

Unit 01 Whoops ... an Invention!

Key Words (p. 07)

- B. 1. light bulb
2. invention
3. scientist
4. microwave oven
5. melt
6. radio wave

While you read (p. 08)

Edison invented the first good light bulb.

Comprehension (pp. 10-11)

A. ⑥

- B. 1. hard work
2. large
3. finding

C. 1. ⑥ 2. ③ 3. ①, ③

D. microwave oven, candy bar, cook food

Link to Write (p. 11)

My Great Invention

I want to introduce my great invention. It is **a hat with a pinwheel on it**. I came up with a good idea when I **spun a pinwheel on a shiny day**. It was an accident!

** Answers may vary.*

Unit 02 The Very Special Jack-o-Lantern

Key Words (p. 13)

- B. 1. bumpy
2. festival
3. cornfield
4. maze
5. puzzle
6. jack-o-lantern

Think about it (p. 14)

An event where you can make jack-o-lanterns, food stands, etc. are at the pumpkin festival.

** Answers may vary.*

Comprehension (pp. 16-17)

A. pumpkin festival, jack-o-lantern

- B. 1. jack-o-lanterns
2. plastic
3. popular

C. 1. ③ 2. ① 3. ③

D. Last year: jack-o-lantern, special
This year: taller, Halloween

Link to Write (p. 17)

The Pomona Pumpkin Festival

Please come and enjoy the festival with us!

- When: **November 6 - November 31**
- Where: **Pomona Ave.**
- Interesting Events:
 1. **the Halloween Parade**
 2. **the Giant Pumpkin Contest**
 3. **the Haunted House**

** Answers may vary.*

Unit 03 Make Your Own Dirt

Key Words (p. 19)

- B. 1. spray
- 2. shade
- 3. Earthworms
- 4. dirt
- 5. feed
- 6. rectangle

While you read (p. 20)

I need a plastic bin, earthworms, garden dirt, newspaper, water, etc.

** Answers may vary.*

Comprehension (pp. 22-23)

- A. Ⓐ
- B. 1. rectangles
- 2. fishing
- 3. water
- C. 1. Ⓐ 2. Ⓐ, Ⓒ 3. Ⓑ
- D. earthworms, newspaper, food garbage

Link to Write (p. 23)

Reduce Food Garbage!

We make a lot of food garbage every day. It's not good for the environment. To reduce food garbage, I'll do the things below.

- 1. I'll finish all the food on my plate.
- 2. I'll **grow dirt using earthworms and food garbage.**
- 3. I'll **buy only the foods on my shopping list.**

** Answers may vary.*

Unit 04 A UFO? An IFO!

Key Words (p. 25)

- B. 1. measure
- 2. square
- 3. cube
- 4. UFO
- 5. equal
- 6. edges

Think about it (p. 26)

I think UFOs really exist, and they are circles.

** Answers may vary.*

Comprehension (pp. 28-29)

- A. UFO, sky lantern
- B. 1. outside
- 2. cube
- 3. square
- C. 1. Ⓑ 2. Ⓒ 3. Ⓐ
- D. Square: four, width
- Cube: six, height

Link to Write (p. 29)

Shapes around Us

We live with many shapes. Look around your house and find some!

Rectangle	Circle	Cube
TV screen	plate	dice
table	clock	box
picture frame	stool	ice cube

** Answers may vary.*

Unit 05 Who Would Get Up First?

Key Words (p. 33)

- B. 1. dizzy
- 2. sweat
- 3. interview
- 4. throw up
- 5. passenger
- 6. flash

Think about it (p. 34)

I would give up my seat to the old woman.

** Answers may vary.*

Comprehension (pp. 36-77)

A. ⑥

- B. 1. sick
- 2. An old woman
- 3. his head

C. 1. ① 2. ③ 3. ③

D. sitting passengers, got up, cameras, famous

Link to Write (p. 37)

My Experience

I was in the same situation as Brian was. I was sitting on **the bus**. I was **sick with a cold**. But there was a **woman with a baby** by me. I **gave up the seat** for her.

