

Unit 01 Green Power

Key Words (p. 07)

- B. 1. frowns
2. perfect score
3. concentrate
4. houseplant(s)
5. framed
6. test

Think about it (p. 08)

- They help her concentrate better.
- Seeing plants and trees improves concentration. Even pictures of them work.

** Answers may vary.*

Comprehension (pp. 10-11)

A. ③

- B. 1. plants
2. curtains
3. picture

C. 1. ⑥ 2. ⑥, ③ 3. ①

D. Before: picture, test
After: plants, trees

Link to Write (p. 11)

Plants Help Me!

There is a **lavender plant** in my room. It **smells good and looks pretty**. I feel **relaxed and calm** when I see the plant.

** Answers may vary.*

Unit 02 Pie across the Ocean

Key Words (p. 13)

- B. 1. Sheep
2. product
3. dessert
4. symbol
5. soldier
6. pastry

While you read (p. 15)

They are apple pie and hot dogs.

Comprehension (pp. 16-17)

A. ①

- B. 1. birds
2. before
3. symbol

C. 1. ③ 2. ① 3. ②

D. Meat pie: birds, magpie, Steak
Apple pie: Europeans, America, products

Link to Write (p. 17)

Famous Dishes around the World

America: apple pie, hot dogs, **hamburger, meatloaf, pizza, steak**
Japan: sushi, **udon, soba, sashimi, donkatsu, kyudon, nabe, ramen**
Italy: **pasta(spaghetti, penne, ravioli, etc.) , pizza, risotto**

** Answers may vary.*

Unit 03 Life of Al

Key Words (p. 19)

- B. 1. refrigerator
2. environment
3. pour
4. recycling
5. melted
6. Aluminum

While you read (p. 20)

They are old cans, aluminum foil, and car parts.

Comprehension (pp. 22-23)

A. melted, recycling

- B. 1. recycling plant
2. car parts
3. a lid

- C. 1. ⑥ 2. ③ 3. ①, ③

D. rectangle, paper-thin, cup, whole

Link to Write (p. 23)

Protect Our Environment

Do you want to keep the planet green? We can make it happen. Try these things in your everyday life.

1. Recycle used aluminum cans, bottles, and paper.
2. Do not throw away garbage in the streets.
3. **Walk or use public transportation, like train, subway, bus, or taxi.**
4. **Do not use disposable things.**

** Answers may vary.*

Unit 04 A Garden, Three Sons, and Some Rope

Key Words (p. 25)

- B. 1. strip
2. share
3. straight
4. rope
5. bend
6. fence

Think about it (p. 26)

I will make a 12-by-12 square.

** Answers may vary.*

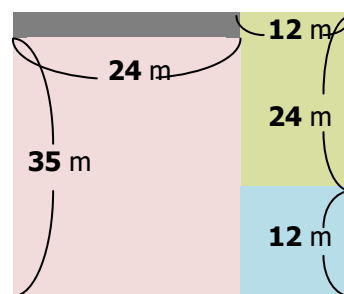
Comprehension (pp. 28-29)

A. garden, ropes, most

- B. 1. 1296 m²
2. his garden
3. Joe

- C. 1. ① 2. ② 3. ③

D.



Joe's land:
840 m²
Leo's land:
288 m²
Jim's land:
144 m²

Link to Write (p. 29)

Same Rope, Different Area

When the rectangle is 1 x 5 or 5 x 1, the area is the smallest. It is 5 cm². But when the rectangle is **3 x 3**, the area is the biggest. It is **9 cm²**.

Unit 05

Lena the Unstoppable

Key Words (p. 33)

- B. 1. college
2. artist
3. healthy
4. learn
5. lecture
6. paint

While you read (p. 34)

She had no arms, and her one leg was much smaller than the other.

Comprehension (pp. 36-37)

A. ①

- B. 1. arms
2. swim
3. feet

C. 1. ①, ③ 2. ② 3. ①

D. Paralympics, singer, artist, lectures, subject

Link to Write (p. 37)

My Role Model

My role model is **Stephen Hawking**. He has challenges:

1. **He had Lou Gehrig's disease.**
 2. **He cannot move his arms or legs.**
- But he never gave up and achieved great things:
1. **He became a great scientist.**
 2. **He gave lots of lectures around the world.**

** Answers may vary.*

Unit 06

It's Raining Cats and ... Cats!

