34

A

1

1. neither
2. remind
3. manage
4. prove

2

1. answered
2. learned
3. worried
4. managed

3

1. become
2. sobbing
3. yourself
4. soundly
5. darling
6. instead

4

1. couple
2. whirl
3. moments
4. important
5. expression
6. swirl

B

The Green Man Visits Nancy Again

Nancy was full. She didn't feel like climbing down from the counter top, so she just jumped. For Nancy, it was like jumping from the top of a building that is more than one hundred stories tall. But she landed on her feet as easily as you would if you jumped from a chair to the floor.

She walked back to her dollhouse. By the time she got back in bed, it was almost time for the sun to come up.

She wasn't very tired, but she made a decision to sleep. She closed her eyes, and in a few moments, she was sleeping soundly.

"Wake up, wake up," a loud voice said. Nancy opened her eyes. For a moment she didn't know where she was or what was standing in front of her. It was green and it was speaking in a loud voice, "Come on and wake up. Wake up."

"I'm awake," Nancy said. Her voice sounded thick and sleepy. The room was light. In fact, things looked so bright that Nancy had to cover her eyes. "Is that you?" she asked.

The little green man answered, "Of course it's me. I've come to see if you're happy."

"No, I'm not happy," Nancy said.

"And why not?" the green man asked.

"Because I don't like being so little."

"Oh," the green man said and sat down. "I thought you never wanted to get big."

"I was wrong," Nancy replied. "I want to get big. I want to grow up. I want to be back with my parents and my friends."

The little green man said, "I can change you back to your regular size if I want to. But I'm not going to change you unless you tell me some things that you learned." The green man stood up and stared at Nancy. "What have you learned about kicking and screaming and acting like a baby?"

Nancy smiled. "I don't have to act like a baby because I can take care of myself."

The man said, "And when nobody is around, what do you do instead of kicking and crying?"

Nancy said, "You have to take care of yourself."

"Good," the green man said. "I'm glad that you learned things about yourself. But have you learned things about the world you live in?"

"Lots of things," Nancy said, and she began to list them. "I've learned that little things don't hurt themselves when they fall from high places. I've learned that . . . " Suddenly everything seemed to whirl and swirl around. Nancy tried to keep talking. "I've learned . . . " She felt very dizzy.

MORE NEXT TIME

C Number your paper from 1 through 20.

Skill Items

Write the word from the box that means the same thing as the underlined part of each sentence.

hoist	fish	tadpoles	squeak
remove	climb	moist	wrong

1. The pond is full of baby frogs.
2. The grass is a little wet today.
3. She will take the books from the desk.

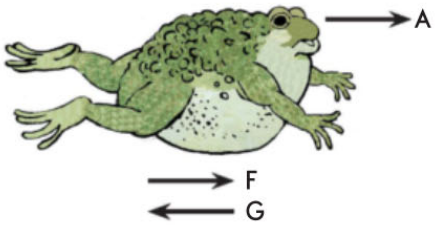
Review Items

Some things happen as tadpoles grow.

4. Write the letter of what happens first.
5. Write the letter of what happens last.

a. They grow front legs.
b. Their tail disappears.
c. They turn blue.
d. They grow back legs.

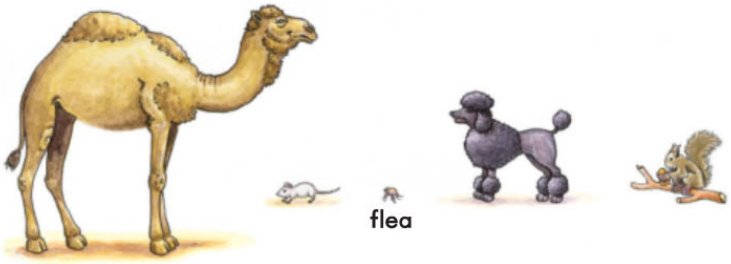
6. The picture shows Goad filled up with air. Arrow A shows air leaving Goad this way ⟶. Write the letter of the arrow that shows the way Goad will move.



7. A mile is a little more than _____ feet.
   - 2 thousand
   - 5 thousand
   - 1 thousand
8. If an ant weighed as much as a cat, the ant could carry an object as heavy as _____.

These animals fell from a cliff. Write the words that tell what happened to each animal.

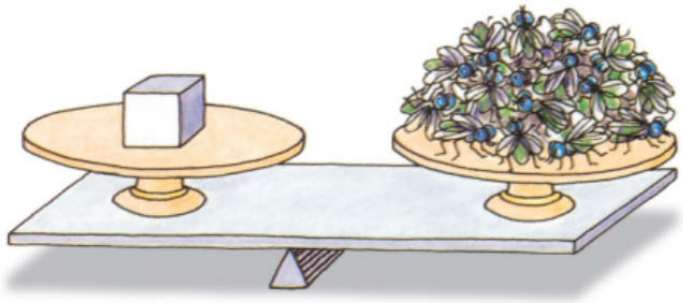
- not hurt
- hurt
- killed



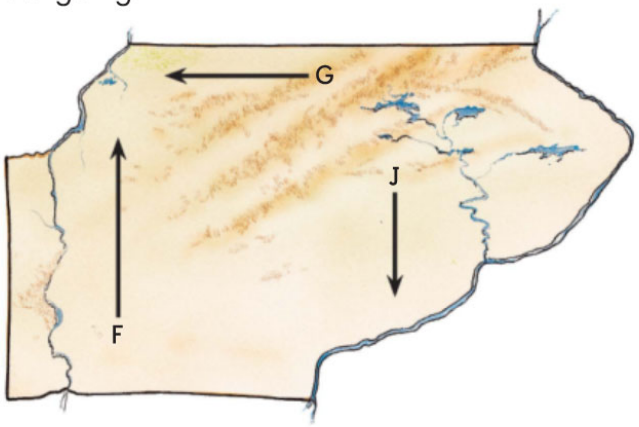
9. 10. 11. 12. 13.

14. Does a housefly weigh **more than a gram** or **less than a gram?**
15. Does a dog weigh **more than a gram** or **less than a gram?**

16. How many grams are on the left side of the scale?
17. So how much weight is on the side of the scale with the houseflies?



18. An arrow goes from the **F.** Which direction is that arrow going?
19. An arrow goes from the **G.** Which direction is that arrow going?
20. An arrow goes from the **J.** Which direction is that arrow going?



