

Class

Name

## Unit 1 Cleaning Up Space Garbage

#	Word	PoS	English Definition	Sample Sentence
1	spaceship	n.	a vehicle used for space travel	It can hit spaceships and even Earth.
2	net	n.	a tool used to catch things i.e. fish	One solution scientists have invented is a giant net to catch trash.
3	giant	adj.	extremely large	One solution scientists have invented is a giant net to catch trash.
4	powerful	adj.	having great power	The scientists will use powerful cameras to find the trash.
5	Earth	n.	the planet that we live on	Then they can bring it back to Earth.
6	fast	adv.	doing an action at a high speed; quickly	It goes around the Earth dangerously fast.
7	debris	n.	the remains of something that has been broken or destroyed	It's called space debris.
8	invent	v.	to produce something useful for the first time	One solution scientists have invented is a giant net to catch trash.
9	bring	v.	to take something or someone to a certain place	Then they can bring it back to Earth.
10	hit	v.	to make contact with a person or object, quickly and with a lot of force, often using hands	It can hit spaceships and even Earth.
11	solution	n.	an action or process of solving a problem	One solution scientists have invented is a giant net to catch trash.
12	trash	n.	things that you throw away because you do not want them; garbage	People have left 8,000 tonnes of trash there.
13	waste	n.	the useless materials, substances, or parts that are left after you use something	Waste is a problem all around the world.
14	dangerously	adv.	likely to cause harm or damage	It goes around the Earth dangerously fast.

Class

Name

## Unit 2 Robot Firefighters

#	Word	PoS	English Definition	Sample Sentence
1	fire	n.	burning that produces flames and creates heat, light, and smoke:	Fighting fires is a dangerous and dirty job.
2	brave	adj.	able and willing to face danger, fear, or difficulty	Brave people battle fires every day.
3	carry	v.	to hold or support something as you move with it	It walks and carries a hose.
4	fit	v.	to be the right size or shape for someone or something:	One is small and can fit through doors.
5	huge	adj.	very big	It sprays water 90 meters and fights huge fires.
6	firefighter	n.	a person whose job is stopping and putting out fires	Soon firefighters will have lots of robot helpers.
7	teach	v.	to give knowledge, information, or lessons in a school setting	Scientists are now teaching it to talk.
8	joystick	n.	a control for various devices	A human controls it with a joystick.
9	meter	n.	a standard unit of measurement; 100 centimeters	It sprays water 90 meters and fights huge fires.
10	soon	adv.	in very little time from now	Soon firefighters will have lots of robot helpers.
11	dangerous	adj.	involving danger, harm, or death	Fighting fires is a dangerous and dirty job.
12	battle	v.	to contend with full strength, vigor, skill, or resources	Brave people battle fires every day.
13	spray	v.	to shoot water	It sprays water 90 meters and fights huge fires.
14	hose	n.	a tube that carries a liquid	It walks and carries a hose.

Class

Name

## Unit 3 Cars That Drive Themselves

#	Word	PoS	English Definition	Sample Sentence
1	type	n.	a particular kind, class, or group	Companies are making a new type of car.
2	vehicle	n.	a means of carrying or transporting something	Also, this kind of vehicle will be safe.
3	prevent	v.	to stop from happening or existing	A computer watches the road and prevents problems.
4	relax	v.	to rest	So they can work or relax.
5	distance	n.	the space between two points	It senses other cars and keeps a safe distance.
6	crash	n.	when a vehicle hits another vehicle or object	This will mean fewer crashes.
7	oneself	pro.	with no one else	These cars drive themselves.
8	mistake	n.	something you do wrong	They think computers can make mistakes.
9	mean	v.	to express an idea, thought or fact	This will mean fewer crashes.
10	driver	n.	the operator of a motor vehicle	Some people don't trust a car with no driver.
11	safe	adj.	not dangerous	Also, this kind of vehicle will be safe.
12	enjoy	v.	to like; to have a good time	And some people just enjoy driving.
13	kind	n.	one of a group of people or things that belong together because they have something in common	Also, this kind of vehicle will be safe.
14	trust	v.	to believe a person or thing will not harm you	Some people don't trust a car with no driver.