** Answers may vary.*

Unit 06 Nauru

Key Words (p. 39)

- B. 1. dig
- 2. native
- 3. island
- 4. mine
- 5. wildlife
- 6. rocks

While you read (p. 41)

The rocks ran out, and they have little business today.

Comprehension (pp. 42-43)

A. rocks, environment

- B. 1. Australia
- 2. Powerful countries
- 3. rich

C. 1. ⑥ 2. ① 3. ③

D. Past: fish, rocks
Now: help, danger

Link to Write (p. 43)

Dear Nauruans,

Hi, I'm **Mika from India**. I'm sorry to hear about **your troubled history**. It taught me **we should save our natural resources**. I wish you the best in the future.

Best,
Mika

** Answers may vary.*

Unit 07 Ook and Aak

Key Words (p. 45)

- B. 1. axe
2. hunt
3. blade
4. hut
5. tent
6. spear

Think about it (p. 47)

I think Ook's life is more interesting because he moves a lot for hunting.

** Answers may vary.*

Comprehension (pp. 48-49)

A. ⑥

- B. 1. place
2. axe
3. hunts

C. 1. ⑥ 2. ⑥, ③ 3. ①

D. Ook's: Old, tip, tent
Aak's: New, blade, food

Link to Write (p. 49)

My Life vs. Aak's

My life is different from **Aak's**. He makes everything with stone. But I **buy things at stores**. And he **lives in his mud hut**. But I **live in the apartment building**.

** Answers may vary.*

Unit 08 The DMZ: An Untouched Nature Reserve

Key Words (p. 51)

- B. 1. center
2. forest
3. protect
4. Stay out
5. border
6. agreement

While you read (p. 52)

It began in 1953.

Comprehension (pp. 54-55)

A. wildlife, protect

- B. 1. between
2. border
3. developed

C. 1. ① 2. ③ 3. ①

D. Background: strip, stay out
The wildlife: safe, untouched, wildlife

Link to Write (p. 55)

Protect It or Not?

The two Koreas will become one country again. Then we can go to the DMZ. I think we **can develop the DMZ**.

My reasons are below.

1. **It can be a natural park for animals and people.**
2. **It can be an educational place about our history.**

** Answers may vary.*

Unit 09 A Bird's-Eye View

Key Words (p. 59)

- B. 1. pilot
- 2. hot-air balloon
- 3. freeze
- 4. scream
- 5. fill
- 6. float

Think about it (p. 61)

It might go down when the air inside becomes colder.

** Answers may vary.*

Comprehension (pp. 62-63)

A. ①

- B. 1. white rock
- 2. scared
- 3. The pilot

C. 1. ③ 2. ②, ③ 3. ①

D. hot air, lighter, beautiful

Link to Write (p. 63)

How Amazing!

Last summer, I went to **Hawaii with my family**. We visited many places and had fun. But **Waikiki** was most impressive. We **surfed and snorkeled in the water** there.

It was wonderful!

** Answers may vary.*

Unit 10 The Longest Voyage

Key Words (p. 65)

- B. 1. record
- 2. solar system
- 3. orbit
- 4. launch
- 5. aliens
- 6. space probe

While you read (p. 67)

It is going to the Oort cloud.

Comprehension (pp. 68-69)

A. probe, golden record

- B. 1. Jupiter's rings
- 2. 1990
- 3. ice

C. 1. ② 2. ③ 3. ①, ③

D. launched, Jupiter, solar system

Link to Write (p. 69)

Dear Aliens,

Hi, there! I'm **Nick** from Earth. I have some things to show you. Here are pictures of **my dogs and cats**. Also, here are some sounds of **my favorite classical music**. I hope I will see you someday.

From Earth

** Answers may vary.*

Unit 11 **A Look Underground**

Key Words (p. 71)

- B. 1. spread
- 2. desert
- 3. pull out
- 4. sapling
- 5. root
- 6. compete

While you read (p. 73)

Roots are important for desert plants because they get lots of water from the dirt and store it.

