**Unit 1 Air Pressure Creates Wind**

**Translate the sentences.**

1. Air is all around us. It’s made of tiny particles.

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2. These particles don’t stay still. They are always moving.

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3. But why does it move? And how does it move? Let’s look for ourselves.

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4. Step 1. Blow up a balloon to three-quarters of the size and tie the end with a binder clip.

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5. Step 2. Put the end of the balloon onto a thick tube.

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6. Step 3. Blow up another balloon halfway and tie the end using a binder clip.

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7. Put the balloon on the other end of the tube.

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8. What do you think will happen? Will the air move? Will it stay in the same place?

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9. Step 4. Remove the clips from both balloons. Watch the air move inside the balloons.

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10. Which balloon will get bigger and which will get smaller?

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11. Why did the big balloon get bigger and expand all the way while the small one got smaller?

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12. It’s because air moves from areas of higher pressure to areas of lower pressure.

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13. The air inside the small balloon is in a smaller space.

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14. So the air molecules are closer together, causing high pressure.

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15. The air molecules in the larger balloon are spread out, causing lower pressure.

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16. The air moves from the small balloon to the big balloon.

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17. Air moves like this in nature as well. We call it “wind.”

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**Unit 2 The Weather Forecast**

**Translate the sentences.**

1. Lulu and her mom are watching TV together. The weather forecast is on.

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2. “Be careful, as there will be a lot of low pressure today.”

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3. “Is low pressure bad, mom?” asks Lulu.

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4. “It’s bad for the weather. High pressure brings sunshine and clear skies.

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5. Low pressure brings rain and clouds. There could be wind or even snow if it’s cold.”

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6. “Then I should take my umbrella today,” says Lulu. “Good idea!” says Mom.

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7. The weather forecast continues.

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8. “Heavy rain and wind are expected in the southern region. Check before you travel.”

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9. “Dad is on a business trip in the south, isn’t he? He planned to fly home today.”

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10. Mom says, “I just got a call from your dad.

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11. His flight was canceled. He will come home tomorrow.”

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12. “It’s lucky we know the weather in advance! This way, we can watch out for low pressure.”

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**Unit 3 How Does Heat Move Liquids?**

**Translate the sentences.**

1. Have you ever boiled water using a kettle? The bottom of the kettle gets hot.

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2. It heats the water inside from the bottom to the top.

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3. How does all the water in the kettle get hot and finally boil? Let’s see.

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4. Step 1. Prepare a large water tub, four cups to support the tub, blue food coloring, a dropper, and a small paper cup.

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5. Step 2. Put the water tub on top of the four cups. Put water in it.

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6. Step 3. Drop the blue food coloring into the bottom of the tub using the dropper.

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7. Make sure you put the food coloring in slowly.

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8. Step 4. Fill the small paper cup with hot water.

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9. Put the paper cup under the food coloring in the tub. See what happens to the blue food coloring.

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10. What happened? The hot water under the tub heated the food coloring.

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11. After a while, the heated food coloring started moving.

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12. It flowed from the bottom to the top of the tub. The heated blue water went up.

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13. The cold water went down. We call this process a “convection current.”

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14. In a kettle, the hot water at the bottom moves up. The cold water moves down.

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15. Then that water gets hot, and it moves up again.

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16. This keeps happening until all the water is hot. The kettle boils! Would you like some tea?

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**Unit 4 Water Moves Around the World**

**Translate the sentences.**

1. It was a very cold winter day. Tim went to the sea with his dad. He put his foot in the water.

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2. “Dad, the water is very cold! The water at the North Pole is much colder, right?”

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3. Dad answered, “That’s right. The water near the North Pole is cold.

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4. But the water near the equator is warm. This causes something amazing to happen.”

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5. “What is that?” Tim asked.

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6. “It’s the circulation of the seawater. Cold water is heavier than warm water.

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7. When the seawater near the poles gets colder, it sinks down.

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8. The cold water flows to warm areas near the equator.

