Y1 Science Targets

TARGETS	Wonderful World	Home Sweet Home	Eye on London	Marvellous Me	Long Ago and Far Away	Food Glorious food
Working scientifically						
(Y1 and Y2)						
I can ask simple scientific questions.		✓		✓		
I can use simple equipment to make observations.		✓		✓		
I can carry out simple tests.		✓		✓		
I can identify and classify things.					✓	✓
I can suggest what I have found out.			✓		✓	
I can use simple data to answer questions			✓	✓	✓	
Biology						
<u>Plants</u>						
I can name a variety of common wild and garden plants.	✓					✓
I can name the petals, stem, leaf and root of a plant.	✓					✓
I can name the roots, trunk, branches and leaves of a tree.	✓					✓
<u>Animals, including humans</u>						
I can name a variety of animals including fish, amphibians, reptiles birds and mammals.	✓					✓
I can classify and name animals by what they eat (carnivore, herbivore and omnivore).	✓					✓
I can sort animals into categories (including fish, amphibians, reptiles, birds and mammals).	✓					✓
I can sort living and non-living things.	✓			✓		
I can name the parts of the human body that I can see.			✓	✓		
I can link the correct part of the human body to each sense.			✓	✓		
Chemistry						
<u>Everyday materials</u>						
I can distinguish between an object and the material it is made from.		✓			✓	
I can explain the materials that an object is made from.		✓			✓	
I can name wood, plastic, glass, metal, water and rock.		✓			✓	
I can describe the properties of everyday materials.		✓			✓	
I can group objects based on the materials they are made from.		✓			✓	
Physics						
<u>Seasonal changes</u>						
I can observe and comment on changes in the seasons.	✓				✓	
I can name the seasons and suggest the type of weather in each season.	✓				✓	

Y2 Science Targets

TARGETS	Wonderful World	Home Sweet Home	Eye on London	Marvellous Me	Long Ago and Far Away	Food Glorious food
Working scientifically						
(Y1 and Y2)						
I can ask simple scientific questions.		✓		✓		✓
I can use simple equipment to make observations.		✓		✓		
I can carry out simple tests.		✓		✓		✓
I can identify and classify things.	✓		✓		✓	✓
I can suggest what I have found out.			✓		✓	
I can use simple data to answer questions			✓	✓	✓	
Biology						
<u>Living things and their habitats</u>						
I can identify things that are living, dead and never lived.	✓					✓
I can describe how a specific habitat provides for the basic needs of things living there (plants and animals).	✓					✓
I can identify and name plants and animals in a range of habitats.	✓					✓
I can match living things to their habitat.	✓					✓
I can describe how animals find their food.	✓					✓
I can name some different sources of food for animals.	✓					✓
I can explain a simple food chain.	✓					✓
<u>Plants</u>						
I can describe how seeds and bulbs grow into plants.		✓				✓
I can describe what plants need in order to grow and stay healthy (water, light & suitable temperature).		✓				✓
<u>Animals, including humans</u>						
I can explain the basic stages in a life cycle for animals, including humans.	✓			✓		
I can describe what animals and humans need to survive.	✓			✓		
I can describe why exercise, a balanced diet and good hygiene are important for humans.		✓		✓		
Chemistry						
<u>Uses of everyday materials</u>						
I can identify and name a range of materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard.		✓			✓	
I can suggest why a material might or might not be used for a specific job.		✓			✓	
I can explore how shapes can be changed by squashing, bending, twisting and stretching.		✓			✓	