Class

Name

## Unit 4 Intelligent Machines

#	Word	PoS	English Definition	Sample Sentence
1	enemy	n.	a person who hates and tries to harm another person	They could understand enemy messages.
2	develop	v.	to make more advanced	Computers and robots have developed a lot.
3	create	v.	to make something new	The first computers were created in the Second World War.
4	solve	v.	to find a solution, explanation, or answer for	By the 1950s, computers could solve difficult math problems.
5	Go	n.	a difficult board game for two players	Now computers play games like chess and Go.
6	intelligent	adj.	able to learn and understand things easily:	The first intelligent robot was built in the 1970s.
7	understand	v.	to know the meaning of something	They could understand enemy messages.
8	difficult	adj.	hard to do or understand	By the 1950s, computers could solve difficult math problems.
9	chess	n.	a popular game for 2 players each of whom moves 16 pieces	Now, computers play games like chess and Go.
10	message	n.	information that is left for or sent to someone else	They could understand enemy messages.
11	beat	v.	to win victory over	They can even beat human champions.
12	friend	n.	a person one has a strong liking for and likes being with, usually not in one's family	Do you have a robot friend?
13	champion	n.	a winner of first prize or first place in competition	They can even beat human champions.
14	build	v.	to use materials to make something new	The first intelligent robot was built in the 1970s.

Class

Name

## Unit 5 Hieroglyphics

#	Word	PoS	English Definition	Sample Sentence
1	ancient	adj.	having existed for many years	Hieroglyphics are the writing system of ancient Egypt.
2	dictionary	n.	a document that gives the meaning and use of words	Experts could use it as a dictionary to translate.
3	direction	n.	the course on which someone or something is traveling	But hieroglyphics can be written in any direction.
4	soldier	n.	a person serving in the military	French soldier discovered the Rosetta Stone.
5	sound	n.	something that is heard; a noise	Some are for one sound.
6	text	n.	the original words and form of a written or printed work	This stone had the same text written in hieroglyphics and Greek.
7	hieroglyphics	n.	a writing system based on pictorial characters	Hieroglyphics are the writing system of ancient Egypt.
8	language	n.	the words and signs that people use to communicate	Most languages are written in one direction.
9	discover	v.	to make known or visible	French soldier discovered the Rosetta Stone.
10	picture	n.	a painting, drawing, or photograph	There are hundreds of pictures.
11	expert	n.	a person with a high level of knowledge or skill relating to a particular subject or activity	Experts could use it as a dictionary to translate.
12	whole	adj.	all of something; entire	Others are for whole words.
13	word	n.	a single unit of language that can be spoken or written:	Others are for whole words.
14	translate	v.	to turn into one's own or another language	Experts could use it as a dictionary to translate.

Class

Name

## Unit 6 Baseball Signs

#	Word	PoS	English Definition	Sample Sentence
1	touch	v.	to feel something by putting fingers or another body part on it	Sometimes, he touches his glove or head.
2	notice	v.	to become aware of	When you watch baseball, you may notice something strange.
3	shout	v.	to say something in a loud way	They can't shout to each other.
4	sign	n.	a motion or gesture to show a thought or command	The players use a variety of hand signs.
5	finger	n.	one of the long, thin parts at the end of a hand	Sometimes, a player holds up his fingers.
6	pitcher	n.	the player who pitches in a game of baseball	The pitcher and other players stand far apart.
7	variety	n.	having many different things or many different types of things	The players use a variety of hand signs.
8	communicate	v.	to share information by speaking, writing or moving	But they need to communicate information about the game.
9	different	adj.	not the same; other	Each team uses different signs.
10	player	n.	a person who competes in a game or sport	The pitcher and other players stand far apart.
11	secret	adj.	kept from knowledge or view	They need to keep their plans secret.
12	information	n.	knowledge or details that let you know more about someone or something	But they need to communicate information about the game.
13	glove	n.	clothing worn on the hands	Sometimes, he touches his glove or head.
14	plan	n.	a set of actions a person intends to do	They need to keep their plans secret.