Name _____

Story Items

1. Was Nancy afraid to jump down from the counter top? _____
2. Did she get hurt when she jumped? _____
3. Tell why. _____

   _____

4. Who woke Nancy? _____
5. Was Nancy happy about being so little? _____
6. Did Nancy change her mind about growing up? _____
7. Nancy learned that she doesn't have to act like a baby because

   _____.

8. Small animals don't get hurt when they _____.
9. Small animals have a voice that is _____.
10. Water has a _____.
11. The food that a small animal eats each day weighs

    _____.

Skill Items

Here's a rule: **Every little girl wants to grow up.**

12. Jan is a little girl. So what does the rule tell you about Jan?

    _____

13. Ron is not a little girl. So what does the rule tell you about Ron?

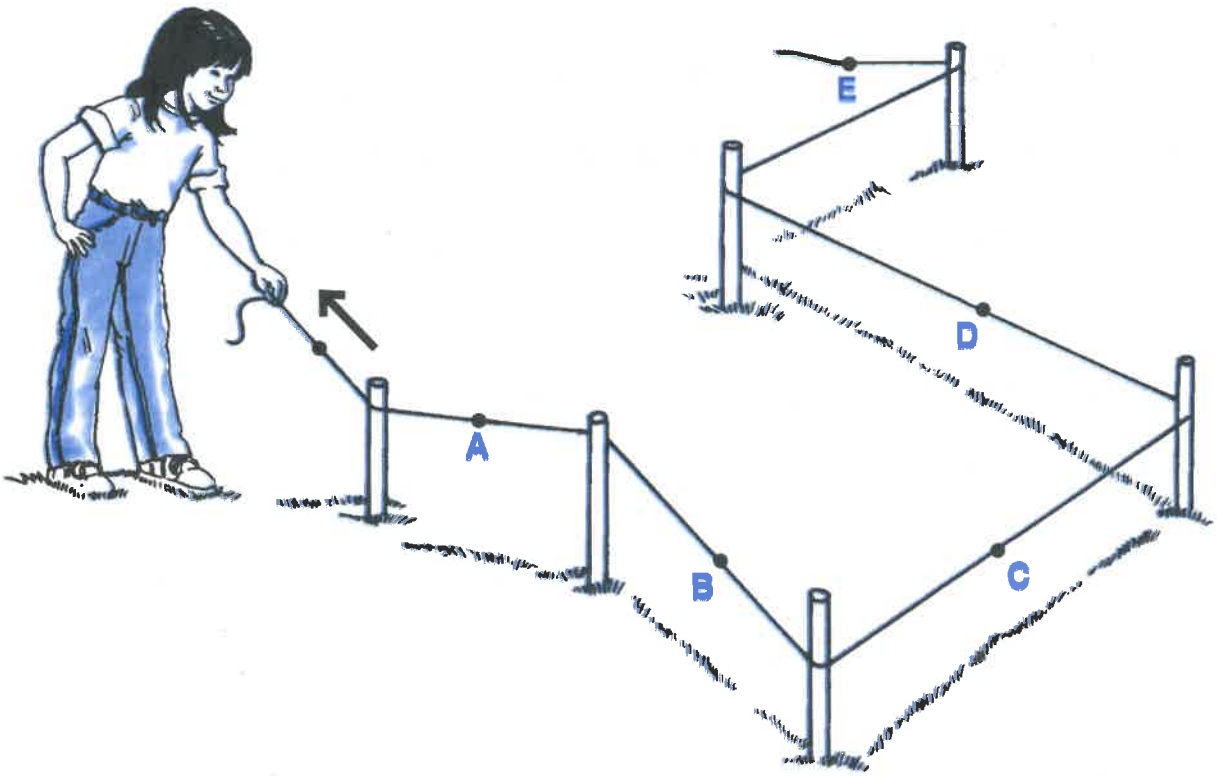
    _____

14. Peg is a little girl. So what does the rule tell you about Peg?

_____

Review Item

15. At each dot, draw an arrow to show which way the string will move when the girl pulls it.



GO TO PART C IN YOUR TEXTBOOK.

35

A

1	2	3
1. several	1. desk	1. expression
2. continue	2. snaps	2. darling
3. distance	3. prove	3. neither
4. sobbing	4. instead	4. becoming
5. worried	5. managed	5. important
6. couple	6. reminds	

B Sounds That Objects Make

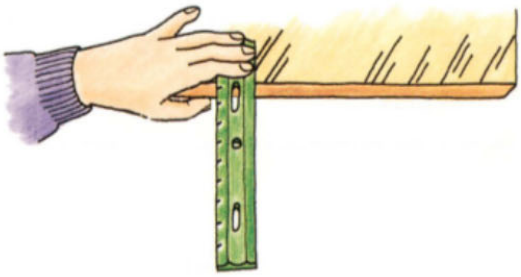
In lesson 26 you read about Nancy's voice and what happened to it when she became smaller and smaller.

Here's the rule about your voice: **If you get smaller, your voice gets higher.**

Follow these instructions and you will see how sounds get higher when things get smaller.

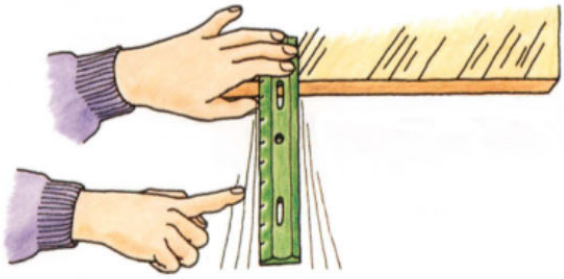
1. Place a plastic ruler so that one end of it is on your desk and the other end hangs over the edge of the desk. Make sure that most of the ruler hangs over the desk. Picture 1 on the next page shows how to place the ruler on your desk.

2. Hold down the end of the ruler that is on the desk.



Picture 1

3. Bend the other end of the ruler down. Then let it go so it snaps back. The ruler will make a sound.



Picture 2

4. Now move the ruler so a smaller part of the ruler hangs over the edge of the desk. The ruler will make a sound that is higher.
5. Now move the ruler so that even less of the ruler hangs over the edge of the desk. The ruler will make a sound that is even higher.

The ruler works just like your voice. When your body gets smaller, the sound of your voice gets higher.

C Nancy Becomes Regular Size

The whole room seemed to be turning and swirling. Nancy felt so dizzy that she was afraid she would fall over. She kept trying to tell the little green man about the things she had learned. Finally, she managed to say, "I learned that water has a skin."

Nancy closed her eyes and talked very loudly. She hoped that she could stop the dizzy feeling by talking loudly.

Suddenly, Nancy opened her eyes. But she didn't see the little green man. She saw the face of a woman.

The expression on that woman's face was one of shock. Her eyes were wide open and so was her mouth. "Where . . . ," the woman said, "where have you been?"

The expression changed. Tears began to form in the woman's eyes. Then Nancy's mother threw her arms around Nancy. "Oh, Nancy," she said. Her voice was sobbing, and she was holding Nancy very tightly. "Oh, darling," she said. "We've been so worried . . . "

Nancy started to cry. She didn't want to cry, but she was so glad to see her mother, and it felt so good to have her mother hold her. She couldn't hold back the tears. "Oh, Mother," she said.

For a few minutes, neither Nancy nor her mother said anything. Then, her mother grabbed Nancy's hands and held them tightly as she said, "Nancy, where have you been? The police have been looking for you and . . . And Sally told a crazy story about you becoming very small."

"It's true," Nancy said. "I know it sounds crazy, but I can prove to you that it really happened. I can tell you where the crumbs of toast are on the counter. I can tell you about the drops of water in the bathroom," Nancy said. "And I can tell you other things."

Nancy's mother was smiling and crying and laughing at the same time. "Oh, Nancy, I don't know what to believe, but I'm very glad to have my darling little baby back."

Nancy said, "I'm not a baby. That's the most important thing I learned when I was less than one centimeter tall. I can take care of myself. And I don't mind growing up at all."

That story took place a couple of years ago. Nancy is still growing up. And she's doing a fine job. She doesn't act like a baby—not even when things go wrong. Instead, she reminds herself, "I can take care of myself." And that's just what she does.

THE END

D Number your paper from 1 through 24.

Skill Items

He is supposed to make a decision in a couple of days.