Comprehension (pp. 74-75)

A. ©

- B. 1. dirt
- 2. food
- 3. deserts

C. 1. ⑥ 2. ⑥, © 3. ①

D. Keeping plants steady: underground, steady, pull

Gathering food and water: store, saplings

Link to Write (p. 75)

We Eat Parts of Plants!

Some vegetables we eat are the roots of plants. They include potatoes, carrots, radishes, and others. I like to eat them!

Some are the **fruits** of plants. They include **tomatoes, eggplants, cucumbers,** and others. I also like them very much!

** Answers may vary.*

Unit 12 **Sweet Science**

Key Words (p. 77)

- B. 1. solid
- 2. thirsty
- 3. stir
- 4. Pour
- 5. liquid
- 6. experiment

Think about it (p. 78)

I think he is not really thirsty. He is making lemon soda to get Juan interested.

** Answers may vary.*

Comprehension (pp. 80-81)

A. science, soda

- B. 1. boring
- 2. juice
- 3. sugar

C. 1. © 2. ① 3. ①, ⑥

D. skip, thirsty, measure, project

Link to Write (p. 81)

Science Fair Project

- Topic: **why oil floats on water**
- What to do: **an experiment**
- What I need: **water, oil, a glass, and a scale**
- Result: **One cup of oil is lighter than the same amount of water.**

** Answers may vary.*

Unit 13 A Different Museum Tour

Key Words (p. 85)

- B. 1. whisper
- 2. focus
- 3. wave
- 4. missing
- 5. tour
- 6. confused

Think about it (p. 87)

I feel the woman looks so sad.

** Answers may vary.*

Comprehension (pp. 88-89)

A. ⓑ

- B. 1. art
- 2. children
- 3. The guide

C. 1. Ⓒ 2. ⓐ 3. Ⓒ

D. First: children's, fun, sighed
Later: weird, secrets

Link to Write (p. 89)

My favorite painter is **Pablo Picasso**. He mostly painted **poor people in Paris**. Among his paintings, I like **The Dream** the most.

** Answers may vary.*

Unit 14 The Sound of Strings

Key Words (p. 91)

- B. 1. hold up
- 2. stool
- 3. string
- 4. note
- 5. similar
- 6. bow

While you read (p. 93)

The violin is the smallest, and the double bass is the biggest.

Comprehension (pp. 94-95)

A. similar, different

- B. 1. bigger
- 2. on the floor
- 3. tall

C. 1. Ⓒ 2. ⓑ 3. Ⓒ

D. Cello, big, Strings, low

Link to Write (p. 95)

My Favorite Instrument

My favorite instrument is the **plute**. It is made of **metal** and has **buttons**. When you play it, you use **your fingers**. It makes beautiful sounds.

** Answers may vary.*

Unit 15 Let's Stay in Shape!

Key Words (p. 97)

- B. 1. exercise
- 2. stretch
- 3. indoors
- 4. bounce
- 5. muscles
- 6. Rock climbing

While you read (p. 99)

Both are more fun than others, and you can enjoy them indoors.

Comprehension (pp. 100-101)

A. a

- B. 1. biggest
- 2. strengthens
- 3. dangerous

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

D. Ball exercise: bounce, legs
Indoor rock climbing: helmet, pads

Link to Write (p. 101)

To Stay in Shape

I do **swimming** every day. It is good for **my lungs and muscles**. Also, I sometimes do **jumping rope**. It **strengthens my legs**. These activities help me stay in shape.

** Answers may vary.*

Unit 16 Animalympics

Key Words (p. 103)

- B. 1. athlete
- 2. fan
- 3. dash
- 4. winner
- 5. high jump
- 6. lead

Think about it (p. 104)

I think Leopard is likely win the high jump.

** Answers may vary.*

Comprehension (pp. 106-107)

A. fastest, jumper, Cheetah

- B. 1. Impala
- 2. same
- 3. 4 m

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

D. 100-meter dash: record, caught
High jump: rookies, beat

Link to Write (p. 107)

School Sports Day

I entered the **long jump**. **Laura** and **I** were the favorites. My record was **1.6 meters**. But hers was **1.55 meters**. **I** won!

