

1

2

3

4

5

6

7

0

1
H
hydrogen
1

Key

relative atomic mass
atomic symbol
name
atomic (proton) number

7 Li lithium 3	9 Be beryllium 4											11 B boron 5	12 C carbon 6	14 N nitrogen 7	16 O oxygen 8	19 F fluorine 9	20 Ne neon 10
23 Na sodium 11	24 Mg magnesium 12											27 Al aluminium 13	28 Si silicon 14	31 P phosphorus 15	32 S sulfur 16	35.5 Cl chlorine 17	40 Ar argon 18
39 K potassium 19	40 Ca calcium 20	45 Sc scandium 21	48 Ti titanium 22	51 V vanadium 23	52 Cr chromium 24	55 Mn manganese 25	56 Fe iron 26	59 Co cobalt 27	59 Ni nickel 28	63.5 Cu copper 29	65 Zn zinc 30	70 Ga gallium 31	73 Ge germanium 32	75 As arsenic 33	79 Se selenium 34	80 Br bromine 35	84 Kr krypton 36
85 Rb rubidium 37	88 Sr strontium 38	89 Y yttrium 39	91 Zr zirconium 40	93 Nb niobium 41	96 Mo molybdenum 42	[98] Tc technetium 43	101 Ru ruthenium 44	103 Rh rhodium 45	106 Pd palladium 46	108 Ag silver 47	112 Cd cadmium 48	115 In indium 49	119 Sn tin 50	122 Sb antimony 51	128 Te tellurium 52	127 I iodine 53	131 Xe xenon 54
133 Cs caesium 55	137 Ba barium 56	139 La* lanthanum 57	178 Hf hafnium 72	181 Ta tantalum 73	184 W tungsten 74	186 Re rhenium 75	190 Os osmium 76	192 Ir iridium 77	195 Pt platinum 78	197 Au gold 79	201 Hg mercury 80	204 Tl thallium 81	207 Pb lead 82	209 Bi bismuth 83	[209] Po polonium 84	[210] At astatine 85	[222] Rn radon 86
[223] Fr francium 87	[226] Ra radium 88	[227] Ac* actinium 89	[261] Rf rutherfordium 104	[262] Db dubnium 105	[266] Sg seaborgium 106	[264] Bh bohrium 107	[277] Hs hassium 108	[268] Mt meitnerium 109	[271] Ds darmstadtium 110	[272] Rg roentgenium 111	Elements with atomic numbers 112 – 116 have been 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.

Teeth.

Crown: Part of the tooth visible above the gum-line.

Enamel: Strong white outer layer of the tooth.

Dentin: Cream coloured layer beneath the enamel.

Neck: a narrow point in the tooth where crown meets gum.

Pulp: is the 'living' part of the tooth, it is made up of blood vessels, nerves and tissue.

Root: found below the gum-line and hold the tooth in place.

Cementum: cements the tooth in the jaw.

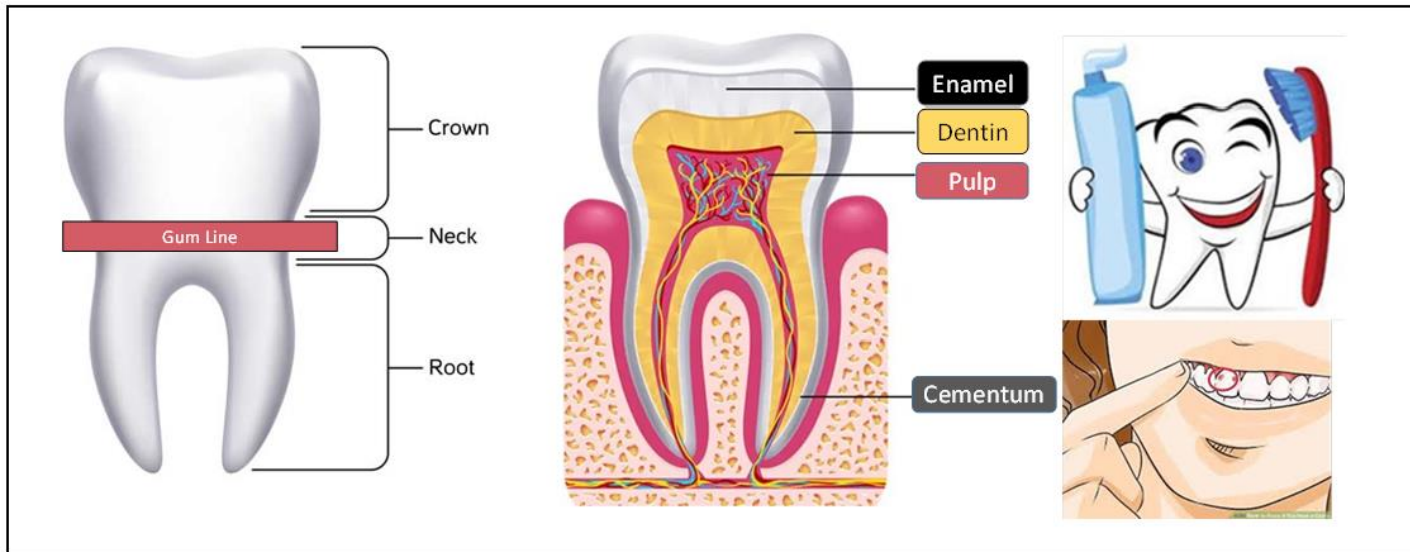
Tooth decay: the softening of your tooth enamel caused by acids that are created when plaque bacteria break down sugar in your mouth.

