Age Related Expectations in Science

Age-related expectations identify what is expected of our learners by a specified age, stage or year group. Our curriculum defines these as a set standard of expectations which are defined either as exemplars, descriptors or questions.

Year 7

Biology Age Related Expectations and Sub grains

Big Idea	Topic	Age Related Expectations	Subgrains
The Cell	Cells	There are two types of cell: prokaryotic and eukaryotic	1. All living things are made of cells 2. Prokaryotic cells are cells without a nucleus 3. Prokaryotic cells are the simplest and oldest cells 4. Bacteria are prokaryotes 5. Eukaryotic cells have a nucleus 6. Eukaryotic cells are more complex cells 7. Animals and plants are eukaryotes
		Cells are made of subcellular structures which all have their own functions	1. Cells are made of organelles 2. Animal cells contain cell membrane, cytoplasm, nucleus, ribosomes, mitochondria 3. Plant cells contain cell membrane, cell wall, cytoplasm, nucleus, ribosomes, mitochondria, permanent vacuole, chloroplasts 4. Cell membrane is the outer layer of the cell 5. The cell membrane is partially permeable and controls which substances can enter and exit the cell 6. The cytoplasm is the liquid gel within the cell that holds the organelles and where chemical reactions happen in the cell.

			7. The nucleus controls all the activities of the cell 8. The nucleus also holds DNA 9. Ribosomes are responsible for building new proteins 10.Respiration takes place within the mitochondria 11.A permanent vacuole is a structure in the cytoplasm filled with cell sap 12.Photosynthesis takes place within chloroplasts 13.Chloroplasts contain chlorophyll
		Many biological structures are too small to be seen with the human eye so scientists use microscopes	1. Cells are microscopic 2. Cells are measured using micrometres 3. 1mm is equivalent to 1000µm 4. Image size is calculated by actual size x magnification 5. Microscopes are used to view microscopic structures 6. Resolution refers to the clarity of an image 7. Magnification refers to the degree to which an image has been enlarged 8. Light microscopes can be used in a school environment 9. Electron microscopes can only be used in a hospital or research environment 10.Compared to a light microscope, the images from an electron microscope have a higher resolution and greater magnification, but the images are black and white, and the specimen must be dead 11.A light microscope will have an objective lens, eyepiece lens, stage, clips, light source, course focusing dial and fine focusing dial 12.To prepare a slide of a cheek cell, wipe a cotton bud on the inside of the cheek. Wipe this carefully across a slide. Add a drop of stain, then lower a cover slip over the specimen, ensuring there are no air bubbles 13.To prepare a slide of an onion cell, peel a single layer of onion and gently lay it on a slide, ensuring it is flat. Add a drop of iodine. Lower the cover slip over the specimen, ensuring there are no air bubbles 14.To focus an image, ensure the lowest power objective lens is in place (usually x4). Place a slide on the stage then raise the stage to its highest point while watching from the side. Look through the eyepiece lens and lower the stage gradually using the course focusing dial. When the image is in focus, adjust it slightly using the fine focusing dial. Increase the magnification to x10 and refocus if necessary. Repeat with x40.
		Different cells	1. Cells have specific jobs within an organism

		have different jobs and they are adapted to carry out these jobs	2. Each cell has adaptations that help the cell to carry out its function. 3. Sperm cells carry the genetic information from the male parent to the egg 4. Sperm cells have a tail so it can swim, lots of mitochondria that transfer energy to the tail, chemicals in the head section to break down the outer layers of the egg and a large nucleus that contains the genetic information to be passed on 5. Egg cells contain the genetic information from the female parent and a nutrient store for the developing embryo 6. Nerve cells are responsible for carrying electrical signals around the body 7. Nerve cells have lots of dendrites to make connections with other nerve cells, are very long and are insulated to stop the signal from being lost. 8. Red blood cells are responsible for carrying oxygen around the body 9. Red blood cells don't have a nucleus so there is more space for haemoglobin (the chemical that carries oxygen). They also have a large surface area due to a biconcave shape that allows rapid diffusion of oxygen into and out of the cell. 10.White blood cells help destroy pathogens (microorganisms that cause illness) 11.White blood cells can change shape so they can leave the blood vessels and get to the site of infection, and so they can engulf pathogens 12.Muscle cells contain proteins that get shorter when provided with energy, allowing the muscle to contract 13.Ciliated epithelial cells line some surfaces within the body, e.g. fallopian tubes, trachea 14.Ciliated epithelial cells have microscopic hair-like structures (cilia) on the outer membrane which can move mucus, pathogens or other cells 15.Root hair cells are found on the roots of plants and are responsible for taking in water and mineral ions from the soil 16.Root hair cells have a large surface area which increases the rate of diffusion and they have many mitochondria for energy transfer for active transport 17.Palisade cells carry out photosynthesis and are found in the upper section of a leaf 18.Palisade cells are very long to allow for more sunlight to be absorbed, and they have a lot of chloroplasts for photosynthesis 19.Xylem cells transport water and mineral ions from roots to the rest of a plant 20.Xylem cells are dead hollow tubes that act like drinking straws, they are very strong which allows them to withstand the pressure of the water and provide the plant with support

