

Class

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## Unit 1 Muscles Move Our Bodies

**Translate the sentences.**

1. and muscles / The bones / "locomotive organs." / are called / which help us move

---

2. like our heart, / important organs / lungs, and brain. / They also protect

---

3. They extend / the body move. / and flex / to make

---

4. using / two straight straws / Step 1. Flatten / a pencil.

---

5. a paper fastener / Push / of each straw. / through one end

---

6. Step 2. Put / plastic bag. / into a / a bendy straw

---

7. so no air / of the bag / can get out. / to the straw / Tie the opening

---

8. both straws, / sides of / front and back. / the bag to / Step 3. Tape both

---

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9. of a hand / tape a drawing / to the front straw. / You can

---

10. bag through / into the plastic / Step 4. Blow air / the bendy straw.

---

11. the plastic bag / blew air, / When you / swelled up.

---

12. thicker and shorter, / the front straw / It got / lift up. / and it made

---

13. our arms. / thicker and bend / in our arms flex, / When the muscles / they get

---

14. and straighten / they get flatter / our arms again. / muscles extend, / When our

---

15. to move. / Thanks to / moving together, / our bones and muscles / we are able

---

16. simple things, / we wouldn't be / of this book! / Without them, / like turn the pages /  
able to do

---

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## Unit 2 Amazing Bones

### Translate the sentences.

1. and hurt himself. / playing soccer / Jessie was / when he fell / with her little brother Pete

---

2. to make sure / keep playing, / his bones / weren't hurt. / He wanted to / but Jessie wanted

---

3. hard substances / "Bones are / our bodies. / inside

---

4. and run. / They / walk / help us    They / organs." / our / protect

---

5. the same?" / look / "Do / all bones

---

6. "Your / round. / skull / is    protects / It / your brain.

---

7. banana. / Your ribs / like a / are curved

---

8. They / and lungs. / protect / your heart

---

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9. of bamboo. / looks like / Your spine / a long stick

---

10. It helps / up and / lie down." / you stand

---

11. Pete. / I have / "Wow, / bones," said / so many

---

12. have hurt / your leg bone. / you might / "Now,

---

13. to check." / go to the / orthopedic doctor / We should

---

14. Pete had a crack / lots of calcium. / and recommended / The orthopedic doctor said /  
in his leg bone

---

15. amazing bones. / and thought / Pete drank milk / about his

---

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## Unit 3 Light Energy

**Translate the sentences.**

1. need sunlight / We know / to grow. / that plants

---

2. Plants convert / chemical energy. / into / light energy

---

3. big and strong. / the plants / energy makes / This chemical

---

4. electric energy. / Solar batteries / energy into / convert light

---

5. electric energy. / Let's see / is converted into / how light energy

---

6. a thin piece / Step 1. Tear / long pieces. / of paper into / or cut

---

7. using / of a propeller / Attach it / double-sided tape. / to the blades

---

8. crocodile clips. / a solar battery / Step 2. Connect / with wires and / to a motor

---

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9. of the motor. / Step 3. Put / on the axis / the propeller

---

10. the sun. / the solar battery / Step 4. Place / facing

---

11. the sun / Light from / the battery. / shone on

---

12. The battery / energy into / electric energy. / converted this light

---

13. powered / from the battery / the motor. / The electric energy

---

14. when the propeller / The electric / kinetic energy / turned. / energy became

---

15. electric energy. / turns into / So, light energy

---

16. kinetic energy. / electric energy / turns into / Then

---

17. the energy / We can't see / because it happens / so quickly. / change forms

---

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## Unit 4 Roller Coaster Cars

### Translate the sentences.

1. his dad. / an amusement / Mike went to / park with

---

2. happy / screams. / some / Mike heard

---

3. a huge / He turned / roller coaster. / and saw

---

4. went up another. / came flying / The cars / down a hill and / on the roller coaster

---

5. cars go / the roller coaster / "How do / Mike asked. / so fast?"

---

6. like a bus?" / have an engine / "Do they

---

7. up a big hill. / "The track / pulls / the cars

---

8. they create / As they / potential energy. / go up,

---

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9. Gravity / downward. / pulls / them

---

10. energy becomes / The potential / kinetic / energy.