Key Words (p. 39)

- B. 1. lizard
2. mosquito
3. nature
4. insects
5. parachute
6. chemicals

While you read (p. 41)

The Borneo tribe sprayed mosquito-killing chemicals. Then, with the mosquitoes, many other insects died, and lizards that ate them died. And also, cats that ate the lizards died.

Comprehension (pp. 42-43)

A. tribe, nature

- B. 1. Borneo
2. Chemicals
3. Rats

C. 1. ③ 2. ①, ③ 3. ②

D. malaria, chemicals, insects,
rats, parachutes, normal

Link to Write (p. 43)

Jake's Problem:

He always catches colds.

Your Advice:

1. **Take lots of vitamins, with fruits and vegetables.**
2. **Wear warm clothes when you go out.**

** Answers may vary.*

Unit 07

A Story of Two Kingdoms

Key Words (p. 45)

- B. 1. join
2. pick
3. jealous
4. gather
5. archer
6. popular

Think about it (p. 47)

King Jumong might have loved Yoori the most.

** Answers may vary.*

Comprehension (pp. 48-49)

A. ⑥

- B. 1. mother
2. brothers
3. Yoori

C. 1. ⑥ 2. ⑥, ③ 3. ①

D. Goguryeo: popular, jealous, followers
Baekjae: followers, name

Link to Write (p. 49)

The Story of Three Kingdoms

- Goguryeo: The first king was Jumong.
He was a good archer.
- Baekjae: The first king was Onjo.
He was a son of Jumong. His brother was Yoori, the second king of Goguryeo.
- Shilla: The first king was **Park Hyeokgeose**.
He was **born out of a big egg from the sky**.

** Answers may vary.*

Unit 08

A Butcher, a Baker: One Clever Money-Maker

Key Words (p. 51)

- B. 1. pay
2. baker
3. butcher
4. price
5. passersby
6. farm

Think about it (p. 52)

I will think of something that the big store can't offer to people.

** Answers may vary.*

Comprehension (pp. 54-55)

A. complained, customers

- B. 1. cheaper
2. discounts
3. different

C. 1. ③ 2. ① 3. ⑥

D. Butcher: passersby, No one
Baker: bread, different, special

Link to Write (p. 55)

Come to Brown's Bakery!

Do you want to fresh-baked bread? Then why not visit us and look around? We are a small bakery with a long history!

- Why Our Shop? •
- 1. We bake bread you can't find at Big-Box.
- 2. **We bake fresh new bread in the store every day.**
- 3. **We use only good ingredients.**

** Answers may vary.*

Unit 09 Something in the Air

Key Words (p. 59)

- B. 1. laundry
- 2. hang
- 3. humid
- 4. Mist
- 5. high-five
- 6. air conditioner

Think about it (p. 61)

She might feel the situation funny and ironic.

** Answers may vary.*

Comprehension (pp. 62-63)

A. ⑥

- B. 1. humid
- 2. dry
- 3. Oliver

C. 1. ①, ② 2. ③ 3. ④

D. Outside: clothes, air, dry
By the air conditioner: reduces, dry

Link to Write (p. 63)

Tomorrow's Weather

Tomorrow, it will be **sunny**.
The temperature will be **24°C**.
And the humidity will be **40%**.
It will **be a very good day to do the laundry**.

** Answers may vary.*

Unit 10 The Escalator Mystery

Key Words (p. 65)

- B. 1. escalator
- 2. subway
- 3. stare
- 4. department store
- 5. Speed
- 6. surprise

Think about it (p. 66)

Different places have different purposes to go, so the escalators go at different speeds.

** Answers may vary.*

Comprehension (pp. 68-69)

A. subway, different

- B. 1. slower
- 2. 30
- 3. on the Internet

C. 1. ② 2. ① 3. ③

D. Subway station: second, same
Department store: subway, 30, Customers

Link to Write (p. 69)

When I'm Going Up

In the **apartment building**, I prefer to use an **elevator**.

My reasons are below.

1. **It's a lot faster than walking on the staircase.**
2. **Sometimes, I can meet my neighbors in the elevator.**

** Answers may vary.*

Unit 11 Acid or Alkali?

Key Words (p. 71)

- B. 1. Vinegar
2. pain
3. medicine
4. stomach
5. compound
6. scale

While you read (p. 72)

It is that more than two compounds meet and change each other.

