



4th Grade February Vacation Packet

Name: _____

Due: Monday, February 26, 2018

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ELA

Directions

Read the poem. Then answer questions 25 through 31.

The Arrow and the Song

by Henry W. Longfellow

I shot an arrow into the air,
It fell to earth, I knew not where;
For, so swiftly it flew, the sight
Could not follow it in its flight.

5 I breathed a song into the air,
It fell to earth, I knew not where;
For who has sight so keen and strong
That it can follow the flight of song?

10 Long, long afterward, in an oak
I found the arrow, still unbroke;
And the song, from beginning to end,
I found again in the heart of a friend.

25

Read these lines from the poem.

**For, so swiftly it flew, the sight
Could not follow it in its flight.**

Which of the following **best** describes what happens in these lines?

- A** The arrow moves too fast to see.
- B** The speaker runs after the arrow.
- C** The arrow gets stuck in an oak tree.
- D** The speaker thinks the arrow is like a bird.

26

The speaker changes from the beginning to the end of the poem. How does the speaker change between the first and third stanzas?

- A** The speaker is older.
- B** The speaker is sadder.
- C** The speaker is more confused.
- D** The speaker is more surprised.

GO ON

27

What is the poem **mostly** about?

- A singing songs into the air
- B shooting arrows into an oak tree
- C losing things and finding them again
- D learning how to deal with sad feelings

28

Read the following lines from the poem.

**For who has sight so keen and strong
That it can follow the flight of song?**

Now read this dictionary entry.

keen (adj) 1. showing great interest 2. highly developed 3. extremely cold
4. quick to understand

Which meaning of “keen” is used in the poem?

- A meaning 1
- B meaning 2
- C meaning 3
- D meaning 4

29

Which of these correctly shows the pattern of **STRONG** and weak syllables in line 7?

- A **FOR WHO HAS SIGHT** so keen and strong?
- B For who has sight **SO KEEN AND STRONG?**
- C **FOR** who **HAS** sight **SO** keen **AND** strong?
- D For **WHO** has **SIGHT** so **KEEN** and **STRONG?**

30

Which of these **best** describes the rhyme scheme in each stanza of the poem?

- A** Only the first and second lines rhyme.
- B** Only the third and fourth lines rhyme.
- C** The first and second lines rhyme, and the third and fourth lines rhyme.
- D** The first and third lines rhyme, and the second and fourth lines rhyme.

31

The poem is divided into three stanzas. Which of the following **best** describes the purpose of each stanza?

- A** Each stanza tells a different event in the speaker's life.
- B** Each stanza tells about a different feeling the speaker has.
- C** Each stanza tells what happens to the arrow the speaker shoots.
- D** Each stanza tells about something that makes the speaker happy.

GO ON

Directions

Read the passage. Then answer questions 25 through 31.

What Is Vermiculture?

