### UNIT



**n.** lawn an area of ground that is covered with short grass



v. pass to move past someone or something



phr. slow down
to move slower



v. enter to go into a particular place



v. refract to cause light or sound to change direction



*adv.* slightly a little



**n.** position the place where something or someone is



*adj.* focused concentrated

### UNIT 2



*adj.* entire complete or full



**n.** swimming pool an artificial area of water for swimming

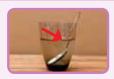


v. dive to jump into water head-first



*adj.* funny causing laughter

*n.* brain



n. refractionlight or sound changing direction



the organ inside the head that controls thought, memory, etc.



*n.* line a long, thin mark on the surface of something



*phr.* come in to enter a place



*adj.* certain particular but not named



v. apply to cause force, pressure, etc. to have an effect



n. plunger
a part of a device that you push
down into the device



*adv.* lightly gently



*n.* change the act of becoming different



v. repeat to make or do something again



*phr.* base on to use particular facts or ideas to develop something



phr. no matter
used to say that something is not important

#### **EXTRA WORDS**



n. lumpa small mass

### UNIT 4



v. pack to put things into a bag, box, etc.



n. chipa thin slice of potato that is fried



phr. in case
because of the possibility of
something happening



*adj.* proud feeling satisfied about something



v. swell to become larger than normal



v. burst to break open or apart suddenly



*adj.* inflated filled and made larger with air or gas



*adj.* suspicious feeling doubt or no trust

#### **EXTRA WORDS**



n. troposphere
the layer of Earth's atmosphere up
to a height of about 10 km



*n.* stratosphere the layer of Earth's atmosphere between 15 and 50 km above Earth

### UNIT 5



n. lens

a curved piece of glass or plastic that makes objects seem closer, smaller, etc.



v. bend

to curve



*adj.* convex

curving outward



*adj.* concave

curving inward



phr. on the other hand

in a way that is different from the first thing mentioned



*adj.* transparent

able to be seen through



**n.** laser pointer

a small device with a light that produces a narrow beam



*n.* beam

a line of light

#### **EXTRA WORDS**



n. magnifying glass

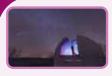
a curved glass that makes things look larger



n. guardian

a person who looks after someone

### UNIT 6



*n.* observatory

a building which scientists study and watch the stars



n. space

the area where the planets and the stars are



n. telescope

a device that you look through to see things that are far away



v. explain

to make something easy to understand



v. gather

to bring together into a group



*phr.* in detail

more clearly, so that even the small parts can be seen



*n*, binoculars

a device that you hold up to your eyes and look through to see things that are far away



n. microscope

a device used for producing a large view of very small objects

#### **EXTRA WORDS**



n. peephole

a small hole in a door through which you can look



**n.** electricity energy that is used to operate machines, lights, etc.



*adj.* electrical relating to electricity



*n.* circuit the complete path that an electric current travels along



n. electric currenta flow of electric charge in a circuit



n. wirea thin, flexible thread of metal



v. connect to join together



n. conductora material that allows electricityto move through it



*adj.* complete with all parts

#### **EXTRA WORDS**



n. componentone of the parts of something

### UNIT 8



phr. get ready
to prepare



n. threada long, thin piece of cotton, silk, etc.



phr. light up
to begin shining



v. join to put or bring together



v. conduct
to allow electricity or heat to go
through



*adj.* positive containing a larger amount of protons



*adj.* negative containing a larger amount of electrons



*adv.* already happening earlier

### UNIT 9



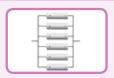
#### n. series

an electrical circuit in which the current passes through one part of the circuit after another



#### n. connection

something that connects two or more things



#### **n.** parallel

an electrical circuit in which the electric current passes through two or more branches



#### adj. remaining

left over after a part has been used



*n.* brightness

the condition of being bright



#### *n.* voltage

the force of an electric current



*adj.* strong

powerful



v. last

to continue to exist

### UNIT 10



#### *n.* heater

a device that produces heat



v. run

to operate



v. plug

to attach electrical equipment to a supply of electricity



n. outlet

a device into which a cord can be plugged to connect a device to electricity



v. throw

to send something through the air with force



n. grocery store

a store that sells food and household supplies



*n*, electronics

devices that require electricity to work



v. overheat

to become hotter than necessary



*n.* daytime

the time of the day when the sky is lit up by the sun



n. sea breeze

a wind that blows from the sea toward the land



*n.* land breeze

a wind that blows from the land toward the sea



*n.* lamp

a device that produces light



*adj.* heated

made hot or warm



n. movement

a change of position



*phr.* heat up

to make something warm or hot



v. create

to make or produce

### **UNIT** 12



*phr.* take a trip

to make a journey



*n.* kite

a frame covered with cloth or plastic that you fly in the air



*prep.* above

in a higher position than something else



phr. from A to B

from one place to another



phr. check out

to find out if something is true



*n.* dinner

the main meal of the day eaten in the evening



phr. go out

to leave a building for an activity



n flow

the movement of something in one direction

#### **EXTRA WORDS**



#### *n.* balance

an even distribution of weight

### UNIT 13



v. differ

to be unlike something else



n. season

one of the four periods of the year: spring, summer, fall, or winter



adj. steep

rising or falling at a sharp angle



n. angle

the space between two lines at the point at which they touch each other



adj. shallow

having a short distance from the top to the bottom



adv. once

one single time



**n.** heat energy

energy produced by the movement of atoms and molecules



v. rise

to move upward

#### **EXTRA WORDS**



n. axis

the imaginary straight line that something turns around



n. hemisphere

a half of the earth, especially divided by the equator

### **UNIT** 14



v. set

to go down below the horizon



adj. bright

full of light



*n.* solar altitude

the angle of the sun relative to Earth's horizon



*prep.* during

from the beginning to the end of a particular period



phr. at an angle

not horizontal or vertical, but sloping in one direction; tilted



v. revolve

to move around a central point or line



*n.* maximum

the largest amount possible



*n*, minimum

the smallest amount possible

#### **EXTRA WORDS**



*n.* precipitation

water that falls to the ground as rain, snow, etc.



v. imagine
to think in your mind



n. coala black hard substance that is used as a fuel



n. climate changechanges in the world's weatheras a result of human activity



*adj.* solar of or from the sun



*adj.* effective achieving the results that you want



v. plan to think about and arrange what you are going to do



v. implementto start using a plan or system



*adj.* essential necessary or needed

*n.* inverter

#### **EXTRA WORDS**



a device that changes direct current to alternating current



n. breaker boxa device that controls and distributes the supply of power

### **UNIT 16**



*n.* website a set of pages on the Internet about a particular subject



v. crash
to stop operating



v. manage to succeed in dealing with something



v. scroll to move text or images up or down on a computer screen



phr. sell out
to sell the entire amount of
something



*adj.* annoying making you feel slightly angry



adj. technical relating to the knowledge or machines used in science and industry



v. load to fully display the page of a website