

Year 5 Science Key Objectives		WT	WA	GD
Working Scientifically				
1	Plan different types of enquiry (fair test, comparative, pattern seeking, research, identifying and classifying, observing over time)			
2	Recognise controlling variables where necessary			
3	Take measurements using a range of scientific equipment with increasing accuracy and precision. Taking repeat readings where appropriate			
4	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs			
5	Use test results to make predictions to set up further comparative and fair tests			
6	Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations			
7	Identify scientific evidence that has been used to support or refute ideas or arguments			
8	Use relevant scientific vocabulary			
9	Spell and read relevant scientific vocabulary			
Living things and their habitat				
10	Describe the differences in the life cycle of a mammal, amphibian, insect and a bird			
11	Describe the process of reproduction in some plants and animals			
12	Observe life cycle changes in plants (growing vegetables/flowers)			
13	Observe changes in an animal over a period of time (chicks, butterfly, frog)			
Animals including humans				
14	Describe changes as humans develop to old age			
15	Draw a timeline to indicate stages of growth and development of humans			
Properties and changes of materials				
16	Compare and group together everyday materials (hardness, solubility, transparency, conductivity and response to magnets)			
17	Observe that some materials will dissolve in liquid to form a solution, and describe how to recover the substance from a solution			
18	Use knowledge of solids, liquids and gases to decide how a mixture might be separated, including filtering, sieving and evaporating			
19	Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials including metals, wood and plastic			
20	Demonstrate dissolving, mixing and changes of state are reversible changes			
21	Explain that some changes result in the formation of a new material, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda			
Earth and Space				
22	Describe the movement of the earth and other planets, relative to the sun in the solar system			
23	Describe the moon relative to the earth			
24	Describe the sun, earth and moon as approximately spherical bodies			
25	Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky			
26	Identify the 8 planets in our solar system and compare the other planets with Earth			
Forces				
27	Explain that unsupported objects fall towards earth because of the force of gravity acting between the Earth and the falling object			
28	Identify the effects of air resistance, water resistance and friction, that act on moving surfaces			
29	Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect			