

BIOLOGY	
B 6.1	MICRO-ORGANISMS
B 6.1.1	Recall the term micro-organisms and that these can be bacteria, viruses or microscopic fungi, e.g. yeasts.
B 6.1.2	Describe ways in which some micro-organisms can be useful and others can be harmful.
B 6.1.3	Explain that micro-organisms grow and reproduce on food and explain some simple food hygiene precautions.
B 6.1.4	Understand the role of decomposers in food chains and the recycling of materials.
B 6.2	PLANT LIFE CYCLES
B 6.2.1	Understand that some plants have flowers which produce seeds, and that these seeds grow into new plants.
B 6.2.2	Sequence the life cycle of a typical flowering plant using the terms <i>germination</i> , <i>flowering</i> , <i>pollination</i> , <i>fertilisation</i> and <i>seed dispersal</i> .
B 6.2.3	Investigate conditions required for the germination of seeds.
B 6.2.4	Explain why seeds need to be dispersed and the ways in which this can occur.
B 6.2.5	Define pollination as the transfer of pollen from the anther to the stigma on the same or a different flower.
B 6.2.6	Distinguish between the processes of insect pollination and wind pollination.
B 6.2.7	Identify parts of an insect pollinated flower and explain the function of each part.
B 6.2.8	Distinguish between pollination and fertilisation.
B 6.2.9	Describe different mechanisms by which seeds are dispersed.
B 6.3	HEART, LUNGS AND CIRCULATION
B 6.3.1	Describe the heart as an organ that pumps blood as part of the circulatory system.
B 6.3.2	Understand that water and nutrients are transported around our bodies in blood.
B 6.3.3	Describe the circulatory system as comprising the heart and blood vessels containing blood.
B 6.3.4	Investigate how pulse rate changes with exercise and explain the reason for the change in terms of transporting oxygen and nutrients to muscles.
B 6.3.5	Describe the lungs as being located in the thorax and as the organs used for breathing.
B 6.3.6	Understand that air is a mixture of gases, including oxygen.
B 6.3.7	Understand that blood picks up oxygen from the lungs and transports it through blood vessels to organs of the body.

B 6.3.8	Distinguish between and correctly use the terms <i>breathing</i> (ventilation of the lungs) and <i>respiration</i> (how oxygen is used by the body once it reaches organs).
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CHEMISTRY

C 6.1	REVERSIBLE AND IRREVERSIBLE CHANGE
C 6.1.1	Explain, with examples, that mixtures can be separated using a sieve or a filter.
C 6.1.2	Understand the terms <i>dissolving</i> , <i>solution</i> , <i>solvent</i> and <i>solute</i> .
C 6.1.3	Explain how a solute can be recovered from a solution by evaporating the solvent.
C 6.1.4	Understand that <i>melting</i> , <i>freezing</i> , <i>evaporating</i> and <i>condensing</i> are changes of state.
C 6.1.5	Explain that changes of state require changes of temperature.
C 6.1.6	Describe the role of evaporation and condensation in the water cycle.
C 6.1.7	Understand that dissolving, mixing and changes of state are reversible changes.
C 6.1.8	Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible.
C 6.1.9	Describe simple irreversible changes, e.g. iron nails rusting, wax burning, wood burning, bread cooking.
C 6.1.10	Describe the observable changes when acid and bicarbonate of soda are mixed as evidence that new materials are formed.

PHYSICS

PH 6.1	EARTH AND SPACE
PH 6.1.1	Understand that the Sun is a star and that it is at the centre of our Solar System.
PH 6.1.2	Understand that Earth, the Sun and the Moon are part of the Solar System and that Earth is a planet with one moon.
PH 6.1.3	Understand that some planets have more than one moon.
PH 6.1.4	Describe the movement of Earth and other planets, relative to the Sun in our Solar System.
PH 6.1.5	Describe the movement of the Moon relative to Earth, and Earth and other planets relative to the Sun, correctly using the term <i>orbit</i> .
PH 6.1.6	Understand that ideas about the Solar System have changed and developed over time.

PH 6.1.7	Explain that Earth spins on its axis causing some parts of Earth to be in daylight when other parts are in darkness.
PH 6.1.8	Investigate how shadow length changes during the course of a day.
PH 6.1.9	Use the idea of Earth's rotation to explain the apparent movement of the Sun across the sky.
PH 6.2	FORCES IN AIR AND WATER
PH 6.2.1	Explain that unsupported objects fall towards Earth because the force of gravity acts between Earth and the falling object.
PH 6.2.2	Understand that weight is a force that is measured in newtons.
PH 6.2.3	Understand that more than one force can act on an object at the same time.
PH 6.2.4	Recall how friction acts on moving objects to slow them down.
PH 6.2.5	Understand how friction can be used to improve how well an object grips a surface.
PH 6.2.6	Understand that friction can act between solid surfaces and air or water.
PH 6.2.7	Understand that air resistance and water resistance are forces that reduce the speed at which an object moves.
PH 6.2.8	Identify the effects of air resistance, water resistance and friction, which act between moving surfaces.
PH 6.2.9	Describe how the shapes of objects can be used to reduce the effects of water resistance, including the term <i>streamlined</i> .