## Unit 1

1

3

4

- 2 turtle 3 prickly pear cactus 4 goose 5 porcupine
- 2 living organisms
  - **b** 3 **c** 1 **d** 5 **e** 2
  - c
     Suggested answer: He keeps a diary to remember events.
- 5 1 F 2 F 3 T
- 6 Students' own answers

### Lesson 1

- a chameleon
- 2) 2 f 3 d 4 g 5 b 6 a 7 e
- 3 2 ran, showed
  - 3 went, didn't see
  - 4 Did (you) inherit
  - 5 did (the chameleon) change
  - 6 flew, didn't get
  - 7 were, didn't touch
  - 8 did (this coconut) get, traveled
- 2 Did (your teacher) like 3 did (she) say 4 told
  5 worked 6 found 7 wanted 8 asked 9 gave
  10 did (they) ask 11 asked 12 explained
  13 enjoyed
- 5 Parts of Animals and Plants: eyes, flowers, hair, leaves, mane, neck, pods, spine, stem

Adjectives to Describe Physical Appearance: attractive (example), big, dark, dry, light, long, prickly, sharp, short, smooth, tall, wrinkled

- 6 flowers, flowers, smooth, stem, prickly
- 7 Students' own answers

### Lesson 2

1	Students' own answers
2	1 hedgehog 2 porcupine 3 porcupine
3	2 stimulus 3 behavior 4 hibernate 5 protection 6 migrate
4	2 reacts 3 behavior 4 hibernation 5 protect 6 survive
5	<ul> <li>2 reacts – reactions 3 behave – behavior</li> <li>4 hibernate – hibernation 5 protect – protection</li> <li>6 survive – survival</li> </ul>
6	Students' own answers
7	Students' own answers. The journey is made by a bird, the Arctic tern.
8	1 b 2 c 3 a
9	Students' own answers
Uni	it 2
1	2 e 3 d 4 a 5 c
2	<ol> <li>environment</li> <li>food web</li> <li>food chain</li> <li>interact</li> <li>ecosystem</li> </ol>
3/4	<ol> <li>They have black stripes on a white coat.</li> <li>Zebras have stripes to protect them from predators and from the sun.</li> <li>They look like horses and donkeys.</li> </ol>
5	Students' own answers.
Less	son 1
1	2 desert 3 grassland 4 tundra 5 rain forest
2	<b>b</b> 1 <b>c</b> 3 <b>d</b> 2 <b>e</b> 5
3	Students' own answers
4	Students' own answers (for example: coat, hat, gloves, boots)

5

Lesson 2

owl

Lesson 3



- **5** Some people harm the environment, and others protect it.
- Students' own answers

# Unit 3

- 2 rice 3 spinach 4 fish 5 beans 6 milk 7 meat 8 orange

Answers and suggested answers:

Dairy	Protein	Grains	Fruits	Vegetables
butter	fish	rice	orange	spinach
milk	meat	beans	melon	cabbage
cheese	eggs	lentils	pineapple	lettuce
yogurt	nuts	corn		

1 c 2 c 3 a 4 b 5 a 6 b 7 c

1 nutrients 2 nutrition 3 diet

## Lesson 1

1 c 2 a 3 d 4 b

2 proteins 3 carbohydrates 4 starch 5 Calories 6 fats 7 glucose 8 cholesterol

- 1 Fats and Sweets 2 Milk and Meat **3** Fruits and Vegetables **4** Bread and Rice Fats and Candy is the smallest. Bread and Rice is the largest.
- Students' own answers
- Students' own answers

## Lesson 2

- 2 adjective 3 adjective 4 adjective 5 noun 6 noun 7 adjective
- 1 overnourished (example), dairy 2 malnutrition, deficient
  - **3** undernourished, grains
  - 4 obesity

Λ

- 1 C 2 B 3 A
  - 1 undernourished 2 normal 3 overnourished

		<b>Б</b> • I		•.	1 1.1	
5	Mr.	Bridge	IS C	quite	healthy	y.

- 6 1 should 2 should 3 shouldn't 4 shouldn't
- 7 Students' own answers

## Review 1-3

- 1) 1b 2c 3b 4c 5a 6c 7a 8c
- Across: 2 goose 3 tundra 6 protein 7 starch
   8 desert 9 fiber
   Down: 1 glucose 2 grains 4 moth 5 turtle
- 3 1 F 2 F 3 T 4 T 5 T 6 F

## Unit 4

- 2 c flood 3 b ash 4 f landslide 5 d lava 6 a - river
- 2 V 3 F 4 V 5 L 6 F
- 3 A 2 B 1
- 4 1 B 2 B 3 A
- 5 Students' own answers

### Lesson 1

- 2 earthquake 3 epicenter 4 fault 5 focus
   6 volcano 7 drought
- 2 F 3 F 4 T 5 F 6 T
- 3 geysers (and volcanoes)
- 4 2 DS 3 F 4 F
- 5 Students' own answers