1. What part means **should?**
2. What word means **two?**
3. What part means **make up his mind?**

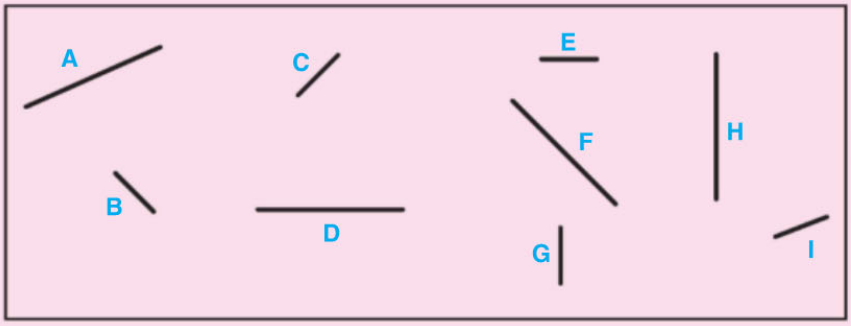
4. Write one way that tells how both objects are the same.
5. Write 2 ways that tell how object A is different from object B.

Object A Object B

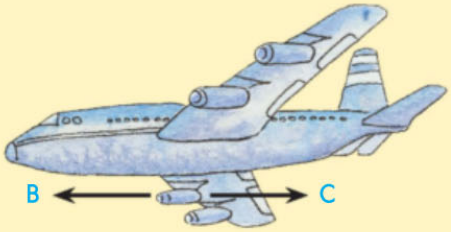
Review Items

Some of the lines in the box are one inch long and some are one centimeter long.

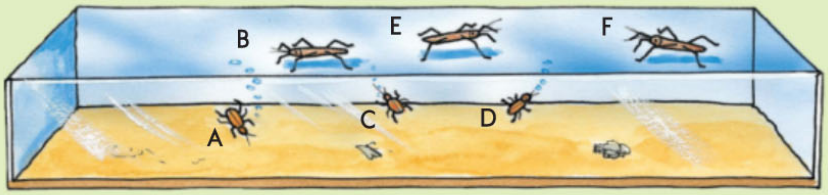
6. Write the letter of every line that is one inch long.
7. Write the letter of every line that is one centimeter long.



8. Which arrow shows the way the air will leave the jet engines?
9. Which arrow shows the way the jet will move?



10. Write the letter of each water strider.



11. Is a water strider an insect?
12. How many legs does a water strider have?
13. How many legs does a fly have?
14. How many legs does a dog have?
15. How many legs does a spider have?
16. How many legs does an ant have?
17. When we weigh very small things, the unit we use is _____.

Some things in the picture weigh **1 gram.** Some weigh **2 grams.** Some weigh **5 grams.** Write how much each object weighs.

18.

19.

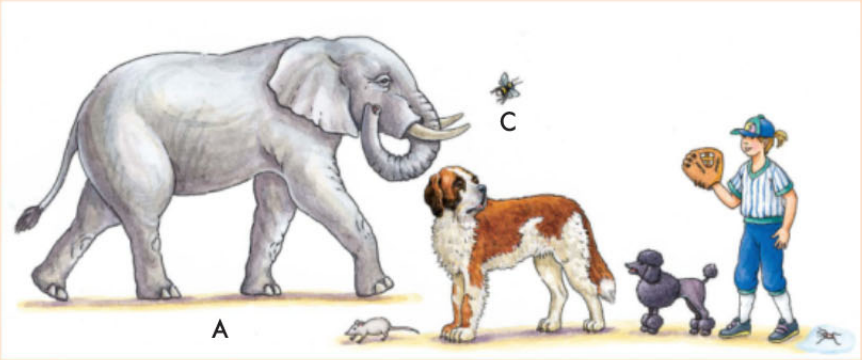
20.

21. 

22. 

23. The food that 3 of the animals eat each day weighs more than those animals. Write the letters of those animals.

24. The food that 4 of the animals eat each day does not weigh as much as those animals. Write the letters of those animals.



Name _____

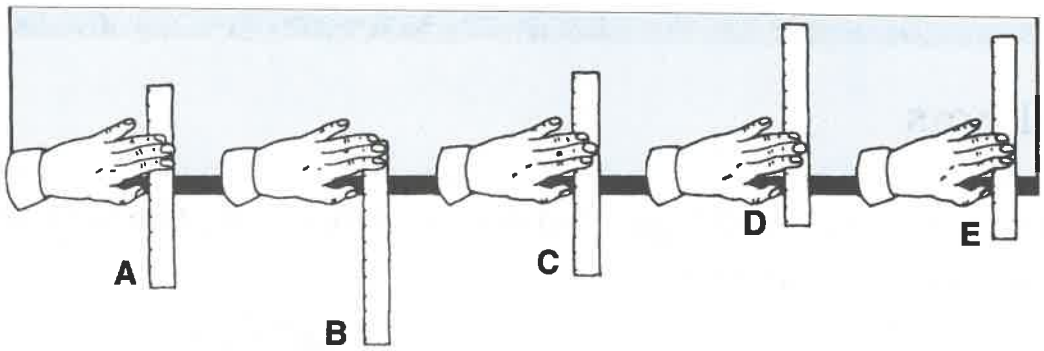
35

A

1. If you get smaller, your voice _____.
2. Fran got smaller. So what do you know about Fran's voice?

_____

3. **Circle** the ruler that will make the highest sound.
4. **Cross out** the ruler that will make the lowest sound.



B **Story Items**

5. Why did Nancy cry when she saw her mother? _____

_____

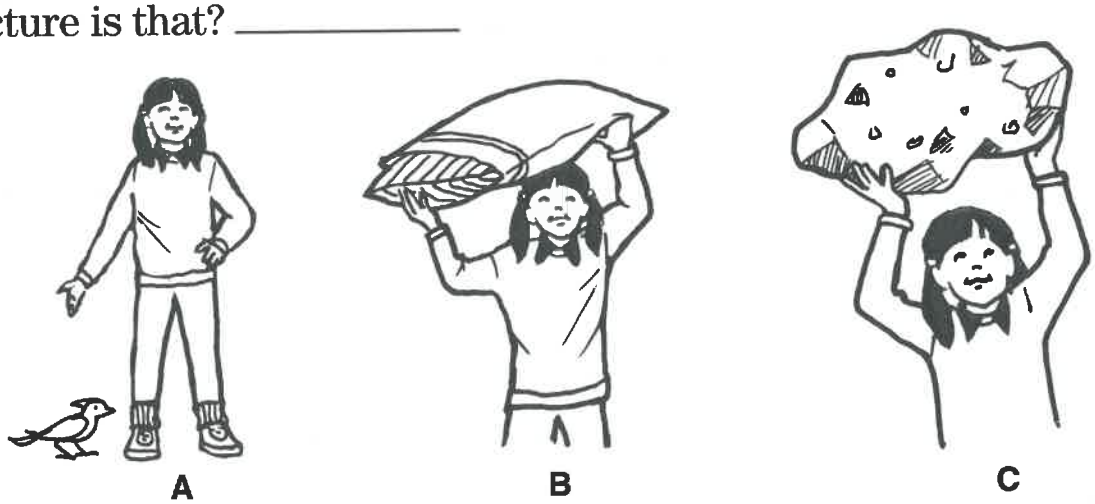
Nancy told about two things to prove that she had been very small.