			21.Phloem cells transport sugars from the leaves to the rest of the plant 22.Phloem cells are also hollow tubes but have sieve plates to allow for the movement of sugars dissolved in water
Organisation	Organisation 1 Movement and Digestion	Cells work together to form tissues, organs and systems	1. Similar cells that work together form tissue 2. Different tissue that work together form organs 3. Organs work together to form organ systems 4. Organisms are made of organ systems 5. For example, the heart is an organ that is made of muscle tissue, connective tissue, blood vessels and nerves 6. For example, the transport system in a plant is made of xylem and phloem cells which form vascular tissue which form part of the roots or shoots
		Movement in the body is controlled by nerves, moved by muscles and supported by bones	1. The skeletal system is made of bones and joints 2. The skeleton allows for movement and provides support and protection and production of blood cells 3. Joints can consist of connective tissues (ligaments, cartilage and tendons) as well as bone and synovial fluid 4. Ligaments hold the joint together to give it stability 5. Cartilage is found at the end of bones and where joints meet 6. Tendons attach muscles to the skeleton 7. Synovial fluid provides lubrication within the joint 8. Joints can be ball and socket (hip), pivot (neck), hinge (elbow), fixed (skull) 9. The parts of a joint can be seen by dissecting a chicken wing 10.When carrying out a dissection, a risk assessment must be completed, showing the potential hazard, risk and control 11.The muscular system is made of muscles and allows for movement 12.Muscles work in antagonistic pairs 13.Nerves carry electrical signals to and from the central nervous system 14.Nerves are stimulated by changes in the environment 15.A stimulus is a change in the internal or external environment that can be detected and responded to 16.The central nervous system consists of the brain and spinal cord 17.The brain is made up of nervous tissue 18.Some responses are automatic and others are conscious

		The digestive system breaks down and absorbs nutrients	1.The digestive system breaks large insoluble food into small soluble molecules that can be absorbed into the bloodstream 2. These molecules can then be used by the body for growth, repair and energy transfer 3. Enzymes are biological catalysts that speed up the digestion of large molecules 4. The mouth is a site of chemical and mechanical digestion, with acid and enzymes in the saliva, while the teeth and tongue physically breaking down food 5. The bolus then passes down the oesophagus to the stomach. 6. The stomach carries out chemical digestion due to the addition of stomach acid (hydrochloric acid)and enzymes. 7. The stomach is made of muscle tissue which contracts to break up the bolus (physical digestion) 8. The partially digested food then enters the small intestines where more enzymes are added, and small soluble molecules are absorbed into the bloodstream. 9. The liver secretes bile into the small intestine to emulsify (break up) fats and neutralise the stomach acid. 10.The small intestines are covered in villi to speed up the absorption of molecules 11.Villi have a large surface area, rich blood supply and are only one cell thick 12.The large intestines absorb water into the bloodstream 13.Faeces are stored in the rectum and leave the body
	Organisation 2 Reproduction	The reproductive system enables fertilisation and the development of a foetus	1. The aim of all organisms is to reproduce and have offspring 2. The male human sex cell is the sperm 3. The female human sex cell is the egg 4. Primary sexual characteristics in a male are the penis and testes 5. Primary sexual characteristics in a female are ovaries, vagina and fallopian tubes 6. Puberty is the change that occurs between the ages of ten and sixteen 7. During puberty reproductive hormones cause secondary sexual characteristics to develop, preparing an individual so they are ready to have offspring 8. Secondary sexual characteristics in males include growth of pubic hair, voice breaks, testes and penis gets bigger, shoulders widen, facial and body hair grows, testes start to make sex hormones and the body gets more muscular 9. Secondary sexual characteristics in females include breasts developing, pubic hair growing, ovaries start to release egg cell, periods start, hips widen, ovaries produce female sex hormones

