1	2											3	4	5	6	7	0
				Key			1 H hydrogen 1										4 He helium 2
7 Li	9 Be		relative atomic mass atomic symbol									11 B	12 C	14 N	16 O	19 F	20 Ne
lithium 3	beryllium 4	atomic (proton) number			r						boron 5	carbon 6	nitrogen 7	oxygen 8	fluorine 9	neon 10	
23 Na	24 Mg					_						27 Al	28 Si	31 P	32 S	35.5 Cl	40 Ar
sodium 11	magnesium 12											aluminium 13	silicon 14	phosphorus 15	^{sulfur} 16	chlorine 17	argon 18
39 K	40 Ca	45 Sc	48 Ti	51 V	52 Cr	55 Mn	56 Fe	59 Co	59 Ni	63.5 Cu	65 Zn	70 Ga	73 Ge	75 As	79 Se	80 Br	84 Kr
potassium 19	calcium 20	scandium 21	titanium 22	vanadium 23	chromium 24	manganese 25	iron 26	cobalt 27	nickel 28	copper 29	zinc 30	gallium 31	germanium 32	arsenic 33	selenium 34	bromine 35	krypton 36
85 Rb	88 Sr	89 Y	91 Zr	93 Nb	96 Mo	[98] Tc	101 Ru	103 Rh	106 Pd	108 Ag	112 Cd	115 In	119 Sn	122 Sb	128 Te	127 I	131 Xe
rubidium 37	strontium 38	yttrium 39	zirconium 40	niobium 41	molybdenum 42	technetium 43	ruthenium 44	rhodium 45	palladium 46	silver 47	cadmium 48	indium 49	tin 50	antimony 51	tellurium 52	iodine 53	xenon 54
133 Cs	137 Ba	139 La *	178 Hf	181 Ta	184 W	186 Re	190 Os	192 Ir	195 Pt	197 Au	201 Hg	204 TI	207 Pb	209 Bi	[209] Po	[210] At	[222] Rn
caesium 55	barium 56	lanthanum 57	^{hafnium} 72	tantalum 73	tungsten 74	rhenium 75	osmium 76	iridium 77	platinum 78	^{gold} 79	mercury 80	thallium 81	lead 82	bismuth 83	polonium 84	astatine 85	radon 86
[223] Fr	[226] Ra	[227] Ac *	[261] Rf	[262] Db	[266] Sg	[264] Bh	[277] Hs	[268] Mt	[271] Ds	[272] Rg	Eleme	Elements with atomic numbers 112 – 116 have been					
francium 87	radium 88	actinium 89	rutherfordium 104	^{dubnium}	seaborgium 106	^{bohrium} 107	hassium 108	meitnerium 109	darmstadtium 110	roentgenium 111		reported but not fully authenticated					

* The Lanthanides (atomic numbers 58 - 71) and the Actinides (atomic numbers 90 - 103) have been omitted.

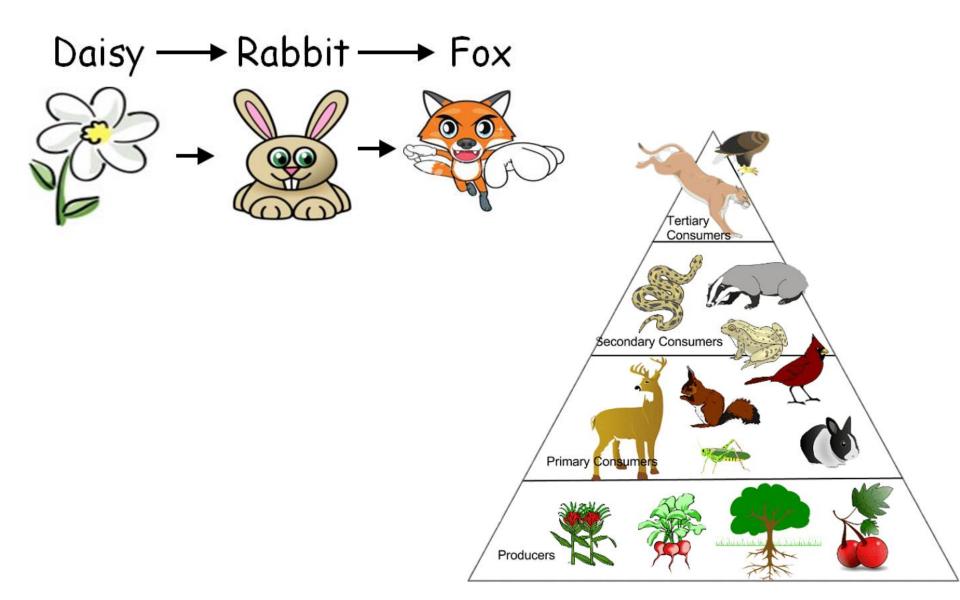
Relative atomic masses for Cu and Cl have not been rounded to the nearest whole number.