Comprehension (pp. 74-75)

A. ©

- B. 1. alkali
2. element
3. weaker

C. 1. ① 2. ①, ③ 3. ②

D. Acidic: sour, vinegar
Alkaline: weaker, soaps

Link to Write (p. 75)

An Upset Stomach

I have an upset stomach when I eat **too much meat**. To reduce the pain, I **take medicine**. I feel better soon because **the medicine is an alkali and it makes acids in meat weaker**.

** Answers may vary.*

Unit 12 The Human Machine

Key Words (p. 77)

- B. 1. arrow
2. bones
3. bow
4. muscles
5. jellyfish
6. balance

While you read (p. 78)

Bones hold the body up, and muscles make the body move and keep the balance.

Comprehension (pp. 80-81)

A. bones, move

- B. 1. hard
2. bow
3. bones

C. 1. ①, ③ 2. ② 3. ③

D. Bones: body, bend, jellyfish
Muscles: balance, stretch, bones

Link to Write (p. 81)

Build Your Bones and Muscles!

To stay in shape, you should strengthen your bones and muscles. To build strong bones, you should **take enough calcium and see the sun a lot**. To grow your muscles, you should **exercise regularly and stretch your muscles**.

** Answers may vary.*

Unit 13

A Secret from Rembrandt

Key Words (p. 85)

- B. 1. press
- 2. painting
- 3. draw
- 4. light
- 5. edge
- 6. shadow

While you read (p. 87)

The white on the egg shows light on the egg.

Comprehension (pp. 88-89)

A. ©

- B. 1. strong
- 2. gray
- 3. darker

C. 1. ① 2. ② 3. ③

D. outline, shadow, shadow, everything

Link to Write (p. 89)

In this painting, I can see **four pears**. There's light **on the pears**. And there are shadows **under the pears**. The light and shadows make things clear.

** Answers may vary.*

Unit 14

Minuet in G Major, by... Me!

Key Words (p. 91)

- B. 1. sign
- 2. notebook
- 3. wonder
- 4. researcher
- 5. ghost
- 6. pop group

Think about it (p. 92)

It's because it was found in Bach's notebook. Bach had two notebooks and did write all the music in the first one.

** Answers may vary.*

Comprehension (pp. 94-95)

A. notebook, Bach

- B. 1. pop
- 2. second
- 3. 1979

C. 1. © 2. ① 3. ①, ②

D. True: two, notebook, writer (composer)
False: Bach

Link to Write (p. 95)

My Favorite Music

Let me introduce my favorite music. It's called **The Four Seasons**. It was written by **Antonio Vivaldi**. I like it because **it expresses the different moods of four seasons beautifully**.

** Answers may vary.*

Unit 15 Let's Play Ball

Key Words (p. 97)

- B. 1. pitch
2. ground
3. Cricket
4. garage
5. bounce
6. hit

Think about it (p. 99)

Unlike in baseball, there's no foul in cricket. So the batman can hit the ball in any direction.

** Answers may vary.*

Comprehension (pp. 100-101)

A. ⑥

- B. 1. cricket
2. baseball
3. garage wall

C. 1. ⑥, ③ 2. ① 3. ⑥

D. Cricket: Bounce, ground
Baseball: bat, Hit

Link to Write (p. 101)

How to Play **Badminton**

- You need **two** people to play it.
- You need a ball, **rackets**, and **an empty space to play it**.
- It has some important rules.
 1. **If your rival fails to hit the ball back, you will have the score.**
 2. **You should not touch the ball with your hands in any case.**

** Answers may vary.*

Unit 16 Tiptoe Tapping, the Tinikling

Key Words (p. 103)

- B. 1. tiptoe
2. combine
3. pole
4. block
5. costume
6. Bamboo

While you read (p. 104)

It started when Spain ruled the Philippines.

Comprehension (pp. 106-107)

A. Filipino, bamboo

- B. 1. music
2. bird
3. wooden blocks

C. 1. ③ 2. ⑥ 3. ①, ③

D. The tinikling: poles, poles
The Double Dutch: American, ropes

Link to Write (p. 107)

Let's Dance!

Why don't we dance together?

- Dance: **Hula**
- Music: **Hawaiian music (using the ukulele, gourd drums, bamboo pipes, sticks, and rattles)**
- Dress: **leis (flower necklace), a pau (skirt), and ankle bracelets**
Come to the playground and enjoy!