6. There were crumbs of _____ on the counter.
7. There were drops of _____ in the _____.

8. Does Nancy want to be called a baby now? _____
9. Does Nancy want to grow up now? _____
10. When things go wrong, Nancy tells herself, "I can take

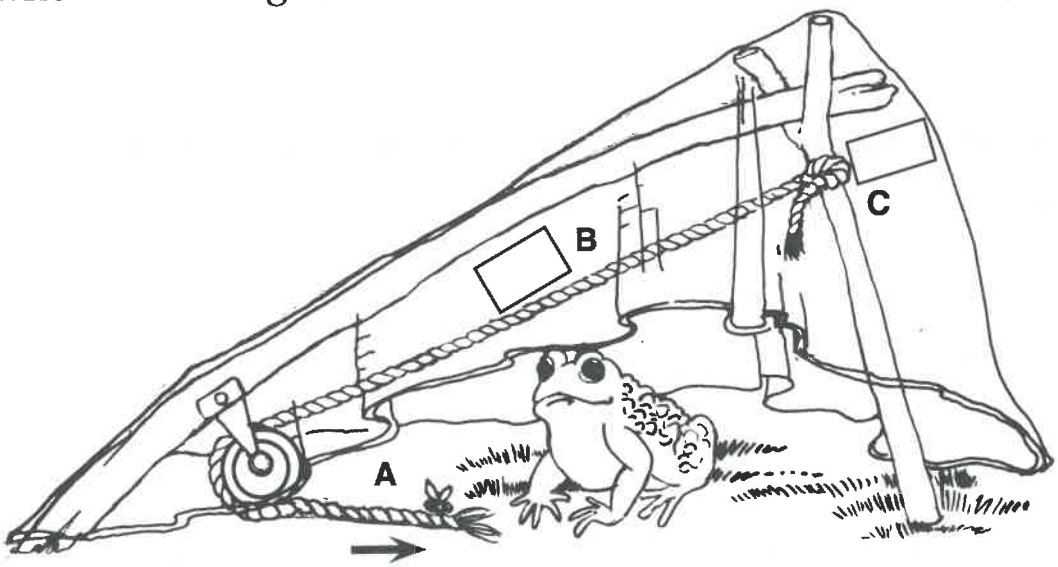
_____."

11. One of these pictures shows Nancy when she was very small. Which picture is that? _____



Review Items

Here's a picture of a food trap. The arrow at **A** shows the way the fly will move when the toad grabs it.



12. **Draw an arrow** to show which way the string will move at **B.**

13. **Draw an arrow** to show which way the pole will move at **C.**

GO TO PART D IN YOUR TEXTBOOK.

36

A

1	2	3
1. a record	1. lifetime	1. fastest
2. cabbage	2. thrown	2. apart
3. maggot	3. tenth	3. worm
4. space	4. crawled	4. rotten
5. Herman	5. continued	5. several
		6. distance

B

Miles Per Hour

When we talk about **miles,** we tell how far apart things are. When we talk about **miles per hour,** we tell how fast things move.

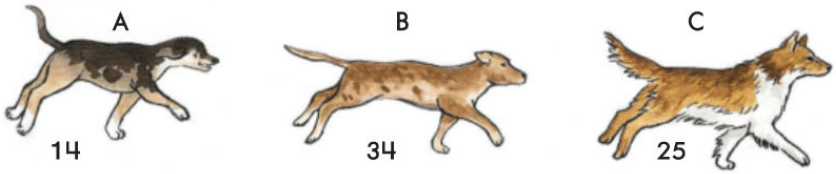
The boat was three miles away. Does that tell how far or how fast?

The boat was going three miles per hour. Does that tell how far or how fast?

The faster something moves, the bigger the number of miles per hour. Ten is a bigger number than nine. So ten miles per hour is faster than nine miles per hour.

Look at pictures A, B, and C. The number below each dog shows how fast that dog is running.

How fast is dog A running?
How fast is dog B running?
How fast is dog C running?
Which dog is running fastest?
Which dog is in front of the others?
Is that dog the fastest dog?



C

A Push in the Opposite Direction

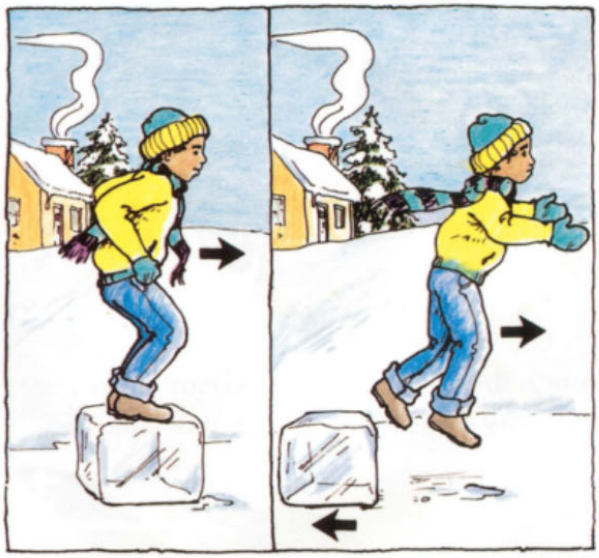
You've learned this rule: **The balloon moves in the opposite direction the air moves.**

You read about Goad. Here's the rule about Goad: **Goad moves in the opposite direction the air moves.** If the air comes out of Goad's mouth in this direction ⟶, Goad moves in the opposite direction. She will move backwards, in this direction ⟵.

If the air comes out of Goad's mouth in this direction ↙, in which direction will Goad move?

If the air coming out of Goad's mouth is blowing south, in which direction will Goad move?

If the air coming out of Goad's mouth is blowing down, in which direction will Goad move?



PICTURE 1 PICTURE 2

There is a rule like this one for everything that moves. Look at picture 1. The boy is standing on a block of ice. The boy is going to move in this direction: ⟶.

When ★ the boy starts to move in this direction ⟶, the block of ice will move in the opposite direction.

Look at picture 2. The arrow shows the boy moving in one direction and the ice moving in the opposite direction.

Look at picture 3. The girl wants to jump from the boat to the dock. Point to show which direction she will jump.

If she jumps in that direction, the boat will move in the opposite direction. When the boat moves in the opposite direction, the girl will fall in the water.

PICTURE 3

Picture 4 shows what happens when the girl tries to jump to the dock. In which direction did the girl start to move?

PICTURE 4

In which direction did the boat move?

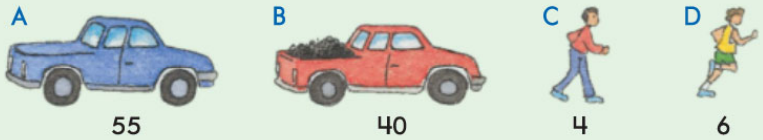
Did the girl land on the dock?

The rule about how things move works for everything. **When something tries to move in one direction, something else tries to move in the opposite direction.**

D Number your paper from 1 through 25.

Each statement tells about **how far** something goes or **how fast** something goes. Write **how far** or **how fast** for each item.

1. They walked 6 miles.
2. They walked 6 miles per hour.
3. The bus was moving 20 miles per hour.
4. The bus was 20 miles from the city.



5. How fast is truck A going?
   - 55 hours • 55 miles • 55 miles per hour
6. How fast is truck B going?
   - 40 hours • 40 miles • 40 miles per hour
7. Which truck is going faster?
8. How fast is boy C going?
   - 4 hours • 4 miles • 4 miles per hour
9. How fast is boy D going?
   - 6 hours • 6 miles • 6 miles per hour
10. Which boy is going faster?