by Alan Van Gilder

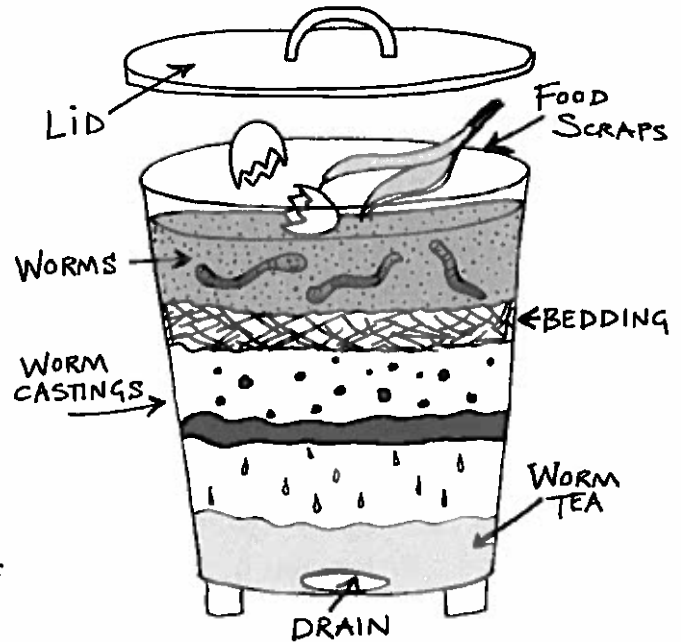
- 1 People generate a lot of garbage that doesn't need to go into the trash can. Lots of waste items, such as food scraps, can instead be turned into compost. Compost is made of decaying food scraps. It can be used to fertilize gardens and farms. Composting can be as simple as creating an area to pile food scraps in the yard. Recently, a more complicated but effective system has become more popular: vermiculture.
- 2 Vermiculture is a type of composting that uses worms to speed up the decay or break down of food scraps. Certain types of worms are ideal for composting. Red wigglers are the most commonly used worms for composting because they eat and reproduce so quickly.
- 3 Worm composting systems are usually set up in a barrel or some kind of tall plastic container. The container is divided into layers. At each layer, part of the process of composting occurs.
- 4 People put their food scraps into the bin. These scraps can include items such as apple peels, eggshells, carrot tops, and potato skins. The next layer down consists of the worms. They live in between the food scraps and a layer of bedding, which usually consists of slightly wet newspaper or straw. The worms eat the food scraps and digest them and create castings. The worm castings are collected from the bottom of the bin and used to enrich the soil of gardens and farms.
- 5 The castings can be collected in solid form. Some composters, however, choose to retrieve it in liquid form, which they call "worm tea." They don't drink it! Rather, the worm tea is an excellent way to fertilize plants and enrich garden soil.
- 6 There are many reasons people choose to use the worm composting method over other kinds of composting. First of all, vermicomposting doesn't require a large yard. It can be done inside. Because the worms work so quickly, the composting matter doesn't smell bad. People have worm-composting systems in their basements or even in the kitchen under the sink. Another reason people choose vermicomposting is that the process yields the best fertilizer. Fertilizing a garden with worm tea can nearly double a garden's yield.
- 7 The main benefit of composting, of course, is that it reduces the amount of garbage going to landfills. Up to 30% of waste in the landfills is material that could instead be composted.

How to create a worm composting system

What you'll need:

A plastic bin with a lid
Newspaper or straw
Worms
Drill
Wooden blocks or bricks

- Step 1 Drill holes in the bin for ventilation. The worms need oxygen.
- Step 2 Add a layer of bedding.
- Step 3 Add worms. (You'll need approximately two pounds of worms for each pound of food scraps you compost.)
- Step 4 Prop the bin up on the bricks or wooden blocks.
- Step 5 For worm tea collection, add a spout to the bottom of the bin.
- Step 6 Begin feeding the worms. Stir in food scraps with the bedding.



25

Why are worm castings collected from the bottom of the composting bin?

- A They will be used to help gardens grow.
- B They will be thrown out with the trash.
- C They will be fed to other animals.
- D They will be used in other composting systems.

GO ON

- 26** Based on the details in paragraph 6, why might someone not do “other kinds of composting”?
- A** It costs too much.
 - B** It might smell bad.
 - C** It is too much work.
 - D** It could create waste.

- 27** How does the author organize ideas in paragraph 6?
- A** He provides steps for creating a worm composting system.
 - B** He describes the effects of other kinds of composting.
 - C** He contrasts worm composting with other kinds of composting.
 - D** He examines the problems caused by worm composting.

- 28** Read this sentence from paragraph 6.

Fertilizing a garden with worm tea can nearly double a garden’s yield.

Based on this sentence, what does the word “yield” tell about a garden?

- A** how many worms it can have
- B** how much soil it can have
- C** how many plants it can grow
- D** how much water it can hold

29

Read these two sentences from paragraph 4.

The worms eat the food scraps and digest them and create castings. The worm castings are collected from the bottom of the bin and used to enrich the soil of gardens and farms.

Which of the following describes the relationship between these two sentences?

- A** The sentences describe two steps in a process.
- B** The sentences compare two events.
- C** The sentences contrast two events.
- D** The sentences describe a problem and its solution.

30

Look at the diagram on page 53 and the directions next to it.

What new information do the diagram and directions provide?

- A** Food scraps go at the top layer of the compost bin.
- B** Bins need a drain or spout at the bottom to collect worm tea.
- C** Bins need newspaper or straw in the middle to gather worm castings.
- D** Plastic containers are good places for composting.

31

Look at the diagram and the directions next to it. Where do the wooden blocks or bricks go?

