

Unit 01 A Robot with a Heart

Key Words (p. 07)

- A. 1. wheel
2. cheer up
3. human
4. elderly
5. engineer
6. screen

- B. 1. Engineers
2. wheels
3. Humans
4. cheer up
5. screen
6. elderly

Think about it (p. 09)

Yes, I do. I think it would be cool.

** Answers may vary.*

Comprehension (pp. 10-11)

A. ©

B. 1. F 2. T 3. T

C. 1. ⑥ 2. © 3. ①, ©

D. Pepper: homework, talking, personality,
babysitter
Future robots: elderly, cheer

Link to Write (p. 11)

My Dream Robot

Someday, I want to have a special robot. He will be able to do lots of things for me and with me. For example,

1. **He will help my homework.**
 2. **He will play with me when I'm bored.**
 3. **He will cheer me up when I'm sad.**
- And I want to name my robot "**Ginger.**"

** Answers may vary.*

Unit 02 The Great White Way

Key Words (p. 13)

- A. 1. perform
2. musical
3. theater
4. shine
5. famous
6. electric light

- B. 1. electric lights
2. musical
3. perform
4. theater
5. shines
6. famous

While you read (p. 14)

"Broadway" means the Theater District near Times Square. It runs between 42nd and 53rd streets, and there are 40 different theaters.

Comprehension (pp. 16-17)

A. famous, theaters

B. 1. T 2. T 3. F

C. 1. © 2. ① 3. ②, ©

D. famous, electric, Theater, tickets, 1988

Link to Write (p. 17)

You have to visit this street while you're here!

I'd like to introduce **Insadong Street**. It's located in **Seoul, South Korea**. This street is famous for **traditional Korean crafts and tea shops**. Here, you can **buy cool souvenirs, drink various herb teas, and sometimes watch great street performances**.

** Answers may vary.*

Unit 03

Can We Stop the Yellow Dragon?

Key Words (p. 19)

- A. 1. plant
2. desert
3. lungs
4. pollution
5. dust
6. sore throat

- B. 1. Dust
2. lungs
3. Pollution
4. sore throat
5. plant
6. desert

While you read (p. 21)

It causes serious health problems.

Comprehension (pp. 22-23)

A. a

B. 1. T 2. F 3. T

C. 1. a 2. b 3. a,c

D. deserts, health, metals, lungs, wall

Link to Write (p. 23)

Yellow Dust Warning

Strong yellow dust is expected tomorrow. When it happens, it's best not to go out. But if you have to, remember the following.

1. Wear a mask. It keeps you from breathing in harmful stuff.
2. **Stay indoors as much as you can.**
3. **Don't touch dusty things you're your hands.**
4. **Wash your hands often.**

* Answers may vary.

Unit 04

How Much Paint?

Key Words (p. 25)

- A. 1. paint
2. use up
3. glance
4. active
5. divide
6. measure

- B. 1. glanced
2. measure
3. Active
4. used up
5. paint
6. divide

Think about it (p. 27)

It would take 14 hours to paint the whole room.

* Answers may vary.

Comprehension (pp. 28-29)

A. c

B. 1. F 2. F 3. T

C. 1. b 2. a 3. b

D. 145.6, painted, 10.4, right, 14

Link to Write (p. 29)

Plan to Paint My Room

I want to paint my room **green**.

1. Each wall is 25.2 m^2 , and there're four sides. So it's **100.8 m^2** .
2. One can of paint can cover 12.6 m^2 . So I should divide **100.8** by **12.6** . It's **$100.8 \div 12.6$** .
3. I move the decimal points to the right, and it becomes **$1008 \div 126$** .
Therefore, I need **8** cans of paint to paint my room.

* Answers may vary.

Unit 05 Kamal's Smile

Key Words (p. 33)

- A. 1. hospital
2. fever
3. shot
4. medicine
5. equipment
6. border

- B. 1. fever
2. equipment
3. shot
4. medicine
5. border
6. hospital

Think about it (p. 34)

The author's job is a doctor, working for Doctors Without Borders.

** Answers may vary.*

Comprehension (pp. 36-77)

A. Doctors, malaria

B. 1. T 2. F 3. T

C. 1. (b) 2. (a) 3. (c)

D. hospital, five, fever, shot, smiled

Link to Write (p.37)

My Future Job

When I grow up, I want to be a **firefighter**. I think I will be good at it because **I like helping people, and I always admired firefighters**. To make my dream come true, I'll **exercise a lot to be in shape, and also study hard**.