Class

Name

## Unit 7 How Animals Communicate

#	Word	PoS	English Definition	Sample Sentence
1	tail	n.	the movable part of an animal's body which grows from its back	Dolphins smack their tail on the water.
2	unique	adj.	distinctively characteristic	Human language seems unique.
3	danger	n.	the possibility of being hurt or killed	This warns other dolphins of danger.
4	chemical	n.	a substance produced by changing atoms and molecules	Ants use chemicals.
5	wing	n.	a part of an animal's body used for flying	Its body and wings vibrate.
6	path	n.	a route or track between one place and another	An ant leaves a chemical path.
7	dance	n.	to move the body and feet to music:	Bees do a special dance.
8	warn	v.	to tell someone about something bad or dangerous	This warns other dolphins of danger.
9	smack	v.	to hit something hard and noisily	Dolphins smack their tail on the water.
10	flash	n.	a bright light that occurs for a very short time	They produce flashes of light to communicate.
11	distance	n.	spatial remoteness	These sounds travel over long distances.
12	low	adj.	at the bottom of a range of sounds	Elephants use low sounds.
13	produce	v.	to give being, form, or shape to	They produce flashes of light to communicate.
14	vibrate	v.	to move side to side or back and forth very quickly in small movements	Its body and wings vibrate.

Class

Name

## Unit 8 Barcodes and QR Codes

#	Word	PoS	English Definition	Sample Sentence
1	stripe	n.	a line or long narrow rectangular pattern	A barcode looks like black stripes.
2	thick	adj.	wide and solid	Others are thicker.
3	dot	n.	a very small round mark	They use dots instead of bars.
4	scan	v.	to look at something carefully to get information	A machine uses a laser to scan them.
5	theater	n.	a place for showing movies or plays	Theaters put them on your movie tickets.
6	item	n.	an object	Supermarkets and shipping companies handle lots of items.
7	machine	n.	a device or piece of equipment that does work using moving parts and uses electricity or other forms of power	A machine uses a laser to scan them.
8	handle	v.	to deal with or manage a particular situation, condition, or person successfully	Supermarkets and shipping companies handle lots of items.
9	airline	n.	a business that transports people and goods by airplane	Airlines put barcodes on your luggage.
10	shipping	n.	the act of transporting goods	Supermarkets and shipping companies handle lots of items.
11	luggage	n.	a traveler's belongings	Airlines put barcodes on your luggage.
12	company	n.	an organization that sells services or goods	Supermarkets and shipping companies handle lots of items.
13	ticket	n.	a certificate or token that shows someone has paid for an event, journey or activity	Theaters put them on your movie tickets.
14	useful	adj.	being needed; having a purpose	Barcodes are useful for some companies.

Class

Name

## Unit 9 The Theremin

#	Word	PoS	English Definition	Sample Sentence
1	wooden	adj.	made or consisting of wood	It is just a wooden box with two antennas.
2	electronic	adj.	a device that uses electricity and electrical parts .	The theremin is one of the first electronic instruments.
3	instrument	n.	a thing used to make sounds and music	The theremin is one of the first electronic instruments.
4	way	n.	the process that is used to do something	The way that you play the theremin is also strange.
5	antenna	n.	a device for radiating or receiving radio waves	It is just a wooden box with two antennas.
6	touch	v.	to put hands on something	You don't touch it, like a piano or guitar.
7	unusual	adj.	being rare or uncommon; not ordinary	And it is very unusual.
8	wave	v.	to swing (something) back and forth or up and down	You wave your hands in the air near the antennas.
9	sci-fi	adj.	short for science fiction; fiction usually about the future, space travel, or time travel	You often hear it in old sci-fi movies.
10	strange	adj.	unusual; odd	The theremin's strange sound isn't for everyone.
11	current	n.	flow marked by force or strength	Your hands change an electric current.
12	change	v.	to do something differently or cause something to be different	Your hands change an electric current.
13	spooky	adj.	strange and scary	It can even sound spooky.
14	electric	adj.	worked by, charged with, or producing electricity.	Your hands change an electric current.

Class

Name

## Unit 10 Beat Machines

#	Word	PoS	English Definition	Sample Sentence
1	cymbal	n.	a metal plate used to make music	Drum machines have recordings of instruments like drums and cymbals.
2	feeling	n.	emotion	These add feeling to the music.
3	wide	adj.	extending over a big distance	And they play a wider variety of sounds.
4	drummer	n.	one that plays a drum	Drum machines are better than human drummers in some ways.
5	beat	n.	the sound made by a series of regularly paced strikes and hits on an object	To some people, drum machines' beats are too perfect.
6	recording	n.	storing sounds or moving pictures using electronic equipment	Drum machines have recordings of instruments like drums and cymbals.
7	add	v.	to put something in something else	These add feeling to the music.
8	variety	n.	the quality or state of having different forms or types	And they play a wider variety of sounds.
9	tired	adj.	wanting to rest or sleep	They never get tired.
10	small	adj.	being little in size, quantity or number	Human drummers make small changes in the beat.
11	perfect	adj.	without mistakes	To some people, drum machines' beats are too perfect.
12	program	v.	to tell a computer what to do	You program beats with these sounds.
13	mistake	n.	a wrong action or statement	They don't make mistakes.
14	always	adv.	at all times	To some people, human drummers are always better.