- A** under the bin to prop it up
- B** at the bottom of the bin to collect tea
- C** on top to hold down the lid
- D** mixed in the bedding to add space

GO ON

Directions

Read the passages. Then answer questions 32 through 34.

Dust Bowl Migration

by William Furman

- 1 Imagine living through dust storms so fierce that great piles of dust block your front door. Dust blows in through the cracks of your home's closed doors and windows. It coats every surface with a thick brown film. The dust gets into your nose and throat, making you cough and sneeze.
- 2 It sounds like life in a hot, lonely desert. But millions of people experienced dust storms like these right here in America. The plains of Texas, Oklahoma, Kansas, Colorado, and New Mexico were once covered with fields of wheat and corn. Farmers used every inch of land to plant as much as possible. But in 1931, a great drought hit the United States. The rains that once fed the crops stopped falling. The dry soil of the plains had been so overworked that there was nothing to hold it down when the winds came. It simply blew across the plains, now called the Dust Bowl.
- 3 Within just one year, there was a great desert in the middle of the United States. Over the next few years, things just got worse. The dust storms came more and more often, and they were making people sick. On a single day in 1935, "Black Sunday," twenty dust storms struck the Dust Bowl.
- 4 The country's new president, Franklin Roosevelt, tried to think of ways to help the people who lived in the Dust Bowl. But nothing could make crops grow in dusty soil without rain. Many people abandoned their homes and land. They set out for the West, looking for new homes and work to do to support their families. Two and a half million migrant people left the Dust Bowl for California, Oregon, Washington, and other states in the 1930s. But not everyone in the Western states was happy to see the newcomers. Some people there called the newcomers "Okies," since many came from Oklahoma. There were not enough jobs or homes for everyone. At first, many of the migrant people had to live in camps and handmade shelters.
- 5 In 1941, the United States began to fight in World War II. This meant that the American people would need to build planes, tanks, and weapons for the soldiers to use in the war effort. Although the rains had returned to the Dust Bowl, most of the migrant people stayed in the Western states where there were plenty of jobs to go around.

These are diary entries written by someone who actually experienced the dust storms in 1934.

from *Dust Bowl Diary*

by Ann Marie Low

April 25, 1934, Wednesday

- 1 Last weekend was the worst dust storm we ever had. We've been having quite a bit of blowing dirt every year since the drouth¹ started, not only here, but all over the Great Plains. Many days this spring the air is just full of dirt coming, literally, for hundreds of miles. It sifts into everything. After we wash the dishes and put them away, so much dust sifts into the cupboards we must wash them again before the next meal. Clothes in the closets are covered with dust.
- 2 Last weekend no one was taking an automobile out for fear of ruining the motor. I rode Roany to Frank's place to return a gear. To find my way I had to ride right beside the fence, scarcely able to see from one fence post to the next.
- 3 Newspapers say the deaths of many babies and old people are attributed to breathing in so much dirt.

July 6, 1934, Friday

- 4 I am still herding cows, and it is awfully hot. Where they have eaten every weed and blade of grain, Bud is plowing so the ground will be softened to absorb rain (if it comes). He is very fed up and anxious to get away to school and fit himself for a job.
- 5 Poor Bud. He has worked so hard and saved so hard. He has done without nice clothes and never went to a dance or movie oftener than about once a year because he was saving every penny for college. He hoped his livestock would pay his way for four years. The price was so low he didn't sell any last year. This year they are worth less, and he absolutely must sell them because there is not enough feed for them and no money to buy feed. All the stock he has won't pay his way through one year of college.
- 6 Grover has already had to ship out more cattle. He wanted me to help him. Roany and I got to Grandma's by 4:30 A.M. We got the cattle to the stockyards in Pingree by 10:00. Then back to herd cows on the wheat field again.

¹ **drouth:** drought

GO ON

32

According to "Dust Bowl Migration," what caused the great dust storms in the Dust Bowl? Use **two** details from the passage to support your response.

33

In *Dust Bowl Diary*, who is Roany? Use **two** details from the passage to support your response.

GO ON

Planning Page

You may PLAN your writing for question 34 here if you wish, but do NOT write your final response on this page. Write your final response on pages 27 and 28.



D*irections* Read the myths. Then answer questions 32 through 34.

