

Science Overview - Year 5



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Forces (History/DT link)		Earth and Space (Geography link)	Living Things and Their Habitats & Animals Including Humans	Properties and Changes of Materials (Art link)	
NC links	Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object Identify the effects of air resistance, water resistance and friction, that act between moving surfaces Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.		Describe the movement of the Earth, and other planets, relative to the Sun in the solar system Describe the movement of the Moon relative to the Earth Describe the Sun, Earth and Moon as approximately spherical bodies Use the idea of the Earth's rotation to explain day and night	Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird Describe the life process of reproduction in some plants and animals. Describe the changes as humans develop to old age.	Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals,	

		and the apparent movement of the sun across the sky.		wood and plastic Demonstrate that dissolving, mixing and changes of state are reversible changes Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.
Skill breakdown	Explain, Identify, Recognise, Explore, Observe, Determine, Design	Describe, Explain, Compare, Create	Describe, Compare, Observing, Recording,	Compare, group, Demonstrate, explain, explore, describe,
Outdoor Learning Ideas		Create a life sized model of the Earth and moon orbiting the sun/Earth.	Habitat building using outdoor resources only.	
Key vocabulary	Force, gravity, air/water resistance, friction, mechanisms, levers, pulleys, gears, springs	Earth, Sun, Solar System, Axis, Planet, Star, Celestial, Orbit, heliocentric/geocentric	Mammal, amphibian, reproduction, life-cycle, naturalist, sexual/asexual reproduction, bulbs, puberty, gestation	Soluble, transparent, conductive (electrical and thermal), dissolve, solution, solid/gas, filter/sieve, evaporate, reversible,
Scientific equipment	Levers, pulleys, springs, newton meter	Sundials,		Magnets, thermometer, sieves, filter paper, funnels, test tubes, data loggers