### **Environment and Microbes**

Word	Pronunciation	Meaning
adaptations	add-app- <b>tay</b> -shuns	The features that plants and animals have to help
		them live in a particular place.
community	com- <b>mew</b> -nit-ee	All the plants and animals that live in a habitat.
distribution	diss-trib- <b>you</b> -shun	The places where an organism can be found in a
		habitat.
environment		The conditions around a certain organism caused by
		physical environmental factors.
habitat		The place an organism lives in (e.g. woodland).
microhabitat		Small areas of a habitat with certain conditions (e.g.
		under a log in a woodland habitat).
physical		The non-living conditions in the environment of an
environmental		organism (e.g. temperature, light).
factors		
daily changes		Changes in the physical environmental factors which
		happen during a day (e.g. it gets dark at night).
deciduous tree	dess- <b>idd</b> -you-us	Tree that drops its leaves in winter (e.g. oak tree).
evergreen tree		Tree that keeps its leaves in winter (e.g. pine tree).
hibernation	high-ber- <b>nay</b> -shun	When animals hide during the winter and go to sleep.
migration	my- <b>gray</b> -shun	When animals move to different areas of the world
		depending on the season.
nocturnal animals	nock- <b>tur</b> -nal	Animals that are active at night.
seasonal changes		Changes in the physical environmental factors of an
		environment which happen during the course of a
		year (e.g. it gets colder in winter).

# **Finding food**

Word	Pronunciation	Meaning
carnivore		An animal that only eats other animals.
decomposer		Something that eats dead plants.
herbivore		An animal that only eats plants.
predator		An animal that catches and eats other animals.
prey	pray	An animal that is caught and eaten by another animal.
consumer	con-syou-mer	An organism that has to eat other organisms to stay
		alive. Animals are consumers.
food chain		A way of showing what eats what in a habitat.
food web		Many food chains linked together.
omnivore		An animal that eats both plants and other animals.
producer	prod- <b>you</b> -sur	An organism that is able to make its own food. Plants
		are producers.
top predator		The last animal in a food chain.

## **Describing differences**

Word	Pronunciation	Meaning
abdomen		Rear or bottom end of an animal's main body.
antenna		Something sticking out of an animal's head which is
		used to sense things. The plural is antennae.
classification	clas-if-ik- <b>ay</b> -shun	Sorting things into groups.
head		Front or top end of an animal's body.
segment		Some animals have bodies that are divided into
		obvious sections called segments.
thorax		Middle part of an animal's main body. In insects the
		legs are attached to the thorax.

### **Classified information**

Word	Pronunciation	Meaning
amphibian	am- <b>fib</b> -ee-an	Vertebrate with moist skin, e.g. a frog.
bird		Vertebrate with feathers, e.g. an eagle.
fish		Vertebrate with wet scales, fins and gills, e.g. a
		salmon.
invertebrate	in- <b>vert</b> -eb-rate	Animal with no backbone.
kingdom		Largest groups that living things are sorted into. The
		two biggest are the plant and animal kingdoms.
mammal		Vertebrate with hair, which also produces milk, e.g. a
		human.
reptile		Vertebrate with dry scales, e.g. a snake.
vertebrate	vert-eb-rate	An animal with a backbone.

## No backbone!/The arthropods

Word	Pronunciation	Meaning
arachnid	ar <b>-ack</b> -nid	Type of arthropod with four pairs of legs, e.g. a
		spider.
arthropod	arth-row-pod	Invertebrate with jointed legs, e.g. a fly or spider.
centipede	sent-ip-eed	Type of arthropod with long thin body divided into
		sections. One pair of legs on each body section.
crustacean	crust- <b>ay</b> -shun	Type of arthropod with a chalky shell and 5–7 pairs
		of legs, e.g. a lobster.
echinoderm	ek- <b>eye</b> -no-derm	Invertebrate with a body in five parts, e.g. a starfish.
exoskeleton	ex-O-skel-e-ton	Thick outer covering found on arthropods.
insect		Type of arthropod with three pairs of legs, e.g. a fly.
millipede	mill-ip-eed	Arthropod with long, thin body divided into sections.
		Two pairs of legs on each body section.
mollusc	moll-usk	Invertebrate that crawls on a fleshy pad, e.g. a snail.