			10.After puberty, females release one egg a month from an ovary. The egg then moves down the fallopian tube 11.Periods are the loss of the lining of the uterus and occur over two to seven days approximately once every 28 days if an egg has not been fertilised 12.Periods are part of the menstrual cycle which is controlled by hormones and prepares the female body for developing an embryo if fertilisation has occurred 13.During fertilisation, a single sperm cell will join with an egg cell within the fallopian tube 14.Fertilisation usually occurs after sexual intercourse but can be controlled artificially if a couple struggle to conceive 15.Fertilisation resulting from intercourse can be prevented by contraceptives: barrier methods (e.g. condoms) or with hormones (e.g. the pill) 16.A human foetus takes 38 weeks to grow from one fertilised cell to a baby 17.Cell division occurs rapidly as the single cell becomes an embryo and then a foetus 18.A placenta forms between the lining of the uterus and the foetus, which allows nutrients and other molecules to pass from the mother's blood to the baby's blood, and for waste products to pass back to the mother's blood. 19.Harmful substances such as drugs and alcohol can pass across the placenta. 20.The baby is surrounded by amniotic fluid which protects it 21.The wall of the uterus is made of muscle which contracts when the mother is in labour
Interdependence	Interdependence Food Chains and Food Webs	Feeding relationships within an ecosystem can be shown as a food web	1. A habitat is an area in which organisms live 2. An ecosystem is the interaction of a community of living organisms with the non-living parts of their environment 3. A predator is an organism that hunts and kills its food 4. Prey is an organism that is eaten by another organism 5. A scavenger eats food that has been killed by a different organism 6. A carnivore only eats meat 7. An herbivore only eats plants 8. An omnivore eats meat and plants 9. A producer is an organism that produces its own food, e.g. a plant 10.A consumer is an organism that eats food to gain energy and biomass, e.g. an animal 11.Organisms within an ecosystem rely on each other for food, shelter, seed dispersal etc. 12.Plants within a habitat often compete for light and space, and for water and mineral ions from the soil

			13.Animals compete with each other for food, mates and territory 14.A food chain shows the transfer of energy between organisms (e.g. lettuce butterfly bird) 15.A food web is used to show all feeding relationships within an ecosystem and consists of multiple food chains 16.Arrows represent the transfer of energy from one organism to another 17.Energy for all food chains and webs comes from the sun 18.All food chains and webs start with a producer 19.Consumers are referred to by their position within the food chain or web; primary, secondary, tertiary 20.A top consumer is an organism that isn't eaten by any other, e.g. lion 21.Populations of organisms within an ecosystem can be affected by numbers of other organisms within the ecosystem or by human behaviours such as hunting or poisoning (e.g. DDT)
		All living things have a place in the classification system	1. All organisms can be classified 2. Classification allows organisms to be identified and enables scientists to identify new species 3. Carl Linnaeus started the classification system as we know it today 4. Organisms are assigned a kingdom, phylum, class, order, family, genus, species 5. Only organisms of the same species can successfully reproduce 6. Organisms are given a Latin name 7. Carl Woese (among others) has developed Linnaeus' system to include a higher level of classification called a domain, of which there are three 8. Evolutionary trees are a visual representation of the relationship between species 9. Modern technology and knowledge of DNA has allowed relationships between species to be identified
		Organisms have adaptations that increase their chance of survival	1. An adaptation is a feature or behaviour that makes an organism more likely to survive in the conditions in which they normally live 2. Structural adaptations are a feature of an organism's body that helps it survive/reproduce 3. Behaviour adaptations are a response made by an organism that will help it survive/reproduce 4. Functional adaptations are a body process that helps an organism survive/reproduce 5. Animals that live in cold climates tend to have small extremities (e.g. ears) and small surface area:volume ratio to reduce heat loss. They also have a form of insulation (either thick fur, a layer of fat, or both) 6. Animals in dry climates are able to gain water from the food they eat, produce little urine and are more active when the temperature is cooler (evening/night/early morning). They also have large surface area:volume ratios to