11. When we talk about miles per hour, we tell how _____ something is moving.

Skill Items

Here are titles for different stories:

a. The Pink Flea b. Pete Gets a Reward

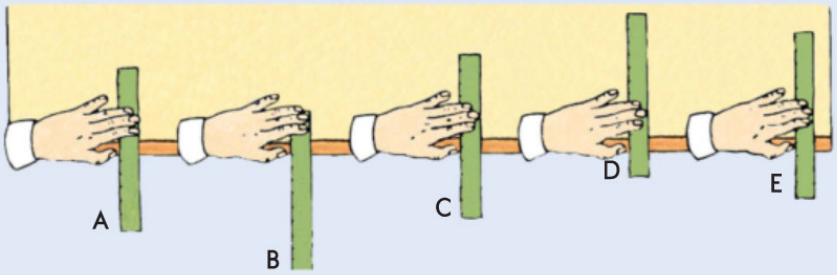
c. The Ant That Escaped

12. One story tells about an insect that was a strange color. Write the letter of that title.
13. One story tells about an insect that got away from something. Write the letter of that title.
14. One story tells about someone who got something for doing a good job. Write the letter of that title.

Review Items

15. If you get smaller, your voice gets _____.
16. Jean got smaller. So what do you know about Jean's voice?

17. Write the letter of the ruler that will make the lowest sound.
18. Write the letter of the ruler that will make the highest sound.



19. The food that a very small animal eats each day weighs _____.
    - less than the animal
    - 5 pounds
    - more than the animal
20. Does dew form in the middle of the day?
21. Dew forms when the air gets _____.
    - cooler
    - windy
    - warmer
22. What do all living things need?
23. What do all living things make?
24. Do all living things grow?
25. If tiny animals fall from high places, they don't _____.

Name _____

36

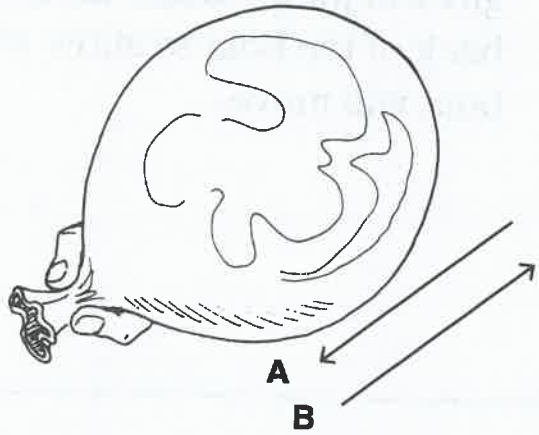
Story Items

1. When something tries to move in one direction, something else tries to move _____.

2. Which arrow shows the direction the air will leave the balloon?

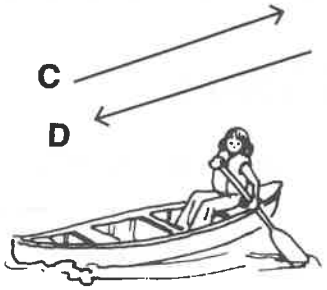
   _____

3. Which arrow shows the direction the balloon will move? _____



4. Which arrow shows the direction the canoe is moving? _____

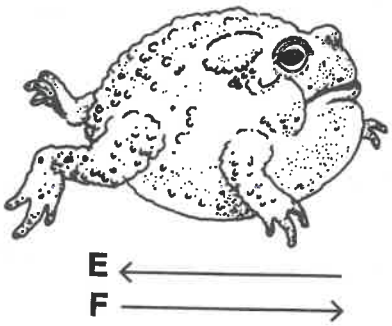
5. Which arrow shows the direction the paddle is moving in the water? _____



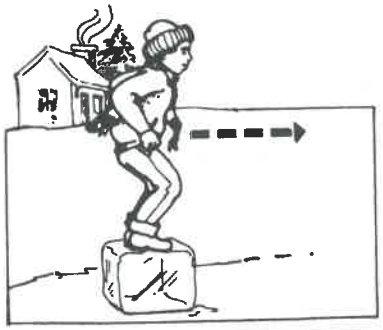
The picture shows Goad filled up with air.

6. Which arrow shows the direction the air will leave Goad? _____

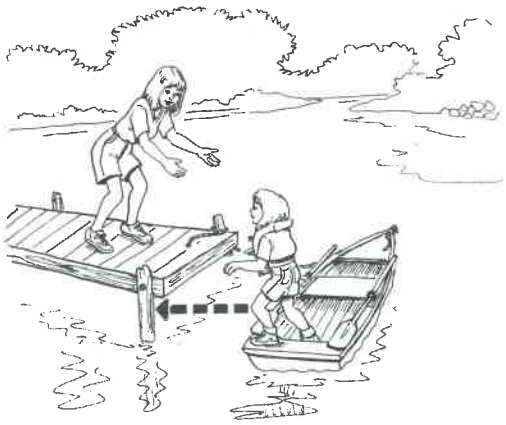
7. Which arrow shows the direction Goad will move? _____



8. The arrow shows which direction the boy will jump. **Make an arrow** on the block of ice to show which direction it will move.



9. The arrow shows which direction the girl will jump. **Make an arrow** on the back of the boat to show which way the boat will move.



Skill Items

Fill in each blank with a word from the box.

decision	traffic	weather	perfect	per
frightened	supposed	forward	couple	

10. The _____ was moving forty miles _____ hour.

11. He is _____ to make a _____ in a _____ of days.

GO TO PART D IN YOUR TEXTBOOK.

37

A

1
1. Kennedy Airport
2. speedometer
3. realized
4. busy
5. meant

2
1. crawled
2. changed
3. wiggled
4. buzzed
5. rubbed
6. rested

3
1. thrown
2. Herman's
3. tenth
4. sleepy
5. fly's

4
1. a record
2. per
3. laid
4. purse
5. lifetime

5
1. rotten
2. worm
3. maggot
4. space
5. crew
6. money

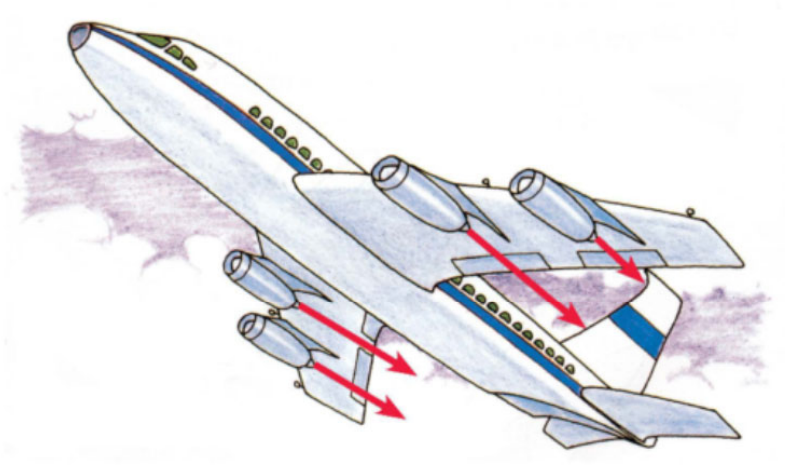
B

More About Pushes in the Opposite Direction

You've learned that if something tries to move in one direction, something else tries to move in the opposite direction.

A paddle works that way. You move the paddle through the water. If the paddle moves through the water in this direction ⟶, the boat moves in the opposite direction. It moves in this direction ⟵.