Y3 and Y4 Science Targets Page 1

TARGETS	What Lies Beneath	In the Spotlight	Dig for Victory	Let's Celebrate	Incredible Inventions	Horrible Histories
Working scientifically						
(Y3 and Y4)						
I can ask relevant scientific questions.			✓		✓ Y3	
I can use observations and knowledge to answer scientific questions.		✓			✓ Y4	
I can set up a simple enquiry to explore a scientific question.		✓		✓		
I can set up a test to compare two things.	✓				✓ Y3	
I can set up a fair test and explain why it is fair.	✓				✓ Y4	
I can make careful and accurate observations, including the use of standard units.	✓				✓Y3	
I can use equipment, including thermometers and data loggers to make measurements.	✓				✓Y4	
I can gather, record, classify and present data in different ways to answer scientific questions.		✓		✓		✓
I can use diagrams, keys, bar charts and tables; using scientific language.	✓			✓		✓
I can use findings to report in different ways, including oral and written explanations, presentation.		✓				✓
I can draw conclusions and suggest improvements.	✓		✓		✓Y3	
I can make a prediction with a reason.		✓	✓			
I can identify differences, similarities and changes related to an enquiry.	✓		✓		✓Y4	
Chemistry						
<u>Rocks</u> – What Lies Beneath Us						
I can compare and group rocks based on their appearance and physical properties, giving a reason.	✓3					
I can describe how fossils are formed.	✓4					
I can describe how soil is made.	✓3					
I can describe and explain the difference between sedimentary and igneous rock.	✓4					
<u>States of matter</u> – What Lies Beneath Us						
I can group materials based on their state of matter (solid, liquid, gas).	✓3					
I can explore how materials change state.	✓3					
I can measure the temperature at which materials change state.	✓4					
I can describe the water cycle.	✓3					
I can explain the part played by evaporation and condensation in the water cycle.	✓4					
Physics						
<u>Light</u> – In the Spotlight						
I can describe what dark is (the absence of light).		✓3				
I can explain that light is needed in order to see.		✓4				
I can explain that light is reflected from a surface.		✓4				

	What Lies Beneath	In the Spotlight	Dig for Victory	Let's Celebrate	Incredible Inventions	Horrible Histories
I can explain and demonstrate how a shadow is formed.		✓3				
I can explore shadow size and explain.		✓4				
I can explain the danger of direct sunlight and describe how to keep protected.		✓3				
<u>Electricity</u> – In the Spotlight						
I can identify and name appliances that require electricity to function.		✓3				
I can construct a series circuit.		✓3				
I can identify and name the components in a series circuit (including cells, wires, bulbs, switches and buzzers).		✓4				
I can draw a circuit diagram.		✓3				
I can predict and test whether a lamp will light within a circuit.		✓3				
I can describe the function of a switch in a circuit.		✓4				
I can describe the difference between a conductor and insulators; giving examples of each.		✓4				
Biology						
<u>Animals, including humans</u> – Dig for Victory						
I can explain the importance of a nutritious, balanced diet.			✓3			
I can explain how nutrients, water and oxygen are transported within animals and humans.			✓4			
I can describe and explain the skeletal system of a human and its purpose.			✓3			
I can describe and explain the muscular system of a human.			✓4			
I can identify and name the parts of the human digestive system.			✓3			
I can describe the functions of the organs in the human digestive system.			✓4			
I can identify and describe the different types of teeth in humans.			✓3			
I can describe the functions of different human teeth.			✓4			
I can use food chains to identify producers, predators and prey.			✓3			
I can construct food chains to identify producers, predators and prey.			✓4			
Physics						
<u>Sound</u> – Let's Celebrate						
I can describe how sound is made.				✓3		
I can explain how sound travels from a source to our ears.				✓3		
I can explain the place of vibration in hearing.				✓4		
I can explore the correlation between pitch and the object producing a sound.				✓4		
I can explore the correlation between the volume of a sound and the strength of the vibrations that produced it.				✓3		
I can describe what happens to a sound as it travels away from its source.				✓3		
Physics						
<u>Forces and magnets</u> – Incredible Inventions						
I can explore and describe how objects move on different surfaces.					✓3	

	What Lies Beneath	In the Spotlight	Dig for Victory	Let's Celebrate	Incredible Inventions	Horrible Histories
I can explain how some forces require contact and some do not, giving examples.					✓4	
I can explore and explain how objects attract and repel in relation to objects and other magnets.					✓3	
I can predict whether objects will be magnetic and carry out an enquiry to test this out.					✓4	
I can describe how magnets work.					✓3	
I can predict whether magnets will attract or repel and give a reason.					✓4	
Biology						
<u>Plants</u> –Dig for Victory						
I can describe the function of different parts of flowering plants and trees.			✓3			
I can explore and describe the needs of different plants for survival.			✓4			
I can explore and describe how water is transported within plants.			✓3			
I can describe the plant life cycle, especially the importance of flowers.			✓4			

Biology						
<u>Living things and their habitats</u> – Horrible Histories						
I can group living things in different ways.						✓3
I can use classification keys to group, identify and name living things.						✓3
I can create classification keys to group, identify and name living things (for others to use).						✓4
I can describe how changes to an environment could endanger living things.						✓4