			increase heat loss 7. Plants that live in tropical rainforests have buttress roots to offer support in loose soil, have waxy leaves so water doesn't collect on them, are often able to grow on other plants increasing their chances of gaining nutrients and light, and have brightly coloured flowers to increase the chance of a pollinator finding the flower 8. Plants that live in dry conditions have wide reaching roots to gain as much water as possible after rain fall. They also have few stomata (holes on the underside of the leaf) to reduce water loss, have a small surface area, and are often able to store water within their tissues 9. Predators usually have excellent 3D vision, sharp claws or teeth and powerful muscles to allow them to sprint after prey 10.Prey animals have excellent hearing, stereoscopic vision and strong muscles allowing them to outrun predators. They often have a defensive coating to provide protection 11.Prey animals and predators use camouflage so they aren't seen as easily, increasing their chances of survival

Chemistry Age Related Expectations and Sub grains

Big Idea	Topic	Age Related Expectations	Subgrains
Particle Theory	Particles, States, Changes of State	Describe the states of matter in terms of particles Describe changes of state in terms of particles Describe the movement of particles (diffusion).	1. Particles are individual units of matter 2. What are the states of matter? 3. How do the different states of matter behave? 4. Structure of the states of matter (arrangement/distance, movement, energy, forces). 5. What is meant by change of state (melting, freezing, solidification, boiling, evaporating, condensing, sublimation, deposition?) 6. What is the link between temperature and changing states. 7. What is meant by melting and boiling points? 8. Students are able to draw and interpret, heating and cooling curves 9. Diffusion is the movement of particles form an area of high to an area of low concentration. 10. Diffusion can be made to go dater by increasing the temperature or increasing the concentration gradient.
Atoms	Structure of the atom	Outline the development of the atomic model. Describe the structure of the atom in terms of protons, neutrons and electrons	1. Atoms are the smallest particles of an element that have the properties of the element. 2. An atom contains three subatomic particles, protons, neutrons and electrons 3. The nucleus contains protons and neutrons. 4. Electrons are found in the shells of an atom. 5. Draw a diagram of an atom, with the nucleus in the centre and the electron shells around the outside. 6. Protons are subatomic particles with a positive charge 7. Neutrons are particles with a neutral charge 8. Electrons are particles with a negative charge 9. Protons and neutrons both have a relative mass of one. Electrons have a mass of 1/2000 compared to a proton or neutron. 10. The number of protons in an atom is given by the atomic number (proton number). 11. The mass number (atomic mass) is the number of protons and neutrons added together.

			12. Almost all the mass of an atom is contained in the nucleus, which is incredibly small, but massive. 13. Democritus first suggested that everything was made of atoms, that were indivisible. 14. John Dalton suggested that all substances were made of indivisible atoms, he called a group of the same atoms an element and if one atom bonded with a different atom it was called a compound. 15. JJ Thompson suggested that an atom was like a 'plum pudding' with negative electrons surrounded by an area of positive charge 16. This model was disproven by Rutherford. Noels Bohr developed a model similar to the model we have currently.
Atoms	Elements and the Periodic Table	Define elements and compounds Use diagrams to represent elements and compounds Describe the arrangement of elements in the periodic table Describe the properties of metals and non-metals Link the development of the periodic table to the Scientific Process	1. Elements are substances made of one type of atom. 2. Each element is composed of a different type of atom. 3. Compounds are two or more elements chemically joined together. 4. When representing different types of element the atoms are circles and are shown to be different by either different colours or sizes. 5. Substances may be shown in solid or gas form. 6. All the elements that exist are displayed in the periodic table of elements. 7. Metals are substances on the left and side and in the middle of the periodic table. 8. Non-metals are in the top right hand corner. 9. Metals are substances with the following properties: high melting points, conductors of electricity and heat, malleable 10. Non-metals are substances that generally don't have these properties, with exceptions. 11. Early models of the periodic table arranged elements by order of atomic weight. This meant elements were in inappropriate groups. 12. Mendeleev ordered elements by both their atomic weight and their properties, leaving gaps for elements he predicted must exist, but had not yet been discovered.