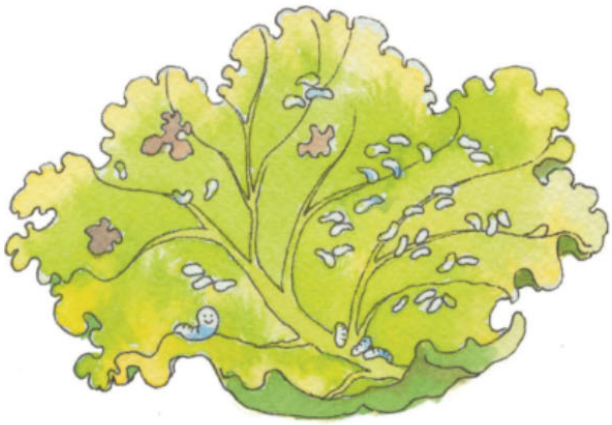
A jet engine works the same way. The jet engine pushes air toward the back of the plane. The plane moves in the opposite direction. The faster the jet engines shoot air toward the back of the plane, the faster the plane moves forward.



C Herman the Fly

Herman was a fly. He was born on some old cabbage leaves that had been thrown out. Herman's mother laid eggs on the leaves, and two days after she laid them, Herman was born. He had brothers and sisters. In fact, he had 80 brothers and 90 sisters. All Herman's brothers and sisters were born on those rotten cabbage leaves.

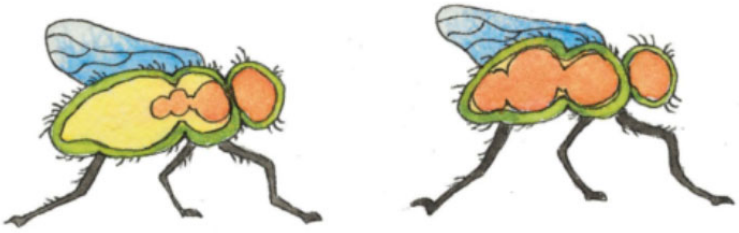
Right after Herman was born, he didn't look like he did when he was a full-grown fly. At first Herman looked like a worm because he was a worm. Here's the fact: When flies are born, they are worms called maggots.



For nine days, Herman was a maggot that crawled around on the cabbage eating and eating and eating. On the tenth day Herman felt sleepy. He stopped eating and went to sleep. When he woke up, he had changed. He was a fly. He wiggled out of his old maggot skin, and there he was, a fly. He was one centimeter long. Like all flies, he had six legs and two big eyes.

Here is something that you may not know about flies. Flies do not change size on the outside. But they change size on the inside. ★ When Herman first became a fly, he

was just as big as he was when he was an old, old fly. A fly's outside body is like a shell. Inside that shell is the part of the fly that grows. At first, the inside part is small. It looks like a little tiny foot in a great big shoe. There is lots of space between the part that grows and the shell. As the fly gets older and older, the inside part gets bigger and bigger until it fills up the shell.



A B

Anyhow, it didn't take Herman long to grow up. Within nine days he was full-grown and doing those things that flies like to do. He buzzed around. He ate. He loved to find things that were rotten and warm. He rubbed his two front feet together as he rested.

Herman looked like any other fly. But he was different, very different. Herman has the record of flying farther and faster than any fly that has ever lived. Most flies fly a few hundred miles in their lifetime. A few flies will fly over a thousand miles. Herman flew thousands and thousands of miles. In the next story, you'll find out how he did that.

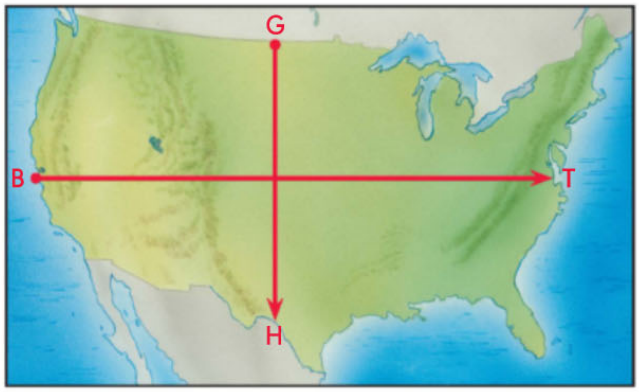
MORE NEXT TIME

D Number your paper from 1 through 21.

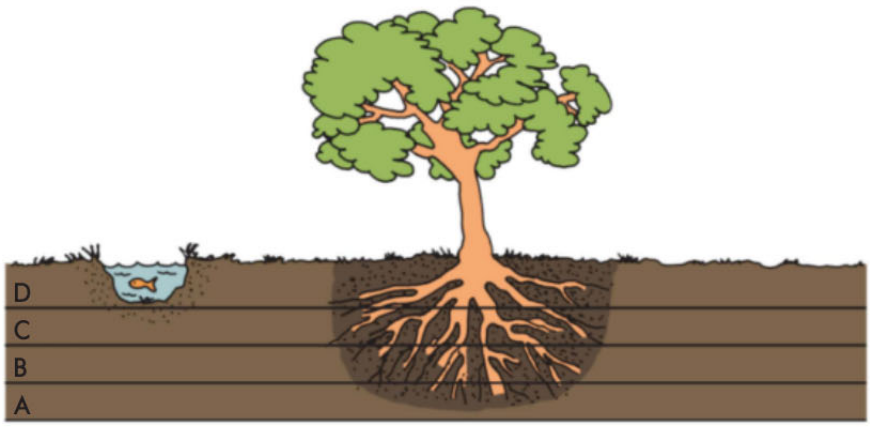
Review Items

1. A mile is more than _____ feet.
   - 2 thousand
   - 1 thousand
   - 5 thousand

2. What part of the world is shown on the map?
3. The map shows how far apart some places are. One line shows 13 hundred miles. The other line shows 25 hundred miles. How far is it from **B** to **T?**
4. How far is it from **G** to **H?**

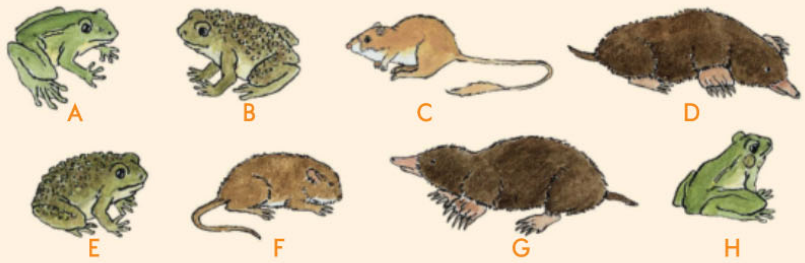


5. Which letter shows where the ground gets warm first?
6. Which letter shows where the ground gets warm last?



7. Which has a tall straight trunk, a forest tree or an apple tree?
8. Which has larger branches, a forest tree or an apple tree?
9. Which is longer, a centimeter or an inch?

10. Write the letter of each toad in the picture.
11. Write the letter of each frog in the picture.
12. Write the letter of each mole in the picture.



13. Which animal has smooth skin, a frog or a toad?
14. Which animal can jump farther, a frog or a toad?
15. Do any frogs have teeth?
16. If an ant weighed as much as a desk, the ant could carry an object as heavy as _____.
17. You can see drops of water on grass early in the morning. What are those drops called?
18. Which weighs more, one gram or one water strider?
19. About how many ants would it take to weigh one gram?
20. Roots keep a tree from _____.
21. Roots carry _____ to all parts of the tree.

Name _____

Story Items

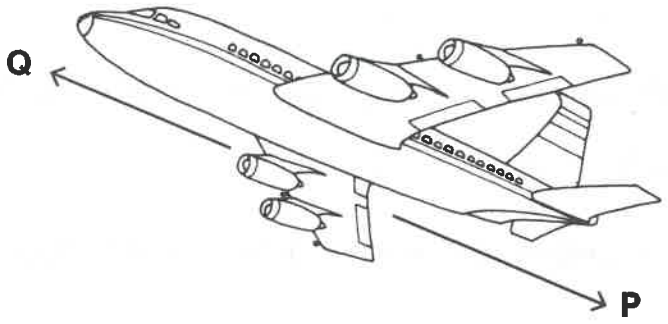
1. When something tries to move in one direction, something else tries to move _____.

2. Which arrow shows the direction the air will leave the jet engines?

   _____

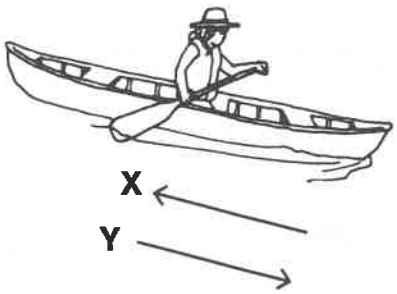
3. Which arrow shows the direction the jet will move?

   _____



4. Which arrow shows the direction the canoe is moving? _____

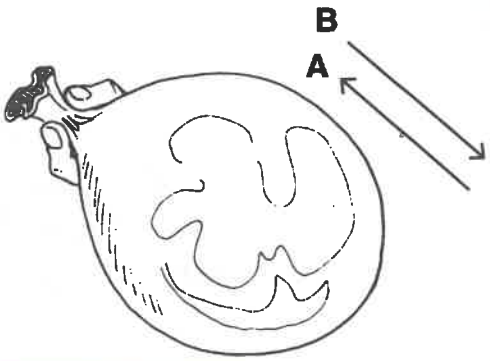
5. Which arrow shows the direction the paddle is moving in the water? _____



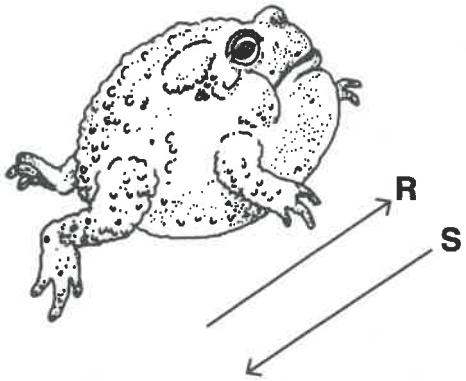
6. If the paddle of a canoe is moving east through the water, in which direction is the boat moving? _____

7. Which arrow shows the direction the air will leave the balloon? _____

8. Which arrow shows the direction the balloon will move? _____



The picture shows Goad filled up with air.



9. Which arrow shows the direction the air will leave Goad? _____

10. Which arrow shows the direction Goad will move? _____

11. When a boy jumps from the mud this way ↖, the mud tries to move which way? _____

Skill Items

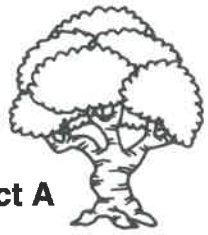
12. Write one way that tells how both objects are the same.

_____

13. Write 2 ways that tell how object A is different from object B.

1 _____

2 _____



GO TO PART D IN YOUR TEXTBOOK.

38

A

1
1. San Francisco
2. passenger
3. attendant
4. pilot
5. idea

2
1. flew
2. chew
3. blew
4. crew

3
1. understand
2. taxicab
3. sunlight
4. airplane
5. belong

4
1. traffic
2. realized
3. busy
4. speedometer
5. hung

5
1. Kennedy Airport
2. money
3. driver
4. meant
5. purse

6
1. S-shaped
2. bounce
3. bouncing
4. jumbo
5. travel

B

Speedometers

You know that miles per hour tells how fast something is moving. The faster something is moving, the bigger the numbers.

Which is moving faster, something that goes five miles per hour or something that goes four miles per hour?

Picture 1 shows a speedometer inside a car that is moving. The arrow is pointing to a number. That number tells how fast the car is going.

Picture 2 shows a speedometer inside a car that is not moving. That car is going zero miles per hour.

PICTURE 1

PICTURE 2

PICTURE 3

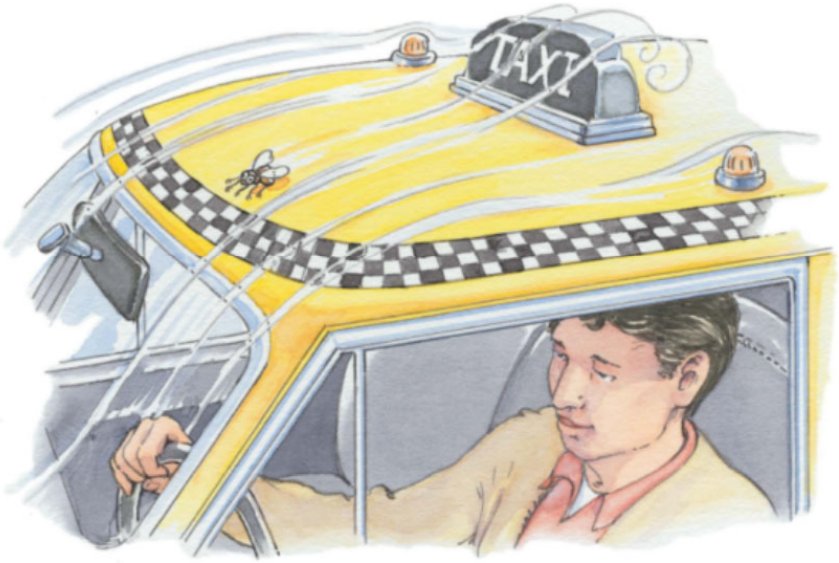
C Herman Goes to Kennedy Airport

Herman became the fly that flew farther than any other fly. If you want to understand how this happened, you have to know where Herman lived.

Herman was born in New York City. He was born on a cabbage leaf that was about five miles from a large airport called Kennedy Airport. Kennedy Airport is very busy. You can go to Kennedy Airport at any time of the day or night and see planes. Some are in the sky, getting ready to land. Others are on the ground, getting ready to take off.

Herman went to Kennedy Airport. Five miles is pretty far for a fly to travel, but Herman didn't fly all the way. He was buzzing around, looking for food, when he saw a nice, warm yellow. He didn't know what it was, but it was warm and yellow. So he landed on it.

It was a shiny new taxicab that was on its way to the airport. It was stopped at a traffic light when Herman landed on the roof. When the cab began to move, Herman thought he would fly away, but then he realized that the wind was blowing too fast. Here's the rule: The faster the cab moves, the faster the wind blows on Herman.



Flies don't take off when the wind is blowing very fast. Flies use their six legs to hang on as hard as they can. So Herman hung on as hard as he could, and the wind blew and blew. But soon the wind blew slower and slower. And then the wind stopped.

The cab had stopped at the airport. For Herman, this stop meant that he could fly away from the cab. For the two women inside the cab, this stop meant that they would have to start working. The women were part of the crew of a jumbo jet.