Y5 and 6 Science Targets

TARGETS	Egyptians	Chocolate	Rainforest	Greece	Flight	Amazing Africa
Working scientifically						
I can plan different types of scientific enquiry.	✓	✓		✓	✓	
I can control variables in an enquiry.	✓	✓		✓	✓	
I can measure accurately and precisely using a range of equipment.		✓			✓	
I can record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.	✓				✓	
I can use the outcome of test results to make predictions and set up a further comparative fair test.	✓			✓		
I can report findings from enquiries in a range of ways.			✓			✓
I can explain a conclusion from an enquiry.		✓			✓	
I can explain causal relationships in an enquiry.	✓			✓		
I can relate the outcome from an enquiry to scientific knowledge in order to state whether evidence supports or refutes an argument or theory.			✓			✓
I can read, spell and pronounce scientific vocabulary accurately.			✓			✓
Biology						
<u>Living things and their habitats</u> - Egyptians						
I can describe the life cycle of different living things, e.g. mammal, amphibian, insect bird.	✓5					
I can describe the life process of reproduction in some plants and animals	✓5					
I can describe how living things (including plants, animals and micro-organisms) are classified into groups according to common observable characteristics.	✓6					
I can give reasons for classifying plants and animals based on specific characteristics	✓6					
Chemistry						
<u>Properties and changes of materials - Chocolate</u>						
I can compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, [electrical & thermal], and response to magnets).		✓5				
I can use knowledge of solids, liquids and gases to decide how mixtures might be separated (including filtering, sieving and evaporating).		✓5				
I can describe how a material dissolves to form a solution.		✓5				
I can describe and show how to recover a substance from a solution.		✓6				
I can explain how some changes result in the formation of a new material and that this is usually irreversible (including changes associated with burning and the action of acid in bicarbonate of soda)		✓6				
I can give evidenced reasons why materials should be used for specific purposes.		✓6				
<u>Evolution and inheritance - Rainforests</u>						
I can describe how the earth and living things have changed over time.			✓5			
I can explain how fossils can be used to find out about the past.			✓5			
I can explain about reproduction and offspring (recognising that offspring normally vary and are not identical to their parents).			✓5			
I can explain how animals and plants are adapted to suit their environment.			✓6			
I can link adaptation over time to evolution.			✓6			
I can explain evolution.			✓6			

	Egyptians	Chocolate	Rainforest	Greece		
Physics						
<u>Earth and space</u> - Greece						
I can describe and explain the movement of the Earth and other planets relative to the Sun.				✓5		
I can describe and explain the movement of the Moon relative to the Earth.				✓6		
I can explain and demonstrate how night and day are created.				✓6		
I can describe the Sun, Earth and Moon (using the term spherical).				✓5		
Physics						
<u>Light</u> - Greece						
I can explain how light travels.				✓5		
I can explain and demonstrate how we see objects.				✓5		
I can use the idea that light travels in straight lines to explain why shadows have the same shape as the object that casts them.				✓6		
I can explain how simple optical instruments work, e.g. periscope, telescope, binoculars, mirror, magnifying glass etc.				✓6		
<u>Forces</u> - Flight						
I can explain that unsupported objects fall towards Earth because of the force of gravity acting between them.					✓5	
I can identify and explain the effect of air resistance.					✓5	
I can identify and explain the effect of water resistance.					✓6	
I can identify and explain the effect of friction.					✓5	
I can explain how levers, pulleys and gears allow a smaller force to have a greater effect.					✓6	
<u>Animals, including humans</u> – Amazing Africa						
I can identify and name the main parts of the human circulatory system.						✓5
I can describe the function of the heart, blood vessels and blood.						✓6
I can describe the ways in which nutrients and water are transported in animals, including humans.						✓5
I can discuss the impact of diet, exercise, drugs and life style on health.						✓6
I describe changes as humans develop to old age.						✓5
<u>Electricity - Flight</u>						
I can explain how the number and voltage of cells in a circuit links to the brightness of a lamp or the volume of a buzzer.					✓6	
I can compare and give reasons for why components work and do not work in a circuit.					✓5	
I can draw circuit diagrams using the correct symbols.					✓5	