Blue Corn Maiden and the Coming of Winter

retold by Marisa Tandor

- 1 Blue Corn Maiden was the prettiest of the corn maiden sisters. The Pueblo People loved her very much, and loved the delicious blue corn that she gave them all year long. Not only was Blue Corn Maiden beautiful, but she also had a kind and gentle spirit. She brought peace and happiness to the People of the Pueblos.
- 2 One cold winter day, Blue Corn Maiden went out to gather firewood. This was something she would not normally do. While she was out of her adobe house, she saw Winter Katsina. Winter Katsina is the spirit who brings the winter to the Earth. He wore his blue-and-white mask and blew cold wind with his breath. But when Winter Katsina saw Blue Corn Maiden, he loved her at once.
- 3 He invited her to come to his house, and she had to go with him. Inside his house, he blocked the windows with ice and the doorway with snow, and he made Blue Corn Maiden his prisoner. Although Winter Katsina was very kind to Blue Corn Maiden and loved her very much, she was sad living with him. She wanted to go back to her own house and make the blue corn grow for the People of the Pueblos.
- 4 Winter Katsina went out one day to do his duties and blow cold wind upon the Earth and scatter snow over the mesas and valleys. While he was gone, Blue Corn Maiden pushed the snow away from the doorway and went out of the house to look for the plants and foods she loved to find in summer. Under all the ice and snow, all she found was four blades of yucca.
- 5 She took the yucca back to Winter Katsina's house and started a fire. Winter Katsina would not allow her to start a fire when he was in the house.
- 6 When the fire was started, the snow in the doorway fell away and in walked Summer Katsina. Summer Katsina carried in one hand fresh corn and in the other many blades of yucca. He came toward his friend Blue Corn Maiden.
- 7 Just then, Winter Katsina stormed through the doorway followed by a roar of winter wind. Winter Katsina carried an icicle in his right hand, which he held like a flint knife, and he carried a ball of ice in his left hand, which he wielded like a hand-axe. It looked like Winter Katsina intended to fight with Summer Katsina.

- 8 As Winter Katsina blew a blast of cold air, Summer Katsina blew a warm breeze. When Winter Katsina raised his icicle-knife, Summer Katsina raised his bundle of yucca leaves, and they caught fire. The fire melted the icicle.
- 9 Winter Katsina saw that he needed to make peace with Summer Katsina, not war. The two sat and talked.
- 10 They agreed that Blue Corn Maiden would live among the People of the Pueblos and give them her blue corn for half of the year, in the time of Summer Katsina. The other half of the year, Blue Corn Maiden would live with Winter Katsina and the People would have no corn.

Demeter and Persephone

retold by Hilary Dumitrescu

- 1 I am Demeter, Goddess of the Harvest. The wheat grows tall and golden wherever I walk. The orchards blossom, and the fruit grows ripe and sweet. The people are happy because I bless all of their growing crops. As long as I am happy, all of the Earth flourishes.
- 2 My daughter Persephone is the apple of my eye. She is as kind as she is beautiful. I have always hated to be away from her, as the thought of any harm coming to her is too dreadful to bear. Once in a great while, my duties as Goddess call me away. It was on one such occasion that tragedy struck.
- 3 While I was away, my beautiful Persephone walked near the seaside, gathering flowers for her hair. She saw one lovely flower with hundreds of tiny blossoms. As she bent to pick it, a great hole opened in the Earth. From out of the great pit raced a chariot driven by Hades, the god of the Underworld. He took one look at Persephone and knew at once that he loved her. Scooping her into his chariot, he raced back underground, vowing to make her his queen.
- 4 When I heard of Hades's terrible trick, I was furious. I demanded that Persephone be released from his kingdom. "Nothing on Earth will grow," I promised Zeus and the other gods, "until my child is returned."
- 5 True to my word, I hid in my house and did not go out to the fields. The crops withered, the fruit shriveled on the vines, and the soil turned to dust. The people cried out to the gods for help.
- 6 Finally, Zeus and the other gods demanded an audience with Hades. They commanded him to return Persephone to me at once.
- 7 "But she has already joined my kingdom!" Hades proclaimed.
- 8 "Nonsense!" I cried. "My daughter would sooner die than stay with you!"
- 9 "Why, just today, she ate six pomegranate seeds. Since she has taken food from my kingdom, she may not return to yours."
- 10 At the sound of this news, my face crinkled to that of an old woman, and the very Earth shook as it seemed to shrivel along with me. At the sight of this, even Hades was moved.
- 11 "All right then," he said. "Since she has eaten only six seeds, she need only stay in my kingdom for six months of the year. The other six months are yours."
- 12 Hearing this news, I was comforted. I covered the land with blankets of white snow. "Until my Persephone returns," I said tenderly to the dry earth.
- 13 As the time of Persephone's return drew nearer, the blanket of snow began to thaw. When I finally saw my daughter's lovely face again, the Earth burst forth with life. The orchards blossomed, and the fruit grew ripe and sweet. The wheat grows tall and golden wherever we walk.