** Answers may vary.*

Unit 01 Green Power

Word Practice (p. 04)

- A. 1. Ⓐ 2. Ⓐ 3. Ⓑ
4. Ⓑ 5. Ⓐ 6. Ⓑ
- B. 1. improve
2. Trust
3. expect
4. result

Sentence Practice (p. 05)

1. There was too much to study!
2. Mom gave her a framed picture.
3. Her test result came the next day.
4. Seeing plants and trees improves concentration.

Summary (p. 05)

- ① houseplants ② framed ③ test
④ seeing ⑤ perfect

Unit 02 Pie across the Ocean

Word Practice (p. 06)

- A. 1. Ⓑ 2. Ⓐ 3. Ⓐ
4. Ⓑ 5. Ⓑ 6. Ⓐ
- B. 1. lamb
2. traditional
3. company
4. cultural

Sentence Practice (p. 07)

1. Pies are more than desserts.
2. People often cooked birds called magpies.
3. Today, steak pies are most common.
4. Over the years, it became a US cultural symbol.

Summary (p. 07)

- ① desserts ② dish ③ birds
④ symbol ⑤ products

Unit 03 Life of AI

Word Practice (p. 08)

- A. 1. Ⓐ 2. Ⓐ 3. Ⓑ
4. Ⓑ 5. Ⓑ 6. Ⓐ
- B. 1. journey
2. stretch
3. shape
4. plant

Sentence Practice (p. 09)

1. He took a long road to your refrigerator.
2. AI was born at the recycling plant.
3. AI wants to be a father someday.
4. It's important to recycle AI.

Summary (p. 09)

- ① refrigerator ② recycling ③ rectangle
④ poured ⑤ recycle

Unit 04 A Garden, Three sons, and Some Rope

Word Practice (p. 10)

- A. 1. Ⓑ 2. Ⓐ 3. Ⓐ
4. Ⓑ 5. Ⓑ 6. Ⓐ
- B. 1. equally
2. divide
3. connect

Sentence Practice (p. 11)

1. Farmer Jake was getting old.
2. The cleverest one gets the most.
3. Leo made a straight line to the north fence.
4. Joe connected Leo's rope and the west fence.

Summary (p. 11)

- ① rectangle ② square ③ fence
④ connected ⑤ biggest

Unit 05

Lena the Unstoppable

Word Practice (p. 12)

- A. 1. Ⓐ 2. Ⓐ 3. Ⓑ
4. Ⓐ 5. Ⓑ 6. Ⓑ
- B. 1. challenge
2. be good at
3. subject
4. role model

Sentence Practice (p. 13)

1. Her one leg was much smaller than the other.
2. She learned to use her feet like hands.
3. Lena gives lectures about her challenges.
4. She gives hope to many people.

Summary (p. 13)

- ① stop ② swim ③ music
④ artist ⑤ role model

Unit 06

It's Raining Cats and ... Cats!

Word Practice (p. 14)

- A. 1. Ⓐ 2. Ⓑ 3. Ⓑ
4. Ⓐ 5. Ⓑ 6. Ⓐ
- B. 1. normal
2. solution
3. unexpected
4. out of control

Sentence Practice (p. 15)

1. Nature connects many things.
2. Small changes often bring unexpected results.
3. The number of rats grew out of control.
4. Finally, things went back to normal.

Summary (p. 15)

- ① unexpected ② chemicals ③ cats
④ rat ⑤ normal

Unit 07

A Story of Two Kingdoms

Word Practice (p. 16)

- A. 1. Ⓐ 2. Ⓑ 3. Ⓑ
4. Ⓐ 5. Ⓑ 6. Ⓑ
- B. 1. follower
2. kingdom
3. unfortunately

Sentence Practice (p. 17)

1. There was a prince named Jumong.
2. Jumong was popular among people.
3. He picked the next king.
4. Onjo and Biryu left and began their own kingdoms.

Summary (p. 17)

- ① special ② jealous ③ country
④ king ⑤ followers

Unit 08

A Butcher, a Baker: One Clever Money-Maker

Word Practice (p. 18)

- A. 1. Ⓑ 2. Ⓐ 3. Ⓐ
4. Ⓑ 5. Ⓐ 6. Ⓑ
- B. 1. discount
2. customer
3. complain
4. nearby

Sentence Practice (p. 19)

1. Big-Box bought lots of food at once.
2. They still made good money.
3. They couldn't sell at low prices.
4. New people started coming to Brown's.