** Answers may vary.*

Unit 06 Learning to Save Lives

Key Words (p. 39)

- A. 1. earthquake
2. ground
3. zone
4. fault line
5. practice
6. safety

- B. 1. zone
2. safety
3. ground
4. earthquake
5. practice
6. fault line

While you read (p. 41)

Families keep extra food and water in their homes. Children at school quickly get under their desks. The government tells people how to move to safety.

Comprehension (pp. 42-43)

A. earthquakes, safer

B. 1. T 2. F 3. F

C. 1. (b) 2. (b), (c) 3. (b)

D. Causes: earthquakes, fault lines, life (lives)
Preparations: extra, desks, government

Link to Write (p. 43)

Be Prepared for a **Storm!**

A **storm** can happen anytime and anywhere around us. So we'd better be prepared. How?

1. Learn where safe places are located.
2. Keep extra water and food at home.
3. **Keep candles or flashlights in case of black out.**
4. **Have a radio ready to hear latest news about the storm.**

** Answers may vary.*

Unit 07 The Sun King

Key Words (p. 45)

- A. 1. decorate
2. respect
3. center
4. palace
5. dress
6. planet

- B. 1. dress
2. planets
3. decorated
4. center
5. palace
6. respect

While you read (p. 46)

It's because Louis was the center of France, as the sun is the center of all the planets.

Comprehension (pp. 48-49)

A. ⑥

B. 1. F 2. T 3. F

C. 1. ⑥ 2. ③ 3. ①

D. gift, king, center, money

Link to Write (p. 49)

The King/Queen of England

- Name/Country: **Elizabeth I / England**

- Nickname and its meaning:
The Virgin Queen, because she never got married

- What was she like?

She was tall and healthy, and she liked studying.

- What did she do?

She made England a strong country.



* Answers may vary.

Unit 08 Sorry, Yia-Yia!

Key Words (p. 51)

- A. 1. embarrassed
2. offer
3. gesture
4. invite
5. rude
6. punishment

- B. 1. rude
2. gestures
3. offered
4. punishment
5. embarrassed
6. invite

Think about it (p. 53)

She felt the author was being rude, because his gesture is rude in Greece.

* Answers may vary.

Comprehension (pp. 54-55)

A. embarrassed, gesture

B. 1. F 2. T 3. T

C. 1. ③ 2. ⑥ 3. ①

D. Gesture: palm

Meanings: rude, punishment, faces

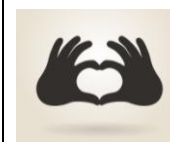
Link to Write (p.55)



I think this means "peace and victory."



I think this means "**you did a good job.**"



I think this means "**love and friendship.**"

* Answers may vary.

Unit 09 The Soccer Ball Moon

Key Words (p. 59)

- A. 1. full moon
2. new moon
3. presentation
4. back
5. orbit
6. face
- B. 1. presentation
2. back
3. orbit
4. new moon
5. full moon
6. face

Think about it (p. 61)

She thought it was very good.

** Answers may vary.*

Comprehension (pp. 62-63)

- A. ©
- B. 1. T 2. F 3. F
- C. 1. @ 2. © 3. @
- D. New moon: dark
Full moon: the Earth, the moon, orbit, Earth

Link to Write (p. 63)

Moon Diary

Last night, I saw the moon in the sky. It was a **full** moon. It looked **round and very bright**. It means the moon was **halfway through its orbit**.

In a week, I think it will change to a **half** moon.



** Answers may vary.*

Unit 10 A Tale of Two Foxes

Key Words (p. 65)

- A. 1. fur
2. mate
3. arctic
4. split
5. relatives
6. recognize
- B. 1. fur
2. relatives
3. mate
4. arctic
5. recognize
6. split

Think about it (p. 67)

A fennec fox doesn't have to eat much food nor have much fat in the body, because it lives in the hot weather.

** Answers may vary.*

Comprehension (pp. 68-69)

- A. different, relatives
- B. 1. F 2. F 3. T
- C. 1. @, @ 2. © 3. @
- D. An arctic fox: warm, fur, babies, mate
A fennec fox: Sahara Desert, half, long, life

Link to Write (p. 69)

An Owl's Life

Have you ever heard about the **owl**? They look **like a kind of bird**, and they have **big eyes and short ears**. Naturally, they live in **all over the world**. They usually live with **the mate and the babies until they get bigger**. I find them interesting because **they can turn their head 360°, and they sleep during the daytime and act in dark**.