---

11. This energy / the track." / fast around / pulls the cars

---

12. all the time. / "Yes, potential energy / to kinetic energy / gets converted

---

13. drop a ball, / When you / potential energy. / it has

---

14. into kinetic energy, and / hits the ground, / As it / it bounces up. / that is turned

---

15. you like / the roller coaster?" / to ride / So, would

---

16. the merry-go-round / go on / again!" / "Let's just

---



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## Unit 5 Our Hearts Pump Blood

**Translate the sentences.**

1. We breathe / our lungs. / air into                      lungs / Our /oxygen. / extract

---

2. it / breaks it down / into nutrients. / The stomach / turn and our intestines

---

3. oxygen and / We need / nutrients / to live.

---

4. They need / to move / our body. / around

---

5. to all cells / Blood delivers / in the body. / nutrients and oxygen

---

6. pumps blood / the body. / The heart / through

---

7. and nutrients / heart stops, / get the oxygen / If the / it needs. / the body can't

---

8. "circulatory organs." / The heart / are called / and blood vessels

---

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9. big bucket of water, / Step 1. Prepare / and some red ink. / a hand pump and pipe, a

---

10. the pipe / Step 2. Put / it quickly. / and squeeze / in the water

---

11. when you press / and amount of / Step 3. Now, / flowing water / the pump slowly. /  
check the speed

---

12. blood flows / the heart / fast. / When / beats fast,

---

13. blood / When / flows slowly. / slowly, / the heart beats

---

14. blood from / It moves / back again. / the body and / the heart all through

---

15. keeps flowing / round. / round and / Blood

---

16. read this! / as you / Your blood / is flowing

---

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## Unit 6 Blood Moves All Around

### Translate the sentences.

1. scissors. / cuts himself / Alex accidentally / with his

---

2. and puts / on the wound. / a bandage / Mom comes

---

3. where blood / Alex asks / treats it, / As she / comes from.

---

4. the heart. / comes from / "Blood

---

5. inside / all around / your body." / It moves

---

6. your body. / "There's blood / all over / under the skin

---

7. Blood / and oxygen. / essential nutrients / contains

---

8. that moves blood / is a powerful pump / The heart / through our blood vessels." / around  
inside the body

---

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9. the same?" / "Are all / blood vessels

---

10. blood vessels: / three kinds of / "No, / arteries, veins, and capillaries. / there are

---

11. push blood / Arteries / the heart. / away from

---

12. Veins / to the heart. / bring / blood back

---

13. to the tips of / your fingers. / carry blood / very small and / They are

---

14. so it / a capillary / bled." / You cut / on your finger,

---

15. very long!" / "My blood vessels / says Alex. / must be

---

16. in your body!" / 120,000 km of / "You have / says Mom. / blood vessels

---

17. with a tasty salad / your heart / "Now, let's / for lunch." / look after

---

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## Unit 7 Making Magnetic Fields

**Translate the sentences.**

1. know that / Did you / magnets move? / can make / electric currents

---

2. an electrical circuit / Step 1. Make / wires, and a switch. / using a battery,

---

3. the compass / Step 2. Put / the wires. / under one of

---

4. the wire is / Make sure / the needle of / the compass. / parallel to

---

5. Step 4. Now, / around. / put the battery / the other way

---

6. the needle / which way / moves now. / Step 5. See

---

7. of the compass? / the electric current / move the needle / How did

---

8. of the compass needle / The south pole / Earth's north pole. / points toward

---

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9. created / pressed the switch, / When we / a magnetic field. / the electric current

---

10. pointed toward / of the compass / in the wire. / the flow of electricity / The needle

---

11. the other way / moved the battery / We then / around.

---

12. flow. / We moved / of the electrical / the direction

---

13. pointed in / direction. / of the compass / the new / The needle

---

14. in a serial / compass closer. / Add more batteries / the wires and / connection or put

---

15. of the needle / bigger. / will be / The movement

---

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## Unit 8 Earth Is a Magnet

**Translate the sentences.**

1. with her / went camping / family. / Bella

---

2. to get / She went / her dad. / wood with

---

3. in the trees. / They saw / a squirrel

---

4. but soon realized / They / followed it / they were lost. / for a while

---

5. "We've / south. / walking / been

---

6. get back." / compass to / use a / We can

---

7. found their / the compass north, / Following / they soon / campsite.

---

8. "Wow, this tiny compass really knows the way."