** Answers may vary.*

Unit 01 **Whoops ... an Invention!**

Word Practice (p. 04)

- A. 1. **b** 2. **a** 3. **a**
4. **b** 5. **a** 6. **a**

- B. 1. tiny
2. far away
3. accident

Sentence Practice (p. 05)

1. He only made the first good one.
2. The light bulb took about 70 years!
3. Some inventions come from accidents.
4. It popped very quickly!

Summary (p. 05)

- ① inventions ② accidents ③ tested
④ radio waves ⑤ microwave oven

Unit 02 **The Very Special Jack-o-Lantern**

Word Practice (p. 06)

- A. 1. **a** 2. **b** 3. **b**
4. **a** 5. **b** 6. **a**

- B. 1. promise
2. normal
3. smooth
4. popular

Sentence Practice (p. 07)

1. They visited the Pomona Pumpkin Festival.
2. We'll get a special one next year.
3. One was even taller than Holly!
4. The big pumpkin was there with hers.

Summary (p. 07)

- ① Halloween ② jack-o-lantern ③ promised
④ normal ⑤ same

Unit 03 **Make Your Own Dirt**

Word Practice (p. 08)

- A. 1. **a** 2. **b** 3. **a**
4. **b** 5. **a** 6. **a**

- B. 1. peel
2. grounds
3. tear up
4. scraps

Sentence Practice (p. 09)

1. People grow plants inside.
2. Put the earthworms in the bin.
3. You can feed them food garbage!
4. It's time to feed your worms.

Summary (p. 09)

- ① dirt ② Rectangles ③ earthworms
④ shade ⑤ leave

Unit 04 **A UFO? AN IFO!**

Word Practice (p. 10)

- A. 1. **b** 2. **a** 3. **b**
4. **a** 5. **a** 6. **b**

- B. 1. width
2. height
3. glowing
4. length

Sentence Practice (p. 11)

1. It's a big, glowing square!
2. There's a UFO heading right for us.
3. Cubes have six square sides.
4. We measure a square two ways.

Summary (p. 11)

- ① glowing ② Squares ③ equal
④ measure ⑤ height

Unit 05 Who Would Get Up First?

Word Practice (p. 12)

- A. 1. a 2. b 3. a
4. b 5. a 6. b
- B. 1. voice
2. decision
3. pretend
4. hidden

Sentence Practice (p. 13)

1. He was dizzy and wanted to throw up.
2. An old woman walked by the sitting passengers.
3. Pretend you're asleep!
4. He gave up his seat to the old woman.

Summary (p. 13)

- ① seat ② passengers ③ Pretend
④ right ⑤ famous

Unit 06 Nauru

Word Practice (p. 14)

- A. 1. b 2. a 3. a
4. b 5. a 6. b
- B. 1. control
2. valuable
3. run out
4. environment

Sentence Practice (p. 15)

1. Nauru is an island near Australia.
2. It is a tiny country with a troubled history.
3. They dug mines everywhere on the island.
4. The mining hurt plants and wildlife.

Summary (p. 15)

- ① history ② natives ③ valuable
④ ran out ⑤ help

Unit 07 Ook and Aak

Word Practice (p. 16)

- A. 1. a 2. a 3. b
4. b 5. a 6. b
- B. 1. tip
2. grab
3. difference

Sentence Practice (p. 17)

1. Aak lives in the New Stone Age.
2. Ook grabs a spear with a stone tip.
3. He always stays in his mud hut.
4. He gets vegetables from his garden.

Summary (p. 17)

- ① Stone Age ② spear ③ axe
④ tent ⑤ hut

Unit 08 The DMZ: An Untouched Nature Reserve

Word Practice (p. 18)

- A. 1. b 2. a 3. b
4. a 5. b 6. a
- B. 1. strip
2. kind
3. untouched
4. rare

Sentence Practice (p. 19)

1. South and North Korea have an agreement.
2. The DMZ is home to many rare animals and plants.
3. The DMZ also has natural, untouched forests.
4. Some also worry about the wildlife in the DMZ.