** Answers may vary.*

Unit 11 A Magical Invention

Key Words (p. 71)

- A. 1. vapor
2. absorb
3. wick
4. wax
5. light
6. burn

- B. 1. light
2. burns
3. wax
4. absorb
5. vapor
6. wick

While you read (p. 73)

It's because wax melts more easily than the wick. The heat makes the wax melt, but it's not hot enough to melt the wick.

Comprehension (pp. 74-75)

A. **b**

B. 1. T 2. T 3. F

C. 1. **b** 2. **a** 3. **c**

D. wick, wax, liquid, vapor, heat

Link to Write (p. 75)

Three States of Matter

Matter changes its state depending on the temperature. Water, for example, is **liquid** at room temperature. It becomes **solid** when it is frozen. And it becomes water vapor when it **is boiled**.

** Answers may vary.*

Unit 12 Best Class Ever

Key Words (p. 77)

- A. 1. compass
2. wire
3. magnetic field
4. discovery
5. electricity
6. needle

- B. 1. wire
2. needle
3. discovery
4. compass
5. magnetic field
6. electricity

While you read (p. 78)

He was interested in both electricity and magnetic fields.

Comprehension (pp. 80-81)

A. discovery, fields, electricity

B. 1. T 2. F 3. F

C. 1. **a**, **b** 2. **a** 3. **c**

D. heat, wire, needle, magnetic

Link to Write (p. 81)

My Fun Science Experiment Idea

I'd like to try **the electric current through an orange**. I want to try it because **it will show there are ions in an orange**. To do the experiment, I need **an orange, a battery, a light bulb, and some wire**. By this experiment, I think I can discover **that the electric current passes through an orange**.

** Answers may vary.*

Unit 13 Anything Can Be Art

Key Words (p. 85)

- A. 1. horn
2. parts
3. imagination
4. handlebar
5. sculpture
6. pile

- B. 1. horns
2. handlebars
3. sculptures
4. Imagination
5. parts
6. pile

While you read (p. 87)

They hated it, and got angry because it didn't look like "real" art. The idea seemed crazy.

Comprehension (pp. 88-89)

A. ①

B. 1. F 2. F 3. T

C. 1. ①, ③ 2. ② 3. ②

D. handlebars, parts, head, hated, common

Link to Write (p. 89)

Title : **Fountain**

This work of art was made by **Marcel Duchamp**. To make it, the artist used a **porcelain urinal**. Many people like this work because **it is very different from any other artwork. It's seen as an icon of 21st century art.**



* Answers may vary.

Unit 14 He Did It His Way

Key Words (p. 91)

- A. 1. prodigy
2. worldwide
3. income
4. classical
5. record
6. band

- B. 1. record
2. income
3. prodigy
4. worldwide
5. band
6. classical

While you read (p. 92)

It's because he made jazz music that wasn't popular at that time. He didn't make much money by doing that.

Comprehension (pp. 94-95)

A. jazz, classical

B. 1. F 2. T 3. F

C. 1. ③ 2. ①, ② 3. ②

D. band, music, actor, album, star

Link to Write (p. 95)

My Favorite Music

- Title/Genre: **Fly Me to the Moon / Jazz**
- Musician: **Kaye Ballard**
- Released date: **April 1954**

I like this music because **the melody is beautiful**. When I listen to this music, I feel **relaxed**.

* Answers may vary.

Unit 15 Ballet or Breakdancing?

Key Words (p. 97)

- A. 1. order
2. proud
3. express
4. gymnastics
5. tradition
6. movement

- B. 1. proud
2. order
3. movements
4. Gymnastics
5. express
6. tradition

Think about it (p. 99)

We can see ballerinas in the theaters, and b-boys in the streets or on the Internet videos.

** Answers may vary.*

Comprehension (pp. 100-101)

A. ①

B. 1. F 2. T 3. T

C. 1. ① 2. ② 3. ③

D. Ballerinas: movements, order, school,
technique
Breakdancers: style, watching, express

Link to Write (p. 101)

I want to Learn Dancing!

The dance I want to learn is **tango**. I think it is **really elegant and fun to dance with beautiful music**. To learn this dance, I **can go to a dance school or find a tutor**.

** Answers may vary.*

Unit 16 See the World – Scuba-Dive!

Key Words (p. 103)

- A. 1. snorkel
2. scuba diving
3. hose
4. shipwreck
5. coral reef
6. float

- B. 1. floating
2. coral reef
3. scuba diving
4. hose
5. shipwreck
6. snorkel

Think about it (p. 105)

I would like to try snorkeling better, because I'm afraid to go deep under the water.