Cavities: are holes caused by tooth decay.

Incisors: nipping off tough plant or meat.

Canines: piecing and locking on to prey.

Pre-molars and Molars: grinding harder materials. Linking the types of teeth an animal has to the diet that they eat.



Skeleton

Skull: Several plates of bone in the head.

Spine: A number of small vertebrae that make up the backbone.

Ribcage: Ribs form a cage that protects the vital organs in the chest.

Humerus: Long bone in the upper arm.

Ulna and Radius: Two bones in the forearm.

Pelvis: Hip bone, where the legs attach.

Femur: Long bone in the upper leg.

Patella: small floating bone known as the knee cap.

Tibia and Fibula: Two bones in the lower leg.

Scapula: The collar bone.

Tendons: Fibres that connect muscle to bone

Ligaments: Fibres that connects bone to bone.

Cartilage: Reduce wear between rubbing bone.

Synovial Fluid: Reduces friction between bones.

Ligaments: Connects bone to bone.

Cartilage: Reduce wear between rubbing bone.

Synovial Fluid: Reduces friction between bones.

Joints: Where two bones meet. There are several types of joints including; 'pivot', 'ball and socket', 'hinge', and 'fixed' joints.

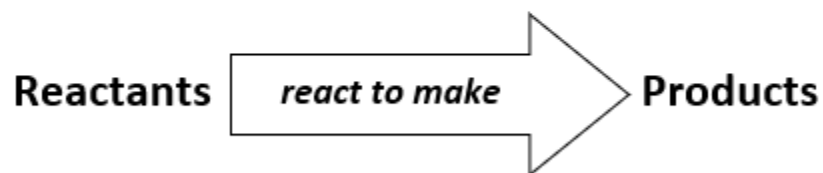
Antagonistic pairs of muscles: Two muscles working together by alternating which is contracted and which is relaxed in order to allow a 'move and return' action.

Chemical reaction – a change in which atoms are rearranged to create new substances. e.g. iron rusting, burning wood, cooking an egg, baking a cake, rotting banana, battery, fireworks

Reactant - a starting substance in a chemical reaction.

Product – a substance that is made in a chemical reaction.

Word equation – a simple way of representing chemical reaction. The reactants are on the left of an arrow, and the products are on the right. The arrow means reacts to make.



Forces

Key Vocabulary:

Acceleration: The rate at which an object's velocity changes

Air resistance: The force of air acting on a moving object

Balanced forces: Two forces of equal size acting in opposite directions

Contact force: A force that must touch an object to affect it

Friction: The force caused by one surface touching another surface

Gravity: A force that attracts an object towards the centre of another object

Magnetism: The force between two magnets or between a magnet and a magnetic material