32

In “Blue Corn Maiden and the Coming of Winter,” why do the Pueblo People love Blue Corn Maiden? Use **two** details from the myth to support your response.

33

How are the points of view in the two myths different? Use **one** detail from each myth to support your response.

GO ON

Math

TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best.

- Read each question carefully and think about the answers before writing your response.
- Be sure to show your work for each problem

1. There are 5,280 feet in a mile. What is the total number of feet in 9 miles?

2. A club's first meeting was attended by 35 people. The first meeting was attended by 7 times as many people as the second meeting. How many people attended the second meeting?

3. Ms. O'Flaherty drove 745 miles in March. She drove 2 times as many miles in March as she did in January. She drove 3 times as many miles in February as she did in January. What was the total number of miles Ms. O'Flaherty drove in February?

4. A group of 8 people at an elementary school gave a total of \$2,808 to a town to fix up a playground. Each person gave the same amount. At a middle school, 5 people each gave \$280 to the same town. How much more did each person at the elementary school give than each person at the middle school?

5. A school has 24 tables in the cafeteria. Each table seats 19 students. How many students can be in the cafeteria if all tables are filled?

6. A store ordered 32 boxes holding 14 chocolate chip muffins each and 4 boxes holding 6 corn muffins each. What was the total number of muffins the store ordered?

7. The price of a board game is \$48. The price of the board game is 4 times as much as the price of a jigsaw puzzle. What is the price of the jigsaw puzzle?

8. A gardener ordered 57 flowering bushes to plant in a park. Each bush cost \$17. What was the total cost of the bushes?

9. Miss Wood wants to buy carpet for the rectangular floor of her living room. The room is 14 feet long and 17 feet wide. What is the area, in square feet, of the living room floor?

10. A rectangle has a width of 9 inches. The area of the rectangle is 648 square inches. What is the length, in inches, of the rectangle?

11. On a road trip, three friends took turns driving. Together, they drove a total of 97 miles. Maria drove 37 miles. She drove 9 more miles than Tina. How many miles did Jenna drive?

12. Cassidy read some pages in her book on Tuesday. On Wednesday, she read 15 pages, and finished the book. She read double as many pages on Tuesday as she read on Wednesday. How long was her book?

13. The school bought the fourth grade 8 boxes of pencils and each box had 12 pencils in it. They classes will combine and share the pencils. If there are 86 fourth graders, will that be enough for each of them to get 2 pencils? If so, how many extras will there be?

14. Meg turns 5 this year. Her Dad, Marco, is 7 times as old as her. How old is her Dad?

15. In September, Kevin got 48 stars. In October he got 8 stars. How many times more stars did Kevin get in September than October?

16. Peter has 738 jelly beans. He has three times as many jelly beans as Stephanie. Stephanie has 121 more jelly beans more than Mary. How many jelly beans does Mary have?

17. Odra is buying an apartment that is 21 ft wide and 6 ft long. Ariana buys an apartment that's the same length as Odra's apartment, but is 3 times wider. How wide is Ariana's apartment?

18. Amanda has 35 books in each of her 3 bookcases at home, 3 books at school and keeps 16 books in her backpack. How many books does she have altogether?

19. Jaylen loves Skittles. There are 43 Skittles in each bag and he just got 19 bags from his friends. How many Skittles will he get to eat if he gives 160 of the skittles back to each of his four friends?

20. Building A is 5,634 feet tall. Building B is 356 feet less than building A. Building C is 423 feet taller than building B. How tall are all three buildings combined?