Ecology

- 7 life processes: (MRS GREN). <u>Movement</u>, <u>Respiration</u>, <u>Sensitivity</u>, <u>Growth</u>, <u>Reproduction</u>, <u>Excretion</u>, <u>Nutrition</u>.
- Habitat: Is where an organism lives, it contains everything the organism needs to survive.
- **Ecology:** the relations of organisms to one another and to their physical surroundings.
- Environment: everything within the surroundings of a specific area.
- Sample: A small part or quantity intended to show what the whole is like.
- Population: the number of organisms of the same species within a certain area
- Abundance: A measure of how common or rare something is.
- **Distribution:** Where particular types of organisms are found within an environment.
- Quadrat: A square frame randomly placed, to estimate number of plants and animals in a given area.

Food Chain.

 $* \rightarrow$ Shows the movement of energy.



Y8: Adaptation KO

Keyword	Definition						
Habitat	The area in which an organism lives						
Ecosystem	The interaction between plants , animals, and their habitats in a particular location						
Community	The collection of different types of organisms present in an ecosystem						
Adaptation	Characteristics that help an organism to survive in its environment						
Structural adaptation	Physical feature that the animal has to help it survive						
Behavioural adaptation	Something the animal does to aid survival e.g. migration , hibernation						
Extremophile	An organism that can survive and reproduce in extreme conditions						

Habitats are places where organisms live. Examples of habitats include: Desert, meadow, woodland, grassland forest, seashore, ocean.



Living things are adapted to their habitats. Animals and plants have special **adaptations or** characteristics that help them survive in the habitats.



An African elephant, for example, lives in a hot habitat and has very large ears that it flaps to keep cool.



An Arctic fox lives in a cold habitat, it has thick fur to keep it warm.

Large ears and thick fur are examples of structural adaptations.

Y8 Health

NUTRIENT

Essential substance that your body needs to survive, provided by food.

CARBOHYDRATE

Nutrient that **provides energy**.

LIPIDS

Nutrients that provide a store of **energy** and **insulate** the body.

PROTEIN

Nutrient used for growth and repair.

VITAMIN

Essential nutrients needed in small amounts to keep you healthy.

MINERAL

Essential nutrient needed in small amounts to **keep you** healthy.

BALANCED DIET

Eating food containing the **right nutrients in the correct amounts**.

DEFICIENCY

A lack of vitamins or minerals, that causes poor growth MALNOURISH-MENT

Eating the **wrong amount** or the **wrong types of food**. **STARVATION**

Extreme case of **not eating enough food**.

OBESE

Extremely overweight.

FITNESS The ability to be active. HEALTH physical, mental and social wellbeing. DISEASE

illness or sickness characterised by specific symptoms.

PATHOGEN

Microorganisms which **causes disease**, e.g. bacteria, fungi, viruses and protists.

COMMUNICABLE Disease

caused by pathogens. These can be passed from one person to another, e.g. chickenpox.

NON-COMMUNICABLE DISEASE

not transferred between people, e.g. cancer.

CARDIOVASCULAR DISEASE

effect the heart.

CANCER

Cells reproduce uncontrollably **producing a growth**, (tumour). **STROKE**

a **blood vessel around the brain is blocked** affecting how the brain works

PANDEMIC

affects a large number of **people on different continents** around the world, e.g. corvid19

EPIDEMIC

affects a large number of people within a country of continent, e.g. ebola.