

Year Group	Reception	Year 1	Year 2	Year 3	Year 4
Topic	All About Me; Fabulous Festivals	Famous People	Famous People	Tomb Raiders	Tomb Raiders
Skills:					
Planning and Communication and Sources	Questions why things happen. Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world. Create simple representations of events, people and objects. Make links and notice patterns in their experiences. Build up vocabulary that reflects the breadth of their experience.	Draw simple pictures. Talk about what they see and do. Use simple charts to communicate findings. Identify key features. Ask questions.	Describe their observations using some scientific vocabulary. Use a range of simple texts to find information. Suggest how to find things out. Identify key features. Ask questions.	Use pictures, writing, diagrams and tables as directed by their teacher. Use simple texts, directed by the teacher, to find information. Record their observations in written, pictorial and diagrammatic forms. Select the appropriate format to record their observations.	Record observations, comparisons and measurements using tables and bar charts Begin to plot points to form a simple graph. Use graphs to point out and interpret patterns in their data. Select information from a range of sources provided for them.
Enquiring and Testing and Obtaining and Presenting Evidence	Show curiosity about objects, events and people. Engage in new experiences and learn by trial and error. To make predictions about what they think will happen and why. Find ways to solve problems / find new ways to do things / test their ideas. Answer how and why questions about their experiences.	Test ideas suggested to them. Say what they think will happen. Use first hand experiences to answer questions. Begin to compare some living things.	Use simple equipment provided to aid observation. Compare objects, living things or events. Make observations relevant to their task. Begin to recognise when a test or comparison is unfair. Use first hand experiences to answer questions.	Put forward own ideas about how to find the answers to questions. Recognise the need to collect data to answer questions. Carry out a fair test with support. Recognise and explain why it is a fair test. With help, pupils begin to realise that scientific ideas are based on evidence.	With help, pupils begin to realise that scientific ideas are based on evidence. Show in the way they perform their tasks how to vary one factor while keeping others the same. Decide on an appropriate approach in their own investigations to answer questions. Describe which factors they are varying and which will remain the same and say why.
Observing and Recording	Observe the effects of physical activity on their bodies. Use senses to explore and make observations of the world around them. To look closely at similarities, differences, patterns and change.	Make observations using appropriate senses. Record observations. Communicate observations orally, in drawing, labelling, simple writing and using ICT.	Respond to questions asked by the teacher. Ask questions. Collect and record data (supported by the teacher). Suggest how they could collect data to answer questions. Begin to select equipment from a limited range.	Make relevant observations. Measure using given equipment. Select equipment from a limited range.	Carry out measurement accurately. Make a series of observations, comparisons and measurements. Select and use suitable equipment. Make a series of observations and measurements adequate for the task.

	Talk about some of the things they have observed, such as plants, animals, natural and found objects. Develop ideas of grouping, sequences, use and effect.				
Considering Evidence and Evaluating	Talk about why things happen and how things work. Talk about what they have found out, and explain how they found it out. Develop their own explanations by connecting ideas or events.	Make simple comparisons and groupings. Say what has happened. Say whether what has happened was what they expected.	Say what has happened. Say what their observations show and whether it was what they expected. Begin to draw simple conclusions and explain what they did. Begin to suggest improvements in their work.	Begin to offer explanations for what they see and communicate in a scientific way what they have found out. Begin to identify patterns in recorded measurements. Suggest improvements in their work. Evaluate their findings.	Predict outcomes using previous experience and knowledge and compare with actual results. Begin to relate their conclusions to scientific knowledge and understanding. Suggest improvements in their work, giving reasons.
Knowledge	Reception	Year 1	Year 2	Year 3	Year 4
NC aims for Key Stages 1 (Years 1 and 2) and 2 (Years 3-4): S1: develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics (describe processes and key characteristics; build up specialist vocabulary; apply mathematical knowledge by collecting, presenting and analysing data) S2: develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them (working scientifically; observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing - controlled investigations; seeking answers to questions) S3 are equipped with the scientific knowledge	How the body changes as we grow. Labelling human body parts. Healthy lifestyles (diet & exercise) What purpose do they have? Using our five senses to explore the world around us. Daily weather update. Autumn walk - changes to weather & environment. ----- Planting bulbs/seeds in an outdoor planter. Exploring light & dark/night & day. Materials - what will keep us warm and dry in winter? Daily weather update. Winter walk - changes to weather & environment.	Animals including humans People and their pets- what do living things need to live, how to be healthy. Research woodlice - needs, habitat, and life-cycle. Design and make a micro habitat for woodlouse in class garden. ----- Seasonal changes Seasons- changes in weather. Linking weather conditions and hibernation Changes in weather - Wind and Sun make a wind sock and spinner and investigate. Sun-catchers and investigated how shadows were formed.	Animals including humans People and their pets- what do living things need to live, how to be healthy. Research woodlice - needs, habitat, and life-cycle. Design and make a micro habitat for woodlouse in class garden. ----- Seasonal changes Seasons- changes in weather. Linking weather conditions and hibernation Changes in weather - Wind and Sun make a wind sock and spinner and investigate. Sun-catchers and investigated how shadows were formed.	States of matter: What's the matter? Separating solids and liquids - investigative skills. Dissolving and evaporation - including every day examples The Water cycle Changing state through heating and cooling (measure and research temperature). ----- Sound: Sounds spectacular Low & high sounds Natural and man-made sounds How sound travels – investigative skills. Measuring sounds - the function of the ear: cochlea, ear canal, ear drum. Voices - voice boxes and echoes	States of matter: What's the matter? Separating solids and liquids - investigative skills. Dissolving and evaporation - including every day examples The Water cycle Changing state through heating and cooling (measure and research temperature). ----- Sound: Sounds spectacular Low & high sounds Natural and man-made sounds How sound travels – investigative skills. Measuring sounds - the function of the ear: cochlea, ear canal, ear drum. Voices - voice boxes and echoes

required to understand the uses and implications of science, today and for the future.					
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