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9. The warm water moves to where the cold water was. It’s a huge convection current.”

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10. “Wow, it works just like our kettle at home! How fast does the water move?”

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11. “It’s very slow. It flows about 1 cm per hour.

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12. It takes more than one thousand years to circulate around the whole world!”

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**Unit 5 Growing Mushrooms**

**Translate the sentences.**

1. Animals and plants are two different types of living things.

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2. There’s another type of living thing. It’s called a fungus.

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3. Mold and mushrooms are types of fungi. They grow well in warm and humid environments.

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4. We can often see mold and mushrooms growing in the summertime.

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5. They don’t get their food from sunlight like plants. They can grow in the dark.

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6. They get nutrients from other living things, dead or alive.

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7. Let’s watch a mushroom grow and see for ourselves!

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8. Step 1. Get a mushroom growing kit. Follow the instructions on the kit.

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9. Step 2. Your kit will include a substrate (mushroom food) and mycelium (mushroom spawn).

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10. It will take a few days for the mushrooms to grow.

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11. Did your mushrooms grow? Aren’t they amazing?

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12. All they need to grow are the spawn and the substrate.

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13. They don’t need sunlight to grow. You didn’t use seeds to grow the mushrooms.

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14. Mushrooms don’t make seeds. They make spores.

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15. Wild mushrooms release the spores. They get carried away by the wind.

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16. If a spore lands somewhere dark, humid, and with good food, it releases the spawn, and a new mushroom can grow.

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17. Mushrooms are easy to find in the woods.

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18. It’s dark and humid, and the soil has lots of nutrients.

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19. But not all mushrooms can be eaten, so don’t pick them.

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**Unit 6 I Am Not a Plant!**

**Translate the sentences.**

1. It’s very nice to meet you. I’m a mushroom. I have a wide cap and a stalk.

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2. I don’t move, and I grow upward, so people think I am a plant.

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3. But I’m not a plant! I’m not an animal either.

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4. Then what am I? I’m a fungus. Mold is a member of my family!

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5. Fungi like me grow well in a warm and humid environment.

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6. You can see a lot of us in the summer.

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7. Plants make their own food through photosynthesis.

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8. I can’t do this, so I get nutrients from dead and living things around me.

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9. How do I reproduce? I reproduce by spores.

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10. Spores are powders in the gills under my cap.

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11. Spores are light, so they float in the air.

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12. They float away and land on the earth. There, they grow into new mushrooms.

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**Unit 7 Water Drops**

**Translate the sentences.**

1. We know that water has three states: liquid, solid, and gas.

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2. We know water can move between these states.

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3. There’s also something else to know about water. It’s called “surface tension.”

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4. What is surface tension? Let’s do an experiment and see.

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5. Step 1. Place a penny on a flat surface. Fill a pipette with water.

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6. Step 2. Pour drops of water on the penny, one at a time. Count the drops.

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7. Step 3. Keep adding drops. How many drops does it take until the water spills off the penny?

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8. Step 4. Try again. How many drops can you add this time before it spills?

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9. How did the water stay on the penny? Why didn’t it spill over straight away?

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10. It’s because of surface tension. Surface tension keeps the water molecules together tightly.

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11. On the surface of the water, they hold together even tighter.

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12. They’re like a skin on the water. This is surface tension.

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13. Surface tension held a few water drops together.

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14. When we added more and more drops of water, eventually we broke the surface tension.

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15. The water spilled. Where else can we see surface tension in action?

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**Unit 8 A Water Strider**

**Translate the sentences.**

1. I’m a water strider. You can find me at ponds and reservoirs.

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2. My body looks like a thin stick. I have three pairs of legs.

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3. My front two legs are short. My back four legs are very long.

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4. Some people say my four long legs make me look like a drone.

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5. Drones float in the air, and I float on the water! I can walk on water, too.

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6. Is it because I’m light? I am light, but there is a more scientific reason.

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7. It’s because I use surface tension.

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8. There are thousands of fine hairs covering my whole body.

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9. The hairs shut in air while my legs push on the surface of the water and spread my weight out.

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10. The water pushes my legs up. That’s how I float on the water.

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11. Look for me in the water!

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**Unit 9 Speed Racers**

**Translate the sentences.**

1. How can we compare the speed of objects? There are two ways to do it.

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2. We can compare their speed over the same distance.

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3. For example, five people run a 100-meter race. The person who finishes first is the fastest.

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4. We can also compare how far objects can travel at different speeds over the same amount of time.

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5. A bicycle travels 60 km in 3 hours. A car travels 240 km, and a train travels 300 km in the same time.

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6. Which is the fastest? It’s the train. It travels the farthest in the same amount of time.

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7. Let’s compare the speed of objects over the same amount of time.

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8. Step 1. Draw a starting line on the floor. Place a tape measure so it is vertical to the line.

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9. Step 2. Prepare three paper cars.

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10. Place one car at the starting line and set a time for the race, for example 1 minute.

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11. Step 3. Move the paper car using a fan.

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12. Mark where the car stopped and measure how far it moved.

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13. Step 4. Now do it for the other two cars. Which car moved the farthest?

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14. The first car went 72 cm, the second car went 52 cm, and the third car went 40 cm.

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15. The first car went the farthest in the same amount of time, so it is the fastest.

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16. Which car was the fastest for you?

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**Unit 10 A Race to Grandfather's House**

**Translate the sentences.**

1. It’s Sally’s grandfather’s birthday.

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2. Sally and her uncle both arrive at Grandfather’s home at 10 a.m.

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3. “Hi, Uncle Pete!” says Sally. “When did you leave home?”

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4. “We left home at 8 a.m., so it took us 2 hours to get here,” Uncle answers.

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5. “When did you leave?”

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6. “We left at 7 a.m., so it took us 3 hours. Hmm... Whose car was faster?

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7. How can we find it out?”

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8. “We need to work out the velocity,” says Uncle Pete.

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9. “Your home is 240 kilometers away from Grandfather’s.

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10. It took you 3 hours, so divide 240 km by 3 hours. That’s 80 km/h.

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11. My home is 140 kilometers away from here, and I took 2 hours to get here.

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12. Divide 140 by 2 to make 70 km/h.”

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13. Sally asks, “So our car was 10 km/h faster than your car, right?”

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14. “Right, Sally. You won!” says Uncle.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Unit 11 The Changing Volumes of Gases**

**Translate the sentences.**

1. You want to play table tennis. The ball rolls off the table and you step on it by mistake.

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2. Oh, no! Now the ball is crushed! How can you play?

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3. Can you fix the crushed ball?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Step 1. Put a balloon over the mouth of a triangular flask.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Step 2. Put the flask in a beaker filled with hot water.

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6. Step 3. Now, put the flask in a beaker filled with ice water.

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7. The volume of gases gets bigger when they get hotter.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. The hot gases made the balloon bigger.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. The volume of gases gets smaller when the gases get colder.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. The cold gases made the balloon smaller.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. So, how can we fix the crushed ball? Can you work it out? That’s right.

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12. Put the ball in hot water. The volume of the gases in the ball will get bigger.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. The crushed ball will return to its original shape!

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14. With your knowledge of the volume of gases, you can play table tennis!

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15. Where else can you use this knowledge?

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**Unit 12 Cold Air, Hot Air**

**Translate the sentences.**

1. “Brian, look at this stew!” says Erica. “It looks weird!

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2. Mom said to eat it for dinner, but I’m not sure whether it’s okay to eat.”

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. “What’s wrong?” says her brother.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. “Look at the plastic wrap on top. It’s curved downward.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Does that mean it’s rotten?” Erica says.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. “Don’t worry, Erica!” laughs Brian.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. “It’s just because the stew was in the fridge. It got cold.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. The air between the plastic wrap and the stew got cold, too.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. The volume of the air got smaller, so the plastic wrap curved downward.”

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. “What happens when you microwave the stew? Will the volume of air get bigger?”

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. “That’s right. The plastic wrap will curve upward!”

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. “Wow! And then we can eat the stew?”

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. “Yes, once we take off the plastic wrap!”

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Unit 13 Stems Carry Water**

**Translate the sentences.**

1. Plants are made of roots, a stem, and flowers, among other parts.

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2. Roots spread out under the ground. They support the plants and absorb water.

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3. The stem brings the water from the roots to the flowers.

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4. How can we see the water move up a plant?

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5. Prepare some red food coloring and the stem of a lily.

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6. Step 1. Add the red food coloring to the water. Put the lily stem in the red water for 4 hours.

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7. Step 2. After 4 hours, take the stem out and cut it horizontally.

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8. Make sure not to cut yourself. What do you see?

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9. Step 3. Now, cut it vertically and see what it looks like.

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10. You can see red dots when you cut it horizontally.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. You can see red lines when you cut it vertically.

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12. The red parts show us how the water moved up the stem.

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13. There are many thin tubes inside a plant’s stem.

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14. These tubes carry water from the roots to the flower.

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15. The appearance of stems varies. Some are thick and straight.

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16. Some are long and thin. Some wind around other objects.

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17. All of them bring water from the roots to the flowers. Aren’t they clever?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Unit 14 Grandfather's Garden**

**Translate the sentences.**

1. Brian visits his grandmother for the weekend. He loves helping her in her garden.

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2. Today, Brian is digging up some sweet potatoes.

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3. He stops digging when he sees something interesting.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. “Grandma, those tomato plants have upright stems.

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5. But these sweet potato stems crawl along the ground.”

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. “That’s right,” says Grandmother.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. “A crawling stem, like that of these sweet potatoes, is called a stolon.

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8. Sweet potatoes and strawberries have stems like this.”

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. “Plants are so interesting. What other plants have different stems?” asks Brian.

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10. “Well, morning glory stems wrap around other objects.” “Wow! That’s cool.”

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. “Yes, there are many different types of stems.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. They look different, but they all do the same thing. They all support the plant.

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13. They all carry water and nutrients.”

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14. Brian keeps digging sweet potatoes.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

15. Learning about plant stems is good, but Grandmother’s sweet potato pie is better!

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**Unit 15 What's the Weather Like Today?**

**Translate the sentences.**

1. In the morning, you check the weather forecast before you go out.

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2. But who makes the weather forecast? And how do they do it?

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3. Meteorologists predict the weather.

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4. They know what the weather will be like in the next few days.

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5. They do this in many different ways.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. They send weather balloons high up in the sky to record atmospheric pressure.

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7. They use satellites to see if there is wind or rain on the way.

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8. They also know what the weather is usually like in an area or at this time of year.

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9. All of this information goes into computers.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. The computers analyze the information to predict the weather.

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11. We can see weather reports on our phone. We can watch weather forecasters on TV.

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12. Sometimes they get things wrong. But it's still a good idea to check the weather forecast!

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**Unit 16 Hydro Helpers**

**Translate the sentences.**

1. 71 percent of Earth’s surface is covered with water. It’s all around us.

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2. But only 3.5 percent of Earth’s water is fresh water. The rest is salty seawater.

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3. Humans can only drink fresh water. We need it to live.

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4. Therefore, it’s important to protect fresh water.

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5. We must keep it clean and safe from pollution.

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6. We must make sure everyone on Earth has safe water to drink.

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7. Hydrologists help with this. “Hydro” means water.

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8. These scientists study the water. They help protect it.

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9. They sort out the problems with contaminated water.

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10. They look for water to drink. Groundwater is water that is held underground.

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11. Hydrologists look for groundwater that can become drinking water for people.

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12. They make sure it is clean and safe to drink. They save lives!

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13. Hydrologists are very important. Think of them when you have a cold glass of water today.

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