Class

Name

## Unit 11 Auto-Tune

#	Word	PoS	English Definition	Sample Sentence
1	tune	v.	to adjust an instrument so it makes the correct sound	In 1997, Auto-Tune changed everything.
2	record	v.	to copy sounds or images onto a machine that can play them back	Engineers recorded a song many times.
3	put together	v.	to produce something using many different things	Then, they took the best parts and put them together.
4	software	n.	a computer program	Then, the software could make it perfect.
5	still	adv.	continuing to be; used to emphasize that something has not changed	The song still sounded natural.
6	engineer	n.	a person who is trained to build or use machines	Engineers recorded a song once.
7	fix	v.	to repair something	But fixing it used to take a long time.
8	creative	adj.	able to think up new and original ideas	Engineers started using Auto-Tune in creative new ways.
9	nearly	adv.	almost but not quite	Nearly every singer wanted to use Auto-Tune.
10	singer	n.	someone who makes music with their voice	Nearly every singer wanted to use Auto-Tune.
11	natural	adj.	closely resembling an original	The song still sounded natural.
12	once	adv.	just one time	Engineers recorded a song once.
13	tone	n.	vocal or musical sound of a specific quality	They moved up and down a few tones very quickly.
14	almost	adv.	nearly but not quite	Now Auto-Tune is used in almost every song.

Reading

Class

Name

## Unit 12 The Changing Shape of Music

#	Word	PoS	English Definition	Sample Sentence
1	disk	n.	a flat, circular device that is used for storing information	Machines played music on tubes or disks.
2	heavy	adj.	being of great weight	But these machines were too heavy to take around.
3	tube	n.	a long cylinder made from plastic, metal, rubber, or glass	Machines played music on tubes or disks.
4	cassette	n.	a plastic cartridge containing magnetic tape with the tape passing from one reel to another	It played music on cassettes.
5	everywhere	adv.	in, at, or to each and every place	With the Sony Walkman, people could take music everywhere.
6	pocket	n.	a small bag that is sewed onto clothes for holding items	And it fit in a pocket.
7	take around	v.	to hold or support something as you move with it	But these machines were too heavy to take around.
8	convenient	adj.	suitable and causing little difficulty	Now, listening to music is convenient.
9	listen	v.	to try to hear someone or something	Long ago, you could only listen to music at concert halls.
10	concert hall	n.	a large building where people go to listen to music	Long ago, you could only listen to music at concert halls.
11	file	n.	a collection of data (such as text or a program)	Your computer and phone can play MP3 files.
12	machine	n.	a device or piece of equipment that does work using moving parts and uses electricity or other forms of power	Machines played music on tubes or disks.
13	stream	v.	to send or receive continuous sound or moving images using computers:	You can also stream music over the internet.
14	fit	v.	to be the correct size for someone or something	And it fit in a pocket.

Class

Name

## Unit 13 The First Scales

#	Word	PoS	English Definition	Sample Sentence
1	spice	n.	part of a plant used to make food taste better	But it was hard to count other goods, like spices.
2	weigh	v.	to measure the heaviness of an object	Merchants weighed these goods.
3	count	v.	to find the total number of people or things in a group	But it was hard to count other goods, like spices.
4	plate	n.	a shallow container that you serve food in	One plate held the goods.
5	trade	n.	the business of buying and selling or bartering goods	Trade started long ago.
6	merchant	n.	a buyer and seller of goods for profit	Merchants weighed these goods.
7	hang	v.	to position something in a raised position so that the top part is fixed and the bottom is unsupported and moves freely	Two plates hung from either side of a bar.
8	value	n.	the amount of money that can be received for something	It was easy to find the value of some goods.
9	equal	adj.	like in quality, nature, or status	Stones were added until the two plates were equal.
10	stone	n.	a piece of rock	Then, the goods weighed the same as the stones.
11	goods	n.	objects produced to be sold	Then, the goods weighed the same as the stones.
12	worth	adj.	having a particular value, especially in money	For example, one cow was worth three goats.
13	side	n.	the part of something that lies to the left or right of its center	Two plates hung from either side of a bar.
14	hold	v.	to contain or be able to contain something	One plate held the goods.