---

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9. "You learned / in school, / didn't you?" / about magnets

---

10. and opposite poles / "The same / to each other." / are attracted / poles repel,

---

11. of Earth. / of the magnet / "The south pole / the north pole / points to

---

12. north!" / compasses / That's why / always point

---

13. around the world." / "Explorers / to travel / used compasses

---



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## Unit 9 Bacteria vs. Fungi

### Translate the sentences.

1. your fridge / type of fungi, in / You probably have / and mushrooms, a / at home. / yogurt, made by bacteria,

2. we can eat / we know / Of course, / mushrooms! / some kinds of

3. new foods. / Like bacteria, / make / mold can

4. new foods is / This process / called fermentation. / of making

5. Other fermented / cheese, and soy sauce. / foods / include kimchi,

6. fungi grow / While bacteria / are very small, / to see with / our bare eyes. / large enough

7. a little water / Step 1. Spray / of bread. / on a slice

8. Step 2. Put / and seal it. / in a zipper bag / the bread

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9. humid place. / Step 3. Put / in a warm and / the zipper bag

---

10. inside the bag / Leave the bread / properly afterward. / to wash your hands / and don't forget

---

11. somewhere warm / Fungi need / to grow. / and humid

---

12. nutrients alone, / They can't get / get them / so they / from other things.

---

13. can include / These things / plants. / animals or

---

14. like the bread / It can / we used. / include old food

---

15. too long! / gets moldy / Now you know / if you leave it / why old fruit

---

16. can produce / Some bacteria / nutrients. / their own

---

17. Unlike fungi, / only a single cell. / made of / bacteria are

---

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## Unit 10 Strange Smells

### Translate the sentences.

1. playing / Dad is / tennis. / back from

---

2. bad! / "Dad, your feet / Mark says, / smell      Is it / foot?" / athlete's / because of

---

3. and fungi cause / smell bad, / Mom explains, / athlete's foot." / "Bacteria make feet

---

4. "are bacteria / "Oh," says Mark, / different?" / and fungi

---

5. very small, and / "Bacteria and / a lot of work. / they do / fungi are both

---

6. food go bad / can make / Both of them / cause illnesses." / and sometimes

---

7. are very scary, / "Bacteria and fungi / asks Mark. / aren't they?"

---

8. and dead plants / their hard work, / become nutrients. / rotten food, dead animals, /  
"Because of

---

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9. mushrooms are / Mold and / of fungi." / both types

---

10. are tasty / "Wow, mushrooms / and cool."

---

11. as well. / "Bacteria and mold / fermentation / both cause

---

12. make the bread and / This helps / you and Dad / soybean paste / like so much.

---

13. you have / strengthen your body!" / Bacteria in the yogurt / explains Mom. / in the morning

---

14. be a whole / "It would / didn't exist." / different world / if they

---

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## Unit 11 62 Degrees in the Morning?

**Translate the sentences.**

1. on some weather sites. / to check / You decide / weather conditions / the latest

---

2. in the morning, / and 80 degrees in / Is it really / the afternoon? / 62 degrees

---

3. the temperature / How can / high? / be this

---

4. two common ways / temperature: Celsius / to measure / and Fahrenheit. / There are

---

5. a weather chart / Step 1. Find / the degrees / with Fahrenheit. / which describes

---

6. changing Fahrenheit / using a formula / Step 2. Find / to Celsius. / Celsius degrees

---

7. First, subtract / temperature. / the Fahrenheit / 32 from

---

8. by 5/9. / multiply / the result / Step 3. Next,

---

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9. always change Fahrenheit / You can / with this formula. / into Celsius

---

10. One weather / in the morning. / site says / it's 62°F

---

11. freezing point of / First, subtract 32, / from 62. / which is the / Fahrenheit temperature,

---

12. Next, / by 5/9. / the result / multiply

---

13. 62°F is 16.7°C. / The result / which means that / about 16.7, / of that is

---

14. try to turn / Celsius? / Why don't you / temperatures into / more Fahrenheit

---

15. What / 25°C? / Fahrenheit / temperature is

---

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## Unit 12 Different Temperatures

**Translate the sentences.**

1. the U.S. / Emma / with her family. / a trip to / goes on

---

2. of fun, / After a day / to their accommodations. / they come back

---

3. television. / Dad watches / the weather / forecast on

---

4. can it be / asks Emma. / so hot?" / "Dad, how

---

5. the temperature / "That's / Fahrenheit." / in

---

6. differently. / "Fahrenheit / a bit / measures temperature

---

7. a human / the coldest thing / "Because that was / at that time. / could make

---

8. of pure / the freezing point / water. / 32°F is

---

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9. point of / 212°F is / water." / the boiling

---

10. "Then / asks Emma. / what is / Celsius?"