** Answers may vary.*

Comprehension (pp. 106-107)

A. snorkeling, world

B. 1. F 2. F 3. T

C. 1. ①, ③ 2. ② 3. ①

D. Snorkeling: hose, coral reef
Scuba Diving: tank, shipwreck

Link to Write (p.107)

My Favorite Summer Vacation Ever!

It was **three years ago**. I went to **Italy** with **my family**. There, I did lots of interesting activities. First, **I went on tours of great museums**. Also, **I tried making pizza with a real chef**. But my favorite was **the hot air balloon ride**. It was so much fun!

** Answers may vary.*

Unit 01 **A Robot with a Heart**

Word Practice (p. 04)

A. 1. elderly 2. human 3. wheel
4. cheer up 5. screen 6. engineer

B. 1. ⓑ 2. ⓐ 3. ⓑ 4. ⓐ

Sentence Practice (p. 05)

1. I had a question about my French homework.
2. The screen on his chest showed the word.
3. That's why he is a great babysitter.
4. The engineers wanted to make a robot with a heart.

Summary (p. 05)

- ① homework ② babysitter ③ robot
④ human ⑤ elderly

Unit 02 **The Great White Way**

Word Practice (p. 06)

A. 1. shine 2. electric light 3. famous
4. theater 5. musical 6. perform

B. 1. ⓐ 2. ⓑ 3. ⓑ 4. ⓐ

Sentence Practice (p. 07)

1. You have to see a Broadway show while you're here!
2. Broadway is one of the city's most famous places.
3. Actors and actresses dream about performing on Broadway.
4. Bright lights shine from the theaters on Broadway.

Summary (p. 07)

- ① famous ② electric ③ Theater
④ plays ⑤ performing

Unit 03 **Can We Stop the Yellow Dragon?**

Word Practice (p. 08)

A. 1. dust 2. sore throat 3. lungs
4. pollution 5. desert 6. plant

B. 1. ⓐ 2. ⓐ 3. ⓑ 4. ⓑ

Sentence Practice (p. 09)

1. Yellow dust causes serious health problems.
2. It goes into their lungs and gets hard to breathe.
3. The deserts are growing because of pollution and climate change.
4. They believe more trees might help stop the dust.

Summary (p. 09)

- ① deserts ② yellow ③ health
④ pollution ⑤ planting

Unit 04 **How Much Paint?**

Word Practice (p. 10)

A. 1. divide 2. use up 3. active
4. paint 5. measure 6. glance

B. 1. ⓐ 2. ⓐ 3. ⓑ 4. ⓑ

Sentence Practice (p. 11)

1. She wanted to paint their room bright yellow.
2. How much does one can of paint cover?
3. Stella measured the part that was already painted.
4. Stella used the pencil to do the problem.

Summary (p. 11)

- ① paint ② enough ③ total
④ divided ⑤ 14

Unit 05

Kamal's Smile

Word Practice (p. 12)

A. 1. shot 2. equipment 3. fever
4. medicine 5. border 6. hospital

B. 1. a 2. b 3. a 4. a

Sentence Practice (p. 13)

1. The hospital does not have enough beds.
2. Why did you choose to do this?
3. Most hospitals here don't have the right medicine.
4. Those smiles are why I love working for Doctors Without Borders.

Summary (p. 13)

- ① doctor ② hospital ③ malaria
④ medicine ⑤ smiles

Unit 06

Learning to Save Lives

Word Practice (p. 14)

A. 1. ground 2. safety 3. fault line
4. practice 5. zone 6. earthquake

B. 1. a 2. a 3. b 4. b

Sentence Practice (p. 15)

1. It's the place where most earthquakes happen.
2. It has more earthquakes than any other country.
3. The government tells people how to move to safety.
4. It's impossible to keep everyone safe all the time.

Summary (p. 15)

- ① earthquakes ② extra ③ desks
④ government ⑤ impossible

Unit 07

The Sun King

Word Practice (p. 16)

A. 1. dress 2. planet 3. center
4. decorate 5. respect 6. palace

B. 1. b 2. a 3. a 4. b

Sentence Practice (p. 17)

1. Louis thought of himself as quite important!
2. He made the sun his symbol.
3. Louis liked displaying his power and money.
4. People still remember him as the Sun King.

Summary (p. 17)

- ① born ② sun ③ center
④ power ⑤ Sun

Unit 08

Sorry, Yia-Yia!