Science

Part I

- 1 A student planted two bean seeds in two identical pots containing the same type of soil. He placed one pot in a closet and the other near a sunny window. Each day, he poured 15 milliliters of water into each pot. Which factor was **different** for the two pots?
 - A amount of water
 - B amount of light
 - C type of soil
 - D type of seed

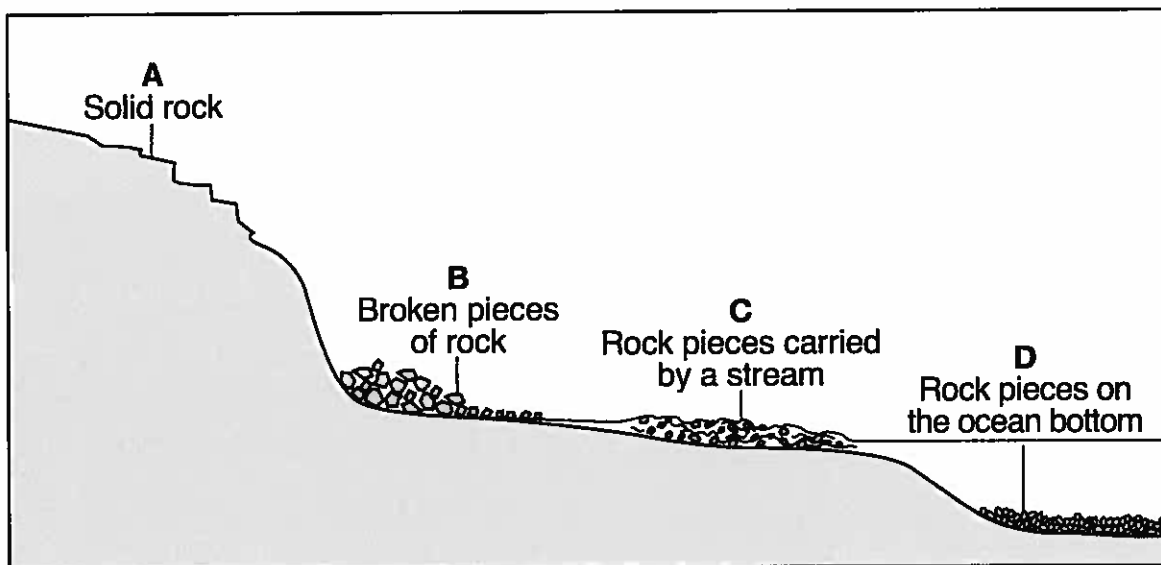
- 2 About how long does it take Earth to make one revolution around the Sun?
 - A a day
 - B a week
 - C a month
 - D a year

- 3 The condition of the air outdoors at a certain time of day is known as
 - A friction
 - B light
 - C force
 - D weather

Note that question 4 has only three choices.

- 4 Which state of matter has **no** definite volume and **no** definite shape?
 - A gas
 - B liquid
 - C solid

Base your answers to questions 5 through 7 on the diagram below and on your knowledge of science. The diagram shows what happens to rock materials as they interact with air and water. Letters *A*, *B*, *C*, and *D* show some rock materials at different places on Earth's surface.



5 Which force causes the rock materials to move from *A* to *B*?

- A electricity
- B friction
- C gravity
- D magnetism

6 Letter *C* shows the process of erosion, because rock material is

- A moved by running water
- B chipped, with sharp edges
- C forming solid rock
- D soaked in ocean water

7 Letter *D* shows the process of deposition, because rock material is

- A broken up by the ocean bottom
- B settled on the ocean bottom
- C moved by ocean water
- D absorbed by ocean water

- 8** A student reaches into a bag of objects. Which property of the objects can be observed by using only the sense of touch?
- A color
 - B odor
 - C taste
 - D texture
- 9** A student removes an ice cube tray from the freezer and places it on a table. The ice cubes are solid and cold. The student forgets to put the ice cube tray back into the freezer. The next day, the ice cubes should be
- A liquid and warmer
 - B solid and warmer
 - C liquid and colder
 - D solid and colder
- 10** A rubber ball rolls across a level surface. The ball will eventually stop rolling due to
- A electricity
 - B conductivity
 - C friction
 - D magnetism
- 11** Which property of an object determines how well it conducts electricity?
- A the color of the object
 - B the mass of the object
 - C how fast the object sinks in water
 - D the material that the object is made of

Base your answers to questions 32 and 33 on the data table below and on your knowledge of science. The data table shows the air temperatures at noon for a city in New York State on five Wednesdays during the month of March. The temperature for March 31 has been left blank.