### Lesson 2

1	Fresh Water: glaciers, groundwater, ice caps, lakes, ponds, rivers, snow
	Salt Water: oceans, lakes
2	<ul> <li>2 freshwater lake 3 salt water 4 ocean</li> <li>5 ice caps 6 glaciers 7 groundwater</li> <li>8 drinking water</li> </ul>
3	3%
4	1 in the oceans 2 in glaciers and ice caps 3 31%
5	Students' own answers
Less	on 3
1	<ul> <li>2 precipitation 3 evaporation</li> <li>4 recycled 5 water cycle 6 water vapor</li> <li>7 storage</li> </ul>
2	1 b 2 a 3 c 4 b
3/4	both
5	1 when the water started to boil / reached 100°C
	2 the evaporation 3 liquid
	4 the vapor
	<b>5</b> b
Uni	t 5
1	1 d 2 c 3 e 4 a 5 b
2	<ul><li>2 solar system 3 space 4 star patterns</li><li>5 phases of the moon</li></ul>
3	Suggested answer: space, the life of an astronaut, star patterns, the moon

👍 2 F 3 T 4 F 5 T

### Lesson 1

2

- 📘 a telescope
  - Galileo's telescope made objects eight times bigger in size.
  - 2 People didn't like Copernicus's theory because they believed that Earth was the center of the universe.
  - **3** Galileo wrote about space until the last day of his life.
- 3 1 star 2 cause 3 astronomer 4 effect
   5 constellation
- 4 farmers and sailors
- 5 1 the ancient Greeks
  - **2** When they could see all of the constellation of Orion
  - **3** Because it is right above the North Pole
- 6 1 to move 2 can't
- 7 Students' own answers

### Lesson 2

- 1 1 solar eclipse 2 lunar eclipse 3 orbit
- 2 False sentence: When the sun passes between the moon and Earth, there's a solar eclipse.
- 3

4

5

b

#### **b** 3 **c** 5 **d** 2 **e** 4 **F** 6

- 1 The moon shines because it reflects sunlight.
- **2** During a total solar eclipse, it becomes dark because the moon casts a shadow on Earth.
- 3 There's a full moon tonight because the moon's bright side directly faces Earth.
- 4 Don't worry if you miss a lunar eclipse because there are several (lunar eclipses) in a year.

### Lesson 3

	1 second 2 fourth 3 first 4 third
2	2 solar 3 outer 4 inner 5 asteroids 6 comets 7 gravity 8 ellipse
3	Students' own answers
4	Which planet would you like to visit, and why?
5	<ol> <li>Neptune 2 Neptune's moons</li> <li>the Martian/alien 4 Earth</li> </ol>
6	Students' own answers
Uni	it 6
	1 measure 2 states 3 separate 4 matter
2	1 e 2 c 3 a 4 b 5 d
3	Students' own answers
4	1 Water 2 Ice Cream 3 Popcorn 4 Wood
5	<ul> <li>Suggested answers:</li> <li>1 Both wood and popcorn change state when heated, but can't change back.</li> <li>2 Both water and ice cream can turn from a solid into a liquid and back into a solid again.</li> </ul>
6	Students' own answers
Less	son 1
1	2 T 3 F 4 T 5 T 6 F
2	Students' own answers
3	1 compare 2 liquid 3 volume
4	Students' own answers
5	1 d 2 a 3 c 4 b
6	<ol> <li>What do you do to the butter? You melt it.</li> <li>How is the cocoa measured? It's measured in teaspoons.</li> </ol>

### Lesson 2

- 2 solution 3 solubility 4 filtration 5 solute
  6 condensation 7 evaporation 8 solvent
- 2 solute 3 mixture 4 solubility 5 solvent
   6 condensation 7 solution 8 evaporation
- 3 Students' own answers

4/5) oil 🗶 salt 🗸 sand 🗶 sugar 🗸

- **2** A magnet can separate iron from sand.
- 3 How can you measure the volume of a liquid?
- **4** You can turn water back into ice, but you can't unpop popcorn.
- **5** You can compare the mass of two objects with a pan balance.

## Lesson 3

6

- 1 substances
   2 physical change
   3 particles
   4 matter
   5 chemical change
- 2 crushing 3 folding 4 burning 5 melting
   6 decaying
- 2 physical
   3 physical
   4 chemical
   5 physical
   6 chemical
- 4 Suggested answers:
  - 1 broken pencil 2 crumpled newspaper
  - **3** origami / folded paper **4** burning wood
  - **5** ice melting **6** brown banana
- 5 1 Physical 2 Chemical
  - If the temperature is below zero, these puddles freeze.

If it isn't wet, it doesn't stick, and it falls apart.

If you leave a banana on a plate for a few days, it starts to turn brown.