Word Practice (p. 18)

A. 1. gesture 2. offer 3. invite
4. punishment 5. rude 6. embarrassed

B. 1. a 2. b 3. a 4. b

Sentence Practice (p. 19)

1. Gestures can mean different things in different cultures.
2. She offered me more, but I was full.
3. Never do that gesture to a Greek.
4. They put dirt on the criminals' faces.

Summary (p. 19)

- ① dinner ② offered ③ gesture
④ rude ⑤ different

Unit 09 The Soccer Ball Moon

Word Practice (p. 20)

A. 1. back 2. presentation 3. face
4. orbit 5. new moon 6. full moon

B. 1. a 2. b 3. a 4. a

Sentence Practice (p. 21)

1. Do you know what causes new moons and full moons?
2. Does the ball look dark to you?
3. She turned until her back was to Marcus.
4. The side facing the Sun also faces the Earth.

Summary (p. 21)

- ①presentation ②ball ③new
④around ⑤bright

Unit 10 A Tale of Two Foxes

Word Practice (p. 22)

A. 1. mate 2. relatives 3. fur
4. recognize 5. arctic 6. split

B. 1. a 2. a 3. b 4. a

Sentence Practice (p. 23)

1. Let's meet two of their relatives today.
2. He and his mate will see each other again next spring.
3. She's half as big as the arctic fox.
4. Her fluffy fur and long ears will keep her cool.

Summary (p. 23)

- ①fur ②babies ③fennec
④half ⑤life

Unit 11 A Magical Invention

Word Practice (p. 24)

A. 1. absorb 2. light 3. burn
4. wick 5. wax 6. vapor

B. 1. b 2. a 3. b 4. a

Sentence Practice (p. 25)

1. We don't use candles very often these days.
2. It melts more easily than the wick.
3. To melt means to change from a solid to a liquid.
4. The wick never gets hot enough to burn up.

Summary (p. 25)

- ①invention ②wick ③wax
④vapor ⑤heat

Unit 12 Best Class Ever

Word Practice (p. 26)

A. 1. wire 2. discovery 3. electricity
4. needle 5. compass 6. magnetic field

B. 1. a 2. b 3. b 4. a

Sentence Practice (p. 27)

1. The professor didn't know that they work together.
2. He wanted to show his students that electricity could make heat.
3. They did not know why this happened.
4. A science professor made a great discovery in class!

Summary (p. 27)

- ①electricity ②compass ③current
④magnetic fields ⑤discovery

Unit 13 Anything Can Be Art

Word Practice (p. 28)

- A. 1. handlebar 2. horn 3. pile
4. imagination 5. parts 6. sculpture

- B. 1. a 2. b 3. b 4. a

Sentence Practice (p. 29)

1. Picasso explained how he made it.
2. Finally, it was removed from the wall.
3. Today, artworks like this are more common.
4. Making it didn't take a lot of skill, but it took imagination.

Summary (p. 29)

- ①seat ②parts ③horns
④crazy ⑤common

Unit 14 He Did It His Way

Word Practice (p. 30)

- A. 1. worldwide 2. record 3. prodigy
4. income 5. band 6. classical

- B. 1. b 2. a 3. b 4. a

Sentence Practice (p. 31)

1. Claude Bolling has always gone his own way.
2. That was not an easy way to become a star.
3. He also worked as an actor in a few movies.
4. It mixed classical music with jazz.

Summary (p. 31)

- ①prodigy ②classical ③star
④different ⑤jazz

Unit 15 Ballet or Breakdancing?

Word Practice (p. 32)

- A. 1. express 2. tradition 3. order
4. proud 5. movement 6. gymnastics

- B. 1. a 2. a 3. b 4. b

Sentence Practice (p. 33)

1. Which would you try if you had to choose one?
2. Ballerinas try to have correct technique.
3. We all know some basic movements like the headspin.
4. I try new things on my own too.

Summary (p. 33)

- ①order ②technique ③learn
④movements ⑤school

Unit 16 See the World — Scuba-Dive!

Word Practice (p. 34)

- A. 1. hose 2. shipwreck 3. float
4. coral reef 5. snorkel 6. scuba diving

- B. 1. a 2. a 3. b 4. b

Sentence Practice (p. 35)

1. We spent the first day snorkeling.
2. When you're used to it, it's fine.
3. The tank feels so heavy when you put it on.
4. If you haven't seen the sea, you haven't really seen the world.

Summary (p. 35)

- ①snorkeling ②hose ③coral reef
④scuba diving ⑤shipwreck