Summary (p. 19)

- ① customers ② cheap ③ complained
④ different ⑤ paid

Unit 09 Something in the Air

Word Practice (p. 20)

- A. 1. Ⓐ 2. Ⓑ 3. Ⓑ
4. Ⓐ 5. Ⓐ 6. Ⓑ
- B. 1. reduce
2. confused
3. sweat
4. drip

Sentence Practice (p. 21)

1. Oliver finished hanging laundry.
2. The clothes will never dry outside.
3. When air is full of water, it can't take more.
4. The water in clothes can't go into the air.

Summary (p. 21)

- ① dry ② humid ③ water
④ air conditioner ⑤ humidity

Unit 10 The Escalator Mystery

Word Practice (p. 22)

- A. 1. Ⓑ 2. Ⓐ 3. Ⓐ
4. Ⓐ 5. Ⓑ 6. Ⓑ
- B. 1. reason
2. on purpose
3. exactly
4. time

Sentence Practice (p. 23)

1. I did a study to find out.
2. Both took exactly two minutes.
3. It really is slower than the subway escalators.
4. I stare at all the cool clothes!

Summary (p. 23)

- ① subway ② slower ③ timed
④ slow ⑤ products

Unit 11 Acid or Alkali?

Word Practice (p. 24)

- A. 1. Ⓑ 2. Ⓐ 3. Ⓑ
4. Ⓑ 5. Ⓐ 6. Ⓑ
- B. 1. sour
2. neutral
3. element
4. bitter

Sentence Practice (p. 25)

1. Your mom gives you medicine.
2. Some foods have strong acids.
3. All compounds are on a chemical scale.
4. Compounds in the middle are neutral.

Summary (p. 25)

- ① reaction ② acids ③ alkalis
④ reduces ⑤ neutral

Unit 12 The Human Machine

Word Practice (p. 26)

- A. 1. Ⓐ 2. Ⓑ 3. Ⓐ
4. Ⓐ 5. Ⓑ 6. Ⓑ
- B. 1. fell down
2. imagine
3. tip over
4. hold up

Sentence Practice (p. 27)

1. Bones and muscles work together.
2. Muscles make your body move.
3. They return to their old shape.
4. You're like a tree with no roots.

Summary (p. 27)

- ① Muscles ② bones ③ Jellyfish
④ balance ⑤ Trees

Unit 13

A Secret from Rembrandt

Word Practice (p. 28)

- A. 1. ☐ b 2. ☐ a 3. ☐ b
4. ☐ a 5. ☐ a 6. ☐ b
- B. 1. outline
2. lightly
3. underneath
4. just

Sentence Practice (p. 29)

1. He showed light and shadow.
2. "Shading" is making things darker.
3. Find the lighter shadow on the egg.
4. Now make everything else light.

Summary (p. 29)

- ① lamp ② outline ③ shadow
④ white ⑤ light

Unit 14

Minuet in G Major, by ... Me!

Word Practice (p. 30)

- A. 1. ☐ a 2. ☐ b 3. ☐ a
4. ☐ b 5. ☐ a 6. ☐ a
- B. 1. songwriter
2. find out
3. record

Sentence Practice (p. 31)

1. But few know it's mine!
2. Bach had two notebooks with the same name.
3. Bach gave this to his family.
4. I kept opening that minuet page.

Summary (p. 31)

- ① Bach ② notebook ③ name
④ second ⑤ researchers

Unit 15

Let's Play Ball

Word Practice (p. 32)

- A. 1. ☐ b 2. ☐ a 3. ☐ a
4. ☐ b 5. ☐ a 6. ☐ b
- B. 1. visit
2. miss
3. strike out
4. bowl

Sentence Practice (p. 33)

1. Mika's cousin Abha is visiting from India.
2. In baseball, you pitch the ball.
3. It flies right into the garage wall.
4. You miss and strike out!

Summary (p. 33)

- ① baseball ② cricket ③ bounces
④ pitch ⑤ strike

Unit 16

Tiptoe Tapping, the Tinikling

Word Practice (p. 34)

- A. 1. ☐ b 2. ☐ a 3. ☐ a
4. ☐ b 5. ☐ b 6. ☐ b
- B. 1. native
2. slide
3. rule
4. apart

Sentence Practice (p. 35)

1. The dancers usually wear colorful costumes.
2. The name comes from a bird.
3. They're careful not to hit the poles.
4. Schools around the world teach tinikling.

Summary (p. 35)

- ① combines ② costumes ③ tiptoe
④ poles ⑤ similar