If it's out in the open and rain falls on it, the metal parts turn brown and orange.



6

Students' own answers

# Review 4-6

1) 1 a 2 c 3 b 4 c 5 b 6 a 7 a 8 b

- 2 1 eclipse 2 land 3 cycle 4 water 5 system6 ice
- 3 1 flood 2 astronomer 3 comet 4 asteroid
   5 gravity



1 lava 2 ash 3 river 4 pond 5 drought 6 eclipse 7 liquid 8 mixture

# Unit 7

- 1) a 3 b 1 c 2
- 1 thermal energy
   2 sound energy
   3 light energy
- 3 1 sound 2 thermal 3 light
- 4 Students' own answers
- 5 Students' own answers

### Lesson 1

- 1 2 d 3 h 4 b 5 c 6 f 7 a 8 g
- 2 frequency 3 amplitude 4 volume 5 vibrations
  6 sound waves 7 pitch 8 wavelength
- 2 echo
   3 echolocation
   4 frequency
   5 distances
   6 temperature
   7 greater
   8 vibrations
- 2 outward 3 through 4 toward 5 between
   6 during

### Lesson 2

1 prism 2 rainbow 3 reflection 4 absorption
 5 refraction

2 1b 2e 3a 4c 5d

3

a

- 4 1 F 2 F 3 F
- 5 1 couldn't 2 could 3 couldn't 4 could

### Lesson 3

- 1 friction 2 radiation 3 conduction
   4 convection
- 2 warm 3 touch 4 gases/liquids
   5 liquids/gases 6 waves 7 surfaces 8 absorb
- 3 Students' own answers
- 4 Suggested answers:
  - Yes, I have. Heat was transferred from the blanket to my body by conduction.
  - 2 Yes, I have. Heat was transferred from the sun to my body by radiation.
  - **3** Yes, I have. The water got warm because heat was transferred from the hot water to the cold water by convection. The hot water got cooler and the cold water got warmer.
  - **4** Yes, I have. The wheels slipped because there wasn't much friction between the wheels and the grass.



Students' own questions and answers

### Unit 8

- 2 b 3 f 4 g 5 a 6 e 7 d 2 Students' own answers From left to right: 3, 1, 4, 2 3 Lesson 1 1 electric force 2 static electricity 3 atoms 4 lightning 5 electric charge 2 Included in the text: where and when he was born, his inventions, his family, who he worked for 1 Serbia 3 2 a year 3 remote control / the first electric motor / radio 4 it can travel a long way and it's safer 5 He didn't believe that atoms are made of smaller particles. 4 1 move toward 2 sticks, picks up 3 builds up 4 reach for Lesson 2 2 conductor 3 battery 4 electric current 5 series circuit 6 parallel circuit 4 doesn't move - moves 2 5 flows - doesn't flow 6 there's one path – there are two or more paths Batteries—Don't forget to recycle them! 3
  - 4 1 shouldn't 2 can 3 half 4 15% 5 quarter

## Lesson 3

- 1 b 2 c 3 e 4 a 5 d
   1 phantom energy 2 power source 3 resistor 4 filament 5 device
   c
   1 e 2 c 3 b 4 a 5 d
   Unit 9
   2 e 3 d 4 f 5 c 6 a
  - **2** a 2 b 1 c 3
  - 3 1 DS 2 F 3 T 4 F 5 T

## Lesson 1

- 2 reference point 3 balanced forces
   4 relative motion 5 mass 6 motion 7 force
   8 weight
- 2 1 b 2 a 3 b 4 c 5 a
- 3 1 Prediction 2 Preparing for the Experiment
   3 Doing the Experiment 4 Conclusions
- I The student thought that heavier objects would fall faster.
  - 2 They dropped the balls from the window.
  - 3 No, it wasn't. (Galileo's theory is right.)
- 5 lc 2a
- 6 Students' own answers

### Lesson 2



- 3 1 direction 2 vibrations 3 absorption
  - 4 reflection 5 resistor 6 insulator
  - 7 acceleration 8 conduction

# **Reading Skills**

h

a

b

с

b

b

Unit 1 Unit 2 Unit 3 Unit 4 a volcanic eruption Unit 5 Unit 6 Unit 7 pleased, interested, well Unit 8

### Students' own answers

#### Unit 9

You use the relative motion of the objects to decide what is moving and what is not moving.

# Writing Skills

#### Unit 1

1 worked 2 noticed 3 were 4 looked 5 had 6 differed 7 didn't know 8 became

### Unit 2

Students' own answers

#### Unit 3 Students' own answers

Unit 4

Students' own answers

#### Unit 5

- 1 Each time the moon completes a turn on its axis, it also travels once around Earth.
- 2 The sun's gravity pulls planets toward it.

#### Unit 6 Students' own answers

Unit 7 Students' own answers

#### Unit 8 1 pick up 2 build up

Unit 9

Students' own answers