Particle Theory	Separating Mixtures	Describe what is meant by a mixture Describe what is meant by a solution Describe and explain the separation of different types of mixtures	1. Mixtures are two or more substances (either different elements or compounds) that are not chemically combined and can be separated by physical means. 2. Diagrams of mixtures have circles to represent atoms, and the different substances are not touching to show they are not chemically combined. 3. A solution is a mixture of a soluble solid (solute) dissolved in a liquid (solvent). 4. Filtration uses filter paper to separate an insoluble solid mixed with a liquid 5. Evaporation/ crystallisation is used to separate a soluble solid (solute) from a solution by evaporating the solvent. 6. Distillation is a method of separating a solvent from solution, that uses evaporation, followed by condensation to collect the liquid. Uses a condenser. 7. Fractional distillation is the separate of two liquids with different boiling points mixed together. 8. Students should be able to identify the apparatus and explain how to carry out a distillation 8. Chromatography is a method of separating soluble solids within a solvent based on their solubility 9. Students should be able to set up paper chromatography and interpret the results

Physics Age Related Expectations and Sub grains

Big Idea	Topic	Age Related	Subgrains

		Expectations	
Energy	Energy	Describe and give examples of different stores of energy.	1. Define a system as an object or group of objects. 2. Define energy as having the SI unit of the Joule. 3. Define and describe examples of kinetic energy as a store of energy. 4. Define and describe examples of gravitational potential energy as a store of energy. 5. Define and describe examples of elastic potential energy as a store of energy. 6. Define and describe examples of thermal energy as a store of energy.
		Understand that energy is conserved.	1. State that conservation of energy means that energy can be usefully transferred, stored or dissipated, but cannot be created or destroyed.
		Understand that energy can be transferred between different energy stores.	1. Describe the energy changes in a falling object from GPE to KE and the effect this has on the object. 2. Describe the energy changes on an object projected upward from KE to GPE and the effect this has on the object. 3. Describe the energy changes in an object hitting an obstacle. 4. Describe the energy changes on an object accelerated by a force. 5. Describe the energy changes on a vehicle slowing down. 6. Describe the energy changes bring water to boil in an electric kettle.
			1. Describe how drag and frictional forces often mean that energy is dissipated in a moving object to the environment and that this is energy is often described as being "wasted". 2. Give examples of useful and wasted energy in several contexts (e.g. a car moving, a kettle boiling, an electrical motor, an electrical heater, a tv, etc). 3.Describe the energy changes in a stretched object such as a rubber band EPE to/from KE.
		Describe and calculate power.	1. Define power as the rate of change of energy measured in Watts. 2. Use the equation P = E / t, to calculate power.
		Describe national	1. Describe the main energy resources available on Earth as being: fossil fuels (oil, coal and gas), nuclear fuel,

		and global energy resources.	biofuel, wind, hydroelectricity, geothermal, the tides, the sun and water waves. 2. Distinguish between renewable energy sources and non-renewable energy sources. 3. Describe different uses for energy resources including transport, electricity generation and heating. 4. Describe the environmental issues that arise from different energy resources and how science can identify these, but does not always have the power to deal with the issues due to political, social, ethical or economic considerations.
Forces	Forces 1	Define and explain what is meant by scalar and vector quantities.	1. Define scalar as a quantity with a magnitude only. 2. Define vector as a quantity with a magnitude and direction. 3. Describe the differences between common scalar/vector pairs: distance/ displacement, speed/ velocity. 4. Group common quantities as scalar: temperature, distance, speed, volume, density, mass, time. 5. Group common quantities as vectors: velocity, force, acceleration.
		Define and calculate velocity/speed.	1. Define velocity/speed as the rate of change of displacement/ distance measured in m/s. 2. Calculate velocity/speed using the equation v = s / t. 3. Define acceleration as changing speed/velocity.
		Describe and give examples of different forces.	1.Define a force as a push or pull. 2. Group common forces as contact (tension, upthrust, drag) and non-contact (electrostatic, gravity). 3. Draw examples of forces, using a free-body diagram: tension in a rope, upthrust on a floating object, weight, drag, thrust of a vehicle. 4. Describe and give examples of drag as a frictional force due to motion through a fluid (liquid or gas).
		Define work done in terms of force and distance moved.	1. Define work done as the energy required to move an object through a distance using a force. 2. Calculate work done for different contexts using the equation W= F s
		Describe and	1. Define a resultant force as the single force that can replace several forces to give the same effect.