Motion: Movement

Newton: The unit for force

Non-contact force: A force that can affect an object without touching it

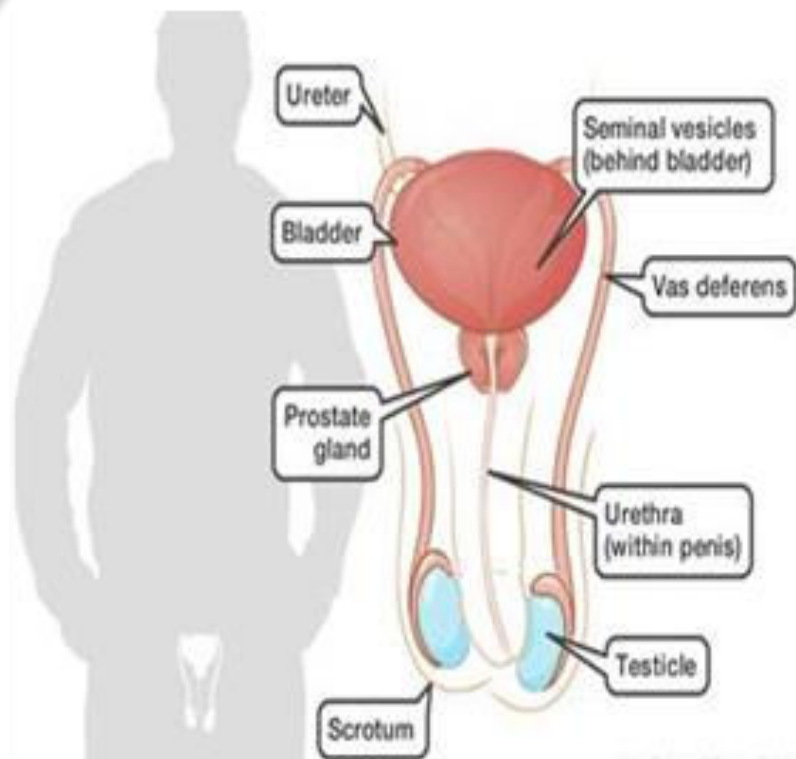
Tension: The force acting on an object that has been stretched

Thrust: A 'pushing' force

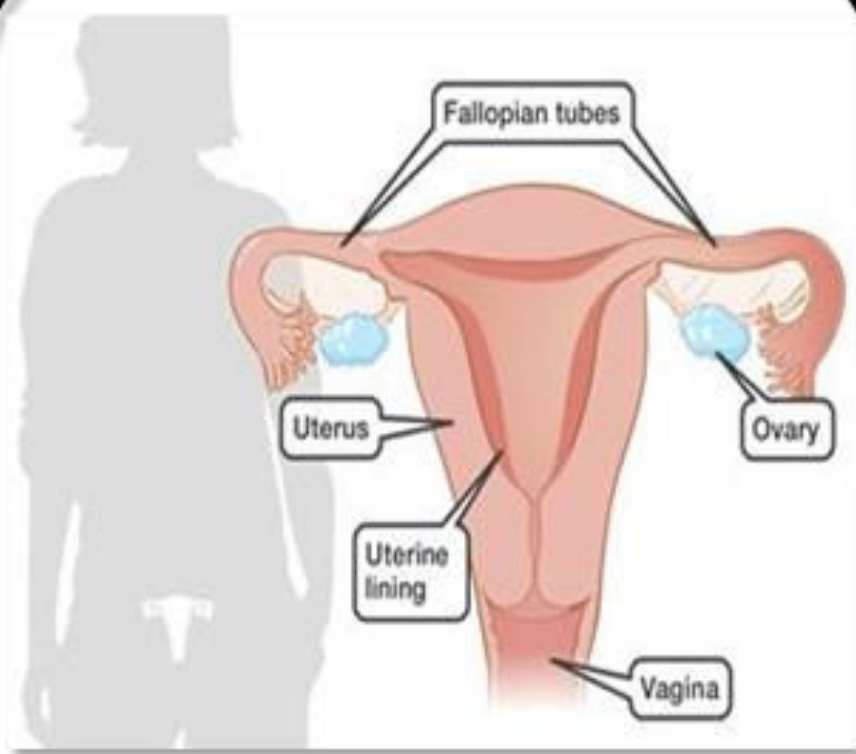
Up-thrust: The force that acts upwards on an object, often from air-resistance or water

Velocity: The scientific word for 'speed'

Weight: The force that results from an object's mass and the effect of gravity



The **SCROTUM** holds the **TESTICLES** which contain the **TESTES** where sperm are made. The **SPERM TUBE** (vas deferens) carries sperm towards the **PENIS**. Seminal vesicles (**GLANDS**), add a liquid called semen to the sperm. The ureter carries urine from the bladder towards the penis. The urethra carries sperm and urine through the penis to the outside.



The **VAGINA** is the opening of the female reproductive system. At the top of the vagina is a ring of muscle called the **CERVIX**. This opens into the **UTERUS**, which is where a foetus can develop. The uterus connects to the **OVIDUCT** (sometimes called the fallopian tube). Once a month an egg is released into the oviduct from an **OVARY**.