Summary (p. 19)

- ① strip ② stay out ③ safe
④ untouched ⑤ protect

Unit 09 A Bird's-Eye View

Word Practice (p. 20)

- A. 1. a 2. b 3. a
4. b 5. a 6. a
- B. 1. space
2. explain
3. continue
4. bird's-eye view

Sentence Practice (p. 21)

1. Don't be scared!
2. Maria stepped inside carefully.
3. The balloon's hot air floats above the cold air.
4. We're heavier than air!

Summary (p. 21)

- ① trip ② lighter ③ sky
④ floats ⑤ bird's-eye

Unit 10 The Longest Voyage

Word Practice (p. 22)

- A. 1. b 2. a 3. b
4. a 5. a 6. b
- B. 1. dust
2. landmark
3. discover
4. speed

Sentence Practice (p. 23)

1. A lonely machine speeds through space.
2. It gathered important data in both places.
3. *Voyager 1* left our solar system in 1990.
4. Will aliens find the record someday?

Summary (p. 23)

- ① launched ② discovered ③ solar system
④ record ⑤ aliens

Unit 11 A Look Underground

Word Practice (p. 24)

- A. 1. a 2. b 3. b
4. a 5. b 6. a
- B. 1. share
2. store
3. underground
4. steady

Sentence Practice (p. 25)

1. We don't think much about plant roots.
2. Roots hold steady in the dirt.
3. Do plants really eat food?
4. Most plants compete for food and water.

Summary (p. 25)

- ① steady ② spread ③ pull, out
④ store ⑤ saplings

Unit 12 Sweet Science

Word Practice (p. 26)

- A. 1. a 2. a 3. b
4. b 5. a 6. b
- B. 1. due
2. project
3. bottom
4. moment

Sentence Practice (p. 27)

1. He pours the juice and stirs in sugar.
2. Juan points to the bottom of the glass.
3. That solid sugar will never become liquid.
4. Let's do an experiment.

Summary (p. 27)

- ① due ② skip ③ pours
④ sugar ⑤ experiment

Unit 13 A Different Museum Tour

Word Practice (p. 28)

- A. 1. ⓑ 2. ⓐ 3. ⓑ
4. ⓐ 5. ⓐ 6. ⓑ
- B. 1. trick
2. weird
3. secret
4. stuff

Sentence Practice (p. 29)

1. Laura and Mom arrived at the Musée d'Orsay.
2. Degas didn't need any legs!
3. The kids looked confused.
4. Who wants to find more secrets?

Summary (p. 29)

- ① fun ② weird ③ people
④ missing ⑤ secrets

Unit 14 The Sound of Strings

Word Practice (p. 30)

- A. 1. ⓐ 2. ⓑ 3. ⓑ
4. ⓐ 5. ⓑ 6. ⓐ
- B. 1. quartet
2. rest on
3. classical

Sentence Practice (p. 31)

1. They are different in size and sound.
2. Violinists can play it under the chin.
3. Short strings can reach high notes.
4. They are too big to hold up.

Summary (p. 31)

- ① string ② bow ③ notes
④ longer ⑤ reach

Unit 15 Let's Stay in Shape!

Word Practice (p. 32)

- A. 1. ⓐ 2. ⓑ 3. ⓐ
4. ⓑ 5. ⓑ 6. ⓑ
- B. 1. pad
2. in shape
3. burn calories

Sentence Practice (p. 33)

1. There are many ways to stay in shape.
2. Some are more fun than others.
3. It also burns a lot of calories.
4. The rock is not real and not very high.

Summary (p. 33)

- ① shape ② bounce ③ rock climbing
④ muscles ⑤ dangerous

Unit 16 Animalympics

Word Practice (p. 34)

- A. 1. ⓐ 2. ⓑ 3. ⓐ
4. ⓑ 5. ⓑ 6. ⓐ
- B. 1. favorite
2. annual
3. beat
4. record

Sentence Practice (p. 35)

1. Cheetah is famous for her speed.
2. We have some rookies for the high jump.
3. She broke her record!
4. Klipspringer just beat him by four meters!

Summary (p. 35)

- ① dash ② lead ③ broke
④ beat ⑤ winner