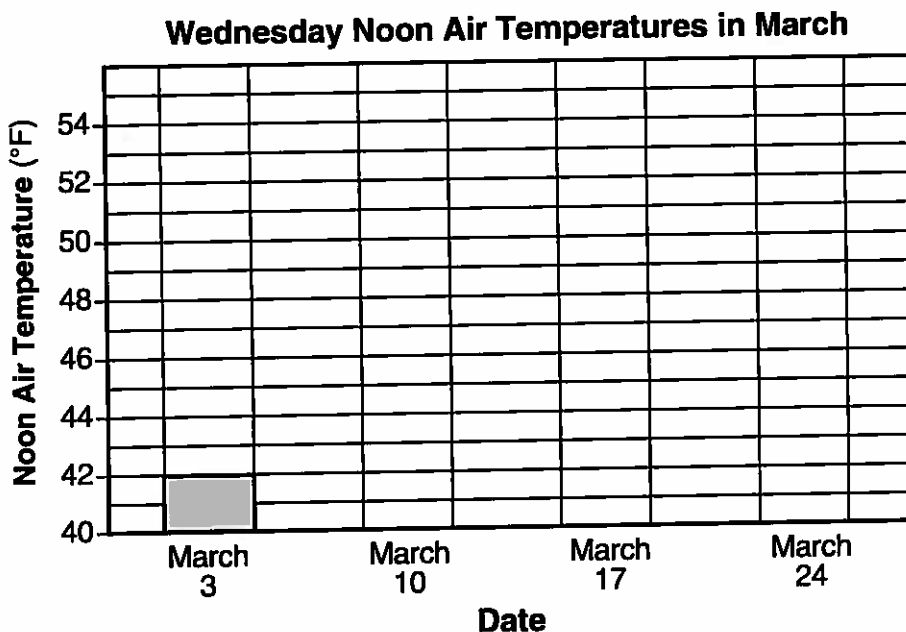
Data Table

Date	Air Temperature at Noon (°F)
March 3	42
March 10	45
March 17	48
March 24	51
March 31	?

32 Based on the pattern shown in the data table, predict the air temperature at noon on Wednesday, March 31. [1]

_____ °F

33 Complete the bar graph below to show the data. The bar for March 3 is shown. [1]



38 Some seeds are dispersed (spread) by falling to the ground. Describe **one other** way that seeds can be dispersed. [1]

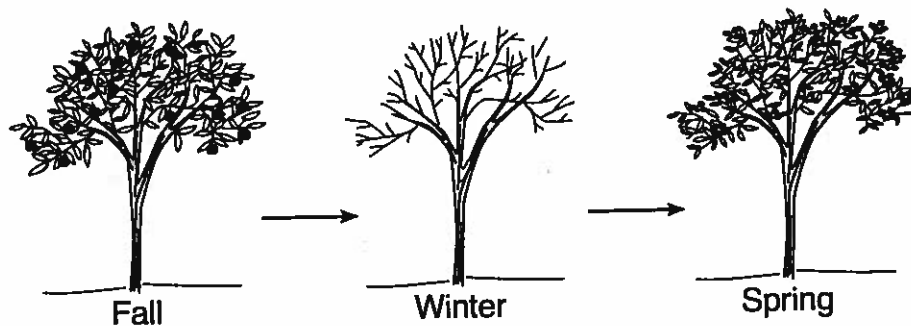
Base your answers to questions 39 and 40 on the information below and on your knowledge of science.

Two students used paper clips to measure the length of the same side of their science textbook. The first student records that the length is 10 paper clips long. The second student records that the length is 6 paper clips long.

39 What might explain why the two students found **different** measurements for the length of the **same** side of the textbook? [1]

40 What tool could the students have used to accurately measure the length of the textbook in centimeters? [1]

Base your answers to questions 43 and 44 on the diagram below and on your knowledge of science. The diagram shows seasonal changes in an apple tree.



43 Describe **one** way that the apple tree changes as fall turns to winter. [1]

44 In the spring, flowers grow on the apple tree. What is the purpose of the flowers on the tree? [1]
