooking when he called
I'd been standing in the kitchen
Staring into the refrigerator
Ignoring the sun melting red and gold behind the barn
Listening to Blue crunching his kibbles[3]
Tags chinging off the edge of his metal food dish
When the phone had rung

"I'm so sorry. I'll have to take a rain check. Go ahead and eat without me," he'd said.
I understand, Dad.
We'll do it again.
Next week.
It's okay
Really
It
Is

[1]ringy cows: the cows' bells ring as they run away from Dad

[2]mesa: a flat-topped, elevated area

[3]kibbles: pet food

33. In "Excerpt from *100 Days and 99 Nights*," what effect does the children saying "Sir, yes, sir!" in paragraph 6 have on the story's tone? Use *two* details from the story to support your response.

34. In "Excerpt from *100 Days and 99 Nights*," how do paragraph 2 and paragraph 14 contribute to the structure of the story? Use *two* details from the story to support your response.

35. How do lines 22 through 30 contribute to the plot of "Rain Check"? Use *two* details from the poem to support your response.

36. How does the speaker's point of view impact the tone of "Rain Check"? Use *two* details from the poem to support your response.

37. The narrator of the story "Excerpt from *100 Days and 99 Nights*" and the speaker in the poem "Rain Check" have different points of view about their family situations. What is the narrator's point of view about her family situation in "Excerpt from *100 Days and 99 Nights*"? What is the speaker's point of view about her family situation in "Rain Check"? How are these points of view different? Use details from *both* the story and the poem to support your response.

    In your response, be sure to

    - describe the narrator's point of view about her family situation in "Excerpt from *100 Days and 99 Nights*"
    - describe the speaker's point of view about her family situation in "Rain Check"
    - explain how these points of view are different
    - use details from *both* the story and the poem to support your response