One of the women opened her purse. She took out some money to pay the cab driver. The sun was shining on the things in her opened purse. There was a pack of chewing gum. And there was some candy. CANDY. If there is one thing that flies love more than cabbage leaves and rotten meat, it is candy. And in the warm sunlight, what could be better than a piece of candy that is four times bigger than you are? Herman saw that piece of candy. He made two circles in the air and one S-shaped move. And he landed right on the candy. But just as he was ready to start eating, everything got dark.

MORE NEXT TIME

D **Number your paper from 1 through 18.**

Skill Items

Here's the rule: **Toads have warts.**

1. Zorm is a toad. So what does the rule tell you about Zorm?
2. Gleeb is not a toad. So what does the rule tell you about Gleeb?

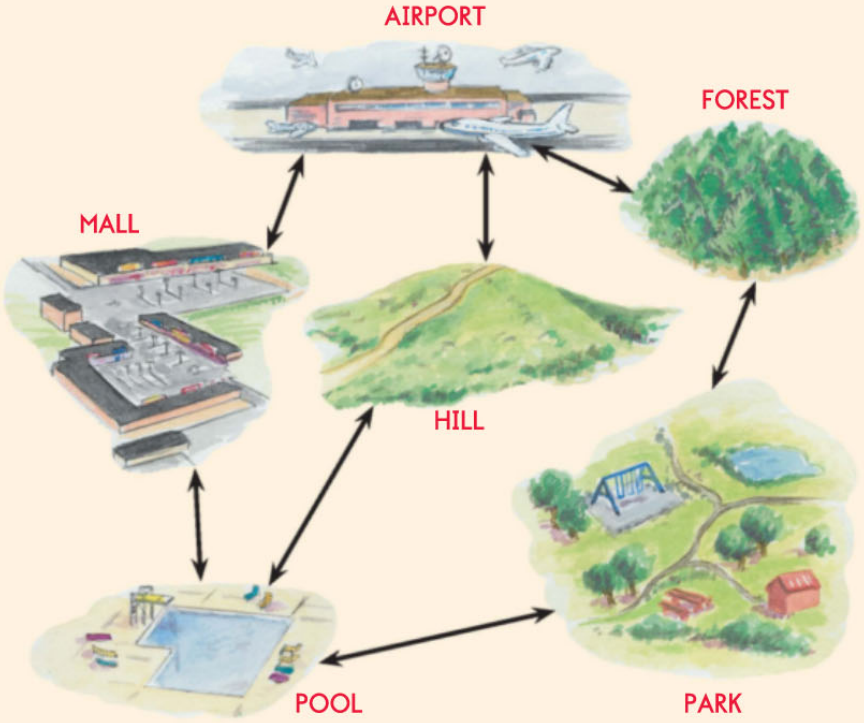
Write the word from the box that means the same thing as the underlined part of each sentence.

apart	warts	behind	motioned	
ahead	propped	hair	broiled	boasted

3. She <u>bragged</u> about winning the race.
4. The cab was <u>in front</u> of the bus.
5. The animal was covered with <u>little bumps</u>.

Things that are this far apart on the map ⟷ are 1 mile apart.
Things that are this far apart ⟷ are 2 miles apart.

6. How far is it from the pool to the park?
7. How far is it from the park to the forest?



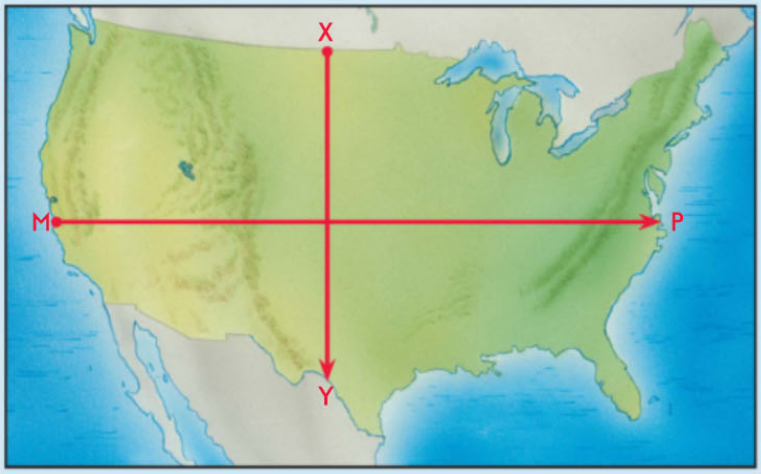
8. What part of the world is shown on the map?

9. The map shows how far apart some places are. How far is it from **M** to **P?**

- 13 hundred miles
- 35 hundred miles
- 25 hundred miles

10. How far is it from **X** to **Y?**

- 13 hundred miles
- 35 hundred miles
- 25 hundred miles



11. A mile is more than _____ feet.

- 5 thousand
- 3 thousand
- 1 thousand

Each statement tells about how far something goes or how fast something goes. Write **how far** or **how fast** for each item.

12. She walked 3 miles.
13. The bus was going 50 miles per hour.
14. She walked 3 miles per hour.
15. He chased the dog 6 miles.

16. How **fast** is truck **R** going?
17. How **fast** is truck **S** going?
18. Which truck is going faster?

25 30

Name _____

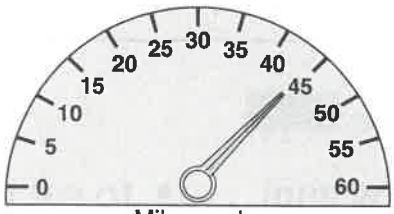
38

A

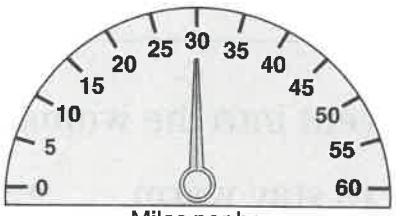
1. What part of a car tells how fast the car is moving?

   • the tires • the speedometer • the clock

Each speedometer in the picture shows how fast the car is moving.



A



B

2. How fast is car A going? _____

3. How fast is car B going? _____

4. Which car is going faster? _____

5. A speedometer tells about _____.

   • miles • hours • miles per hour

B **Story Items**

6. What city was Herman born in?

   • New York City • Toadsville • Portland

7. What airport was close to where Herman was born?

   • O'Hare • Kennedy • O'no

8. How far was the airport from where Herman was born?

_____

9. Why didn't Herman fly off the cab?

- Flies don't fly in the morning.
- Flies don't take off near airports.
- Flies don't take off in big winds.

10. How many legs does Herman have? _____

11. The two women were part of the crew of a

_____.

12. Herman went into the woman's purse _____.

- to stay warm
- to chew gum
- to eat candy

13. **Underline** 2 things that Herman liked about the cab.

- It was warm.
- It was new.
- It was fast.
- It was green.
- It was yellow.

14. When was the wind blowing fastest on Herman?

- when the cab was standing still
- when the cab was going 35 miles per hour
- when the cab was going 15 miles per hour

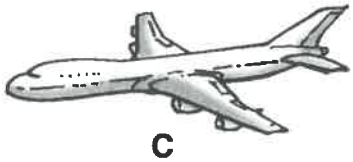
Look at the pictures.

15. **Underline** the thing that Herman rode on to the airport.

16. **Make an X** on the thing the two women were going to work on.

A

B



C

D

GO TO PART D IN YOUR TEXTBOOK.