		calculate resultant forces in different contexts.	2. Resolve horizontal and vertical forces on a diagram into a resultant force.
		State Newton's first law and apply to different contexts.	1. State Newton's first law: An object will stay at rest or in a uniform motion in the same direction unless acted upon by a resultant force. 2. Define equilibrium as an object where all the forces are balanced (the resultant force is zero). 3. Recognise and draw objects in different contexts in equilibrium (e.g: a stationary car and a car moving at a constant velocity).
		State Newton's second law and apply to different contexts.	1. State Newton's second law: An object's acceleration is directly proportional to the resultant force on it. 2. Give simple examples, using force diagrams of an accelerating object (e.g. a car accelerating).
		State Newton's third law and apply to different contexts.	1. State Newton's third law: For every force, there is an equal and opposite force. 2. Describe and draw, using force diagrams examples of Newton's third law using support forces. 3. Describe and draw, using force diagrams examples of Newton's third law using gravitational forces. 4. Describe and draw, using force diagrams examples of Newton's third law using electrostatic forces.
Space	The Solar System	Space	1. There are 8 planets in our Solar System. Students should know them in order from the Sun. 2. The inner planets are Mercury, Venus, Earth, Mars. These planets are made of rocks. The outer planets or gas giants, are Jupiter, Saturn, Uranus, Neptune. These are largely made of gas 3. Between the inner and outer planets is the asteroid belt. These are small lumps of rock whose orbits are easily disturbed. This can cause collisions with other celestial objects. 4. At the centre of the Solar System is the Sun which is an average sized star. 5. Other objects in the Solar System are dwarf planets, comets, Moons and Satellite A Moon is a satellite of a planet or dwarf planet

			6. The solar system is part of a Galaxy called the Milky Way. The Milky Way contains millions of solar systems. 7. The Universe is made of billions of galaxies. The scale of the Universe is hard for humans to comprehend.
		Explain the causes of the seasons.	1. The Earth's axis is tilted this means that different parts of the world will experience seasons at different times of the year. 2. The difference in the seasons will depend on your location 3. Compare the difference in seasons in the UK, North pole and the Equator
		Explain solar and lunar eclipses.	1. A solar eclipse is where the Moon passes between the Sun and the Earth, casting a shadow on the Earth. 2. A lunar eclipse is where the Earth passes between the Sun and Moon, casting a shadow on the Moon.
		Explain how ideas about our Universe have changed over time	1. The geocentric model states that all objects orbit the Earth and the Earth is stationary at the centre of the Universe 2. The Geocentric model was replaced by the heliocentric model 3. Galileo observed the Moons of Jupiter using a telescope, this confirmed that all things did not orbit the Earth 4. The heliocentric model of the Universe was refined over many years as the technology used to observe the Universe improved.
		Explain and calculate the force of gravity.	1. Gravity is a force that exists between two objects with mass. 2. The more mass the objects have and the closer that they are together the greater the force of gravity 3. The force of gravity causes a radial field 4. An object on or close to a planet will experience a force of gravity we call this the weight 5. Weight can be calculated by using the formula w=mg 6. The weight of an object will vary depending on location, whereas the mass will be the same regardless of its location 7. An object is said to be weight less when the gravitational force is 0
Electricity	Electricity and Magnetism	Explain the effect of charge in electrostatics.	1. Define charge as being positive, negative or neutral and having the units of Coulombs. 2. Describe an electron as having a negative charge of -1.6 x 10^-19 C. 3. Describe how an insulating material can be charged with the force of friction and the transfer of electrons. 4. Describe how like-charges repel and unlike forces attract.

			5. Explain how a charged object can be attracted to a neutrally charged object (e.g. charged balloon to a neutral wall) by repelling surface electrons and creating a slightly positively charged surface.
		Define and explain electrostatic and magnetic fields.	1. Define a field as the area in which a force acts. 2. Draw radial and uniform electric fields as field lines with the density of lines indicating the strength of the field. 3. Explain static discharge and phenomena such as sparks using the concept of electrical fields. 4. Plot a magnetic field around a bar magnet using a magnetic compass. 5. Draw magnetic field lines around one or two bar magnets arranged like-pole facing or dislike pole facing. 6. Define the poles of magnets as North and South. 7. Describe how like-poles repel and unlike poles attract.
		Explain the effect of the Earth's magnetic field.	1. Describe the magnetic field around the Earth. 2. Explain the behaviour of a magnetic compass ‘as pointing towards the magnetic north pole of the Earth’.