

Unit:	Time Detectives	Alive and Kicking	Work Like an Egyptian
National Curriculum Science Knowledge taught as stand- alone lessons			 Forces and Magnets notice that some forces need contact between two objects, but magnetic forces can act at a distance observe how magnets attract or repel each other and attract some materials and not others compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials describe magnets as having two poles predict whether two magnets will attract or repel each other, depending on which poles are facing.
National Curriculum Science Knowledge Linked to topic	Rocks (Materials) compare and group together different kinds of rocks on the basis of their appearance and simple physical properties describe in simple terms how fossils are formed when things that have lived are trapped within rock recognise that soils are made from rocks and organic matter. Light recognise that they need light in order to see things and that dark is the absence of light	 Plants identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant investigate the way in which water is transported within plants explore the part that flowers play in the life cycle of flowering plants, including 	



	 notice that light is reflected from surfaces recognise that light from the sun can be dangerous and that there are ways to protect their eyes recognise that shadows are formed when the light from a light source is blocked by an opaque object find patterns in the way that the size of shadows change. 	pollination, seed formation and seed dispersal. Animals (including humans) identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat identify that humans and some other animals have skeletons and muscles for support, protection and movement. Forces (linked to movement) compare how things move on different surfaces	
Subject Focus	When looking at the stone age, different types of rocks are introduced. They are closely observed and grouped according to observable features and tests for hardness etc. This leads to identifying that rocks are not all the same and can be used for different purposes. Some rocks may contain fossils which provide evidence of the past.	This topic is all about what plants and animals (including humans) need in order to survive and grow. Children will be growing plants in different conditions to test what conditions they like best and looking at how the stem and flower are responsible for transporting water, pollination and seed dispersal. In humans, they will look at nutrition, discovering how to maintain a healthy balance; and how the body uses its skeleton and muscles during exercise.	This stand-alone topic allows for exploration of magnets - children will explore how magnets attract and repel using appropriate vocabulary. They will test different materials to see which are magnetic and be able to make predictions based on their observations.
Fab Five/ Top Ten	 I can name some types of rock and give physical features of each I can explain how a fossil is formed I can explain that soils are made from rocks and also contain living/dead matter 	 I can explain the function of the parts of a flowering plant I can describe the life cycle of flowering plants, including pollination, seed formation, seed dispersal, and germination 	 I can give examples of forces in everyday life I can give examples of objects moving differently on different surfaces I can name a range of types of magnets and show how the poles attract and repel



	 4. I can describe how we see objects in light and can describe dark as the absence of light 5. I can define transparent, translucent and opaque 3. I can give different methods of pollination and seed dispersal, including examples 4. I can name the nutrients found in food 5. I can state that to be healthy we need to eat the right types of food to give us the correct amount of these nutrients 		including examples rients found in food be healthy we need to s of food to give us the	 4. I can draw diagrams using arrows to show the attraction and repulsion between the poles of magnets 5. I can show how like poles repel and unlike poles attract, and name unmarked poles 	
Topic specific Vocabulary	properties fossils organic matter millions sieve remains	light eyes source relect bounce surface solid shadow shiny mirror reflection	All Year 1 and 2 + flowering oxygen carbon dioxide nutrients support pollen pollination stigma fertilisation dispersed	As Year 1 and Year 2 + skeleton balanced protect muscle	force pole contact magnet push pull iron steel opposite attract repel
	types of scientif • set up simple prand fair tests • make systemation, where appropriate measurements us range of equipments and data loggers • gather, record,	estions and using different ic enquiries to answer them ractical enquiries, comparative ic and careful observations and ate, taking accurate sing standard units, using a ent, including thermometers classify and present data in a to help in answering questions	and fair tests • make systematic and , where appropriate, ta measurements using sta range of equipment, inc and data loggers	uiries to answer them all enquiries, comparative careful observations and king accurate andard units, using a cluding thermometers	• ask relevant questions and using different types of scientific enquiries to answer them • set up simple practical enquiries, comparative and fair tests • make systematic and careful observations and , where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • gather, record, classify and present data in a variety of ways to help in answering questions



- record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- report on findings from enquiries, include oral and written explanations, displays or presentations of results and conclusions
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- predictions for new values, suggest improvements and raise further questions
- identify differences, similarities or changes related to simple scientific ideas and processes use straightforward scientific evidence to answer questions or to support their findings.

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