Class

Name

## Unit 14 Weighing a Planet

#	Word	PoS	English Definition	Sample Sentence
1	scientist	n.	an expert who studies or works in science	Scientists have a way to find the weight of a planet.
2	object	n.	a thing or item	And they also need to know how long it takes the object to orbit the planet once.
3	pull	v.	to move something toward you	This tells them about the gravity pulling on the moon.
4	weight	n.	the amount that a thing weighs	Scientists have a way to find the weight of a planet.
5	distance	n.	the space between two points	They need to know the distance between the planet and the moon.
6	moon	n.	the Earth's natural satellite that shines by the sun's reflected light, revolves about the Earth from west to east	They look at a planet's moons.
7	heavy	adj.	being of great weight	A heavy planet pulls harder on its moons.
8	hard	adj.	being firm, stiff, and difficult to bend, break, or cut into	A heavy planet pulls harder on its moons.
9	planet	n.	any of the large bodies that revolve around the sun in the solar system	Scientists have a way to find the weight of a planet.
10	tell	v.	to communicate something	This tells them about the gravity pulling on the moon.
11	gravity	n.	the force that attracts a body towards the centre of the earth, or towards any other physical body having mass	This tells them about the gravity pulling on the moon.
12	quickly	adv.	in a rapid manner	So they will orbit the planet quickly.
13	orbit	v.	the way planets move around the sun and the moon moves around the Earth	And they also need to know how long it takes the object to orbit the planet once.
14	so	conj.	thus, therefore	So they will orbit the planet quickly.

Class

Name

## Unit 15 Catching Rain

#	Word	PoS	English Definition	Sample Sentence
1	flood	n.	a rising and overflowing of water onto normally dry land	Floods can wipe out whole villages.
2	dangerous	adj.	involving danger, harm, or death	But it can also be dangerous.
3	speed	n.	quickness of motion	It measures the size and speed of raindrops.
4	plan	v.	a set of actions a person intends to do	This helps them plan how to best use water.
5	drop	n.	a small round-shaped amount of liquid	Larger drops fall faster.
6	village	n.	a very small community or town in the countryside	Floods can wipe out whole villages.
7	fall	v.	to drop to the ground	Scientists can tell how much rain is falling per hour.
8	times	n.	to show the difference in amount or size of two things	They also contain many times more water.
9	measure	v.	to find the size or amount of something:	It measures the size and speed of raindrops.
10	study	v.	<b>to learn about a subject</b>	Luckily, scientists have good tools to study rain.
11	size	n.	the bigness or smallness of something	It measures the size and speed of raindrops.
12	per	pre p.	for each or every	Scientists can tell how much rain is falling per hour.
13	defend	v.	to protect something or something from danger	And how to defend us from it.
14	wipe out	v.	to destroy completely	Floods can wipe out whole villages.

Class

Name

## Unit 16 Weather Models

#	Word	PoS	English Definition	Sample Sentence
1	storm	n.	very heavy rain usually with thunder and lightning	Big storms are dangerous.
2	predict	v.	to say an action or event will happen in the future based on current information	It's the job of weather scientists to predict the weather.
3	blizzard	n.	a powerful storm with large amounts of snow and strong winds	Blizzards and hurricanes can even kill.
4	information	n.	knowledge obtained from investigation, study, or instruction	Weather scientists collect information about the weather.
5	collect	v.	to bring together; to gather	Weather scientists collect information about the weather.
6	moisture	n.	liquid diffused or condensed in a relatively small quantity	They watch changes in temperature and moisture.
7	perfect	adj.	being completely without faults or mistakes	The system is not perfect.
8	complicated	adj.	involving a lot of different parts; difficult to understand:	They run complicated models of the weather.
9	temperature	n.	a measure of hotness or coldness	They watch changes in temperature and moisture.
10	air	n.	the gases we breathe, the atmosphere	They watch how the air moves.
11	model	n.	usually a miniature representation of something	They run complicated models of the weather.
12	kill	v.	to end the life of a person or other living thing	Blizzards and hurricanes can even kill.
13	forecast	n.	a prediction of something based on current information	This shows the weather forecast.
14	hurricane	n.	a strong storm that begins over an ocean	Blizzards and hurricanes can even kill.