Science									
	Autumn		Spring		Summer				
Year5	Materials & Changing states		Earth, Sun & Moon/ Forces		Life Cycles/ Describe Changes as Human Develop to old age				
	Term1	Term2	Term1	Term2	Term1/Term2-				
	Materials (Mixtures and Separation)	Materials – Changing State	Earth, Sun & Moon	Forces	Life Cycles /Describe Changes as Human Develop to old age. — (Jigsaw- Changing me)				
Knowledge (must know)	-what are mixtures -what does dissolve means -know that some materials will dissolve in a liquid to form a solution -what processes can we use to separate mixture	-Compare everyday materials based on their properties, including hardness, solubility, transparency., conductivity(electrical and thermal) and response to magnets understand what changes states of matter - understand reversible and irreversible changes -differentiate between reversible and irreversible changes	-the size of the planets with respect to the sun -how the model of the solar system developed -how day and night is formed -how seasons are formed – differences between planet, natural satellite and star -the phases of moon	-what a force is the units of force -the different types of forces -which force is the weakest and why -what a simple machine is -how to show the forces acting using arrows -what are balanced and unbalanced forces -how to use a force meter to measure weight -the advantages and disadvantages of frictional forces -real life examples where friction is useful or harmful - recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect	-the life cycles of a mammal, an amphibian, an insect and a bird -the different types of reproduction -why different plants have modified root, stem and leaf and flower -famous scientists and their contribution towards study of plants and animals -different ways that plants disperse seeds				
(skills) (be able to	-investigate how does a container of saltwater change over time? -plan a fair test to investigate which types of sugar dissolves the fastest.	-sort materials based on their properties, including hardness, solubility, transparency., conductivity(electrical and thermal) and response to magnets -How does temperature affect how much of solute we can dissolve? - investigate reversible and irreversible changes	-observe the phases of moon and record the phases -construct simple shadow clocks and sundials, calibrated to show midday and the start and end of the school day - plot a graph in order to compare the time of day at different places on the Earth through internet links -create simple models of the solar system	-plan a fair test to find how surface area of a parachute affects the time it takes to fall? -plan a fair test to determine resistance in water by making and testing boats of different shapes -to investigate how changing variables on a paper helicopter affects the speed at which it falls through the air	-grow plants from different parts of plant -compare and contrast how different animals reproduce and grow -observe changes in an animal over a period of time (for example, by hatching and rearing chicks or a butterfly or a frog)				
Key Vocabulary	Matter heterogeneous mixture dissolve solution solute	Reversible irreversible insulator immiscible	pinnacle rotation geocentric heliocentric axis revolution planet	hefty unstable Newton gravity buoyancy friction air resistance unbalanced forces simple machine	propagation breeding reproduction asexual metamorphosis fertilization cell				

Ass.	Computing Data and information- Flat-file databases Maths Statistics	Reading Non Fiction SPACE Literacy Newspaper Report Moon Landing Astronaut's Diary-optional Geography Identification of equator, N&S hemispheres/ Tropics and time zones	Computing Data and information- Flat-file databases Design and Technology CAMs Moving Toys PE Invasion games - Hockey Tennis Change of speed Maths Statistics	PSHSE Healthy me (Summer) Puberty
Perform ance/de bate/w orld of work				