---

11. in 1742. / "Another scientist / Celsius temperature / proposed

---

12. boiling point / the freezing point of water / He set / of water as 100°C. / as 0°C and the

---

13. Except for / most places in the world / other countries, / use Celsius. / the U.S. and a few

---

14. find an American / in Fahrenheit? / what degrees look like / weather forecast and see /  
Why don't you

---



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## Unit 13 The Wonder of Rainbows

### Translate the sentences.

1. moving light. / reflection are / two ways of / Refraction and

---

2. Look at / binoculars. / with / a bird      away. / close / It looks / it's far / even though

---

3. fly / The birds / a lake. / over      see them / water. / in the / You can

---

4. bounces off / The light / reflected. / and is / the water

---

5. at reflection / at the / Let's look / same time. / and refraction

---

7. a transparent / Step 1. Fill / water. / glass with

---

8. Put / at an angle. / in the water / the mirror

---

8. near a window / can shine / Step 2. Place the glass / on the mirror. / so the sun

---

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9. the reflection / wall. / on the / Step 3. Check

---

10. on the wall. / the glass to / Control / make a rainbow / the angle of

---

11. the water. / was refracted / entered / The sunlight / as it

---

12. down and / changed / It slowed / direction.

---

13. It bounced / back. / and came / off the mirror

---

14. refracted again. / As it / it was / left the water,

---

15. and left the water, / hit the mirror / the light was / different colors. / split up into / When the light

---

16. In nature, / after it rains. / we only see / the sun shines / rainbows when

---

17. refracted and / Light is / in the experiment. / reflected like

---

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**Unit 14 All the Colors of the Rainbow****Translate the sentences.**

1. his mom are / on the way to town. / caught in / Noah and / a heavy shower

2. stops raining, / It soon / comes out. / and the sun

3. look at / "Wow, Mom, / that!      rainbow! / It's / a

4. end. / Let's go / the / and find      I want / the rainbow." / to touch

5. touch / "You can't / Noah. / a rainbow,

6. Rainbows / of light." / are made

7. we learned / I think / in school. / about it / "Oh,

8. because of / Is it / reflection?" / light

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9. the light enters / When / refracted."/ the drops, / it is

---

10. of the water / hits the back / "It then / is reflected." / drop and

---

11. again." / it is / leaves the drop, / "As it / refracted

---

12. twice and / "So the light / asks Noah. / reflected once?"/ is refracted

---

13. many wavelengths." / the light is / "As it exits / the droplet, / split into

---

14. "And the / colors?" / all different / wavelengths are

---

15. colors of / the rainbow." / "All the

---

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## Unit 15 Creating Organs and Limbs

**Translate the sentences.**

1. many organs / consists of / together. / all working / Your body

---

2. It is like / machine. / complicated / a wonderful and

---

3. always work / However, / properly. / they don't

---

4. Hearts / properly. / stop working          an accident. / can be / Limbs / lost in

---

5. be able to get / of their real organs. / They might / to do the work / an artificial organ

---

6. can give / artificial limb. / you an / Doctors

---

7. with fingers / be an arm / It might / really move. / that can

---

8. with an / Doctors can replace / a damaged heart / artificial one.

---

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9. your inner ear / They can replace / hear better. / so you can

---

10. producers design / artificial organs. / Artificial organ / and make

---

11. them. / organs and try / at our real / to copy / They look

---

12. them from / metals. / plastics and / They make

---

13. Artificial organs / real ones. / as good as / are not

---

14. that humans / also some organs / create. / cannot yet / There are

---

15. organ producers / But artificial / keep/ trying.

---

16. who need artificial / all they can / organs and limbs. / to help people / They do

---

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## Unit 16 Online Doctors

**Translate the sentences.**

1. a doctor. / You / speak to / need to

---

2. doctor's office / But the / far away. / is too

---

3. the house. / Telemedicine allows / to their doctor / people to speak / without leaving

---

4. to speak / You may / with family. / have used / for school or / video software

---

5. too. / with your doctor, / can use it / But you

---

6. an online doctor / Talk to / or the phone. / on the computer

---

7. records. / The doctor / your medical / can check

---

8. with you. / can see / They / what's wrong

---

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9. and tell you / They can / do next. / what to / prescribe medicine

---

10. however. / likes online / doctors, / Not everyone

---

11. prefer to / Some people / face-to-face. / see doctors

---

12. something important. / online doctors / Others think / could miss

---

13. However, / many people. / it can / help

---

14. or people in / Disabled people / online doctors. / might prefer / the countryside

---

15. an online doctor / even speak to / People can / country. / from another

---

16. can make / easier. / many lives / Telemedicine

---