# Problems with pests/Toxic chains

Word	Pronunciation	Meaning
insecticide		A chemical that kills insects.
persistent		If something does not get broken down easily in nature very quickly and stays around for a long time, it is said to be persistent.
pesticide	pest-iss-ide	Chemical that kills pests.
pest		An organism that damages crops that humans grow.
specific pesticide		A pesticide that is harmful to only a few pests.
Bioaccumulation		The build- up of a chemical in an organism's tissues.
Biomagnification		The increase in concentration of persistent chemicals as you go up the food chain.
toxic		Another word for poisonous.

### Microbes

#### A hidden world

Word	Pronunciation	Meaning
bacterium		A type of microbe bigger than viruses. (plural = bacteria)
fungus		Organisms which are different from animals, plants and bacteria. Examples include mushrooms and yeasts. (plural = fungi)
microbe		Short for micro-organism.
micro-organism		A very small living thing.
organism		A living thing.
virus		The smallest type of microbe. Many people think that they are not living because they do not carry out the seven life processes for themselves.
yeast		A type of fungus with only one cell and therefore a microbe. They are bigger than bacteria.

#### **Microbes in action**

Word	Pronunciation	Meaning
aerobic respiration	air- <b>rO</b> -bick	A type of respiration that needs oxygen. Releases energy from a sugar (glucose) and produces carbon dioxide as a waste gas.
anaerobic respiration	<b>an</b> -air-rO-bick	A type of respiration that does not need oxygen.
budding		The way yeast cells divide. A new small cell (a bud) starts to grow out from another cell.
ethanol		Often just called 'alcohol'. Produced by yeast when they ferment sugar.
fermentation		The type of anaerobic respiration carried out by yeast. It produces carbon dioxide and ethanol.
limiting factor		Something that stops a population growing.
population		The numbers of a certain organism found in a certain area.

## Under attack/Cholera: The evidence

Word	Pronunciation	Meaning
disease		When some processes that happen in the body do not work in the way they should.
evidence		Information that helps to prove that an idea is correct.
fever		A high body temperature.
infect		When a microbe gets into your body you are 'infected' by it.
infectious	in <b>-feck</b> -shus	A disease that can be spread from person to person or from animal to person is infectious.
observation		Looking carefully at things and recording what you see or measure.
prediction	pred- <b>ick</b> -shun	An idea about what will happen when you change something.
symptoms		The effects that a disease has on your body.
theory	theer-ree	A scientific idea that can be tested.

### Self defence

Word	Pronunciation	Meaning
antibody		Small chemicals made by some white blood cells. They attach to microbes and help to destroy them.
antiseptic		Weak disinfectant safe to use on human skin.
ciliated epithelial	sil-lee-ay-ted	Cells in the trachea which have microscopic hairs (cilia) growing from them which
cell	eppy- <b>theel</b> -ee-al	wave to move mucus up to the gullet to be swallowed.
clot		When blood becomes solid. Makes a 'scab' when it is on the surface of the skin.
disinfectant		Strong chemical used to kill microbes.
engulf		When a white blood cell completely surrounds a microbe and destroys it, it is said to engulf the microbe.
mucus	mew-cus	Sticky substance used to trap microbes and dust. Found in nose and trachea.
natural defences		Your body's way of trying to keep microbes out (e.g. skin) or killing them if they get inside you (eg stomach acid).
pasteurisation	pas-ter-eyes- <b>ay</b> - shun	Milk is heated up to 70°C for about 15 seconds which is enough to kill the most harmful bacteria in it.
scab		A dry blood clot on the surface of the skin.
trachea		Another name for the windpipe.
white blood cell		A type of blood cell which helps to destroy microbes. They either engulf microbes or make antibodies.

#### **Beating infections/Medicine men**

Word	Pronunciation	Meaning
antibiotic	ant-ee-by- <b>ot</b> -tick	Medicine that can kill bacteria but not viruses.
immune	imm- <b>you'n</b>	If you cannot get a disease you are said to be 'immune' to it.
immunisation	imm-you'n-eyes- <b>ay</b> - shun	Making people immune to diseases.
infect		When a microbe gets into your body you are 'infected' by it.
medicine		A drug that helps the body to ease the symptoms of a disease or cure the disease.
resistant		Bacteria that are not affected by an antibiotic are said to be resistant to it.
vaccine	vack-seen	A mixture containing microbes which normally cause disease, which have been treated so that they don't. Injected into people to make them immune.