



Autumn 1 - Unit 1 - Earth Rocks

**** In each section there are a range of activities to choose from. Those here are only suggested. Not all activities have to be completed and some could be part of an exploration area / table.**

Week	Unit	National Curriculum strand	Activity Title	Subject knowledge Learning outcomes	Working scientifically learning outcomes
1	Hard Rock Café	Rocks	Testing rocks	To explore different kinds of rocks and their properties	To collect and record data from observations and tests
		Rocks	Rocks for dinner	To explore the properties of rocks and to test rocks	To collect and record data from observations and tests
2	A family affair	Rocks	Rock families	To explore different types of rock families	To collect and record data from observations
3	A Family affair	Rocks	Let's eat igneous rocks!	To explore different types of rock families	To set up and carry out simple practical activities
	A Family affair	Rocks	Sedimentary sandwiches	To explore different types of rock families	To set up and carry out simple practical activities
4	A Family affair	Soils	Soil investigation	To recognise that soil comes from rock	To classify and use a key To set up and carry out simple practical activities and fair tests
5	Fantastic fossils	Fossils	Leaving an impression	To find out how fossils are formed	To use results to draw conclusions and suggest improvements or new questions
6	Fantastic fossils	Fossils	Is it a fossil?	To find out how fossils are formed	To use results to draw conclusions and suggest improvements or new questions

Autumn 2 – Unit 2 - Food and our Bodies

**** In each section there are a range of activities to choose from. Those here are only suggested. Not all activities have to be completed and some could be part of an exploration area / table.**

Week	Unit	National Curriculum strand	Activity Title	Subject knowledge Learning outcomes	Working scientifically learning outcomes
1	Food for thought	Animals including Humans Nutrition	Feeding frenzy	To learn about healthy and balanced diets	To gather, record and present data in different ways
2	Food for thought	Animals including Humans Nutrition	Food groups	To learn about healthy and balanced diets	To gather, record and present data in different ways
3	Funny bones	Animals including Humans – The Skeleton	Scary skeletons	To describe the basic parts of the skeletal system	To observe and compare animals with and without skeletons
	Funny bones	Animals including Humans – The Skeleton	Protecting our bones	To describe the basic parts of the skeletal system	To observe and compare animals with and without skeletons
4	We like to move it	Animals including Humans – The Skeleton	Muscle madness	To look at joints, and how bones and muscles help us move	To make systematic and careful observations
5	We like to move it	Animals including Humans – The Skeleton	Muscle madness – how to build your own model arm	To look at joints, and how bones and muscles help us move	To make systematic and careful observations
	We like to move it	Animals including Humans – The Skeleton	Muscle madness – how to build your own model muscle	To look at joints, and how bones and muscles help us move	To make systematic and careful observations

6	We like to move it	Animals including Humans – The Skeleton	Bend and flex	To look at joints, and how bones and muscles help us move	To make systematic and careful observations
---	--------------------	---	---------------	---	---

Spring 1 – Unit 3 - Mirror, mirror

**** In each section there are a range of activities to choose from. Those here are only suggested. Not all activities have to be completed and some could be part of an exploration area / table.**

Week	Unit	National Curriculum strand	Activity Title	Subject knowledge Learning outcomes	Working scientifically learning outcomes
1	Time to reflect	Light	Looking at reflections	To describe the reflections when light is reflected from surfaces	To record observations and make sense of them
2	Time to reflect	Light	Bouncing and reflecting	To describe the reflections when light is reflected from surfaces	To record observations and make sense of them
3	Shadow shapes	Light	Making shadows	To describe how shadows are formed	To design and carry out a fair test
4	Shadow shapes	Light	Playing with shadows	To describe how shadows are formed	To design and carry out a fair test
5	Magic mirrors	Light	Past reflections	To research and gather some key facts about how mirrors have been made over the centuries To make a simple mirror and create a list of the key uses	
6	Magic mirrors	Light	Making mirrors	To research and gather some key facts about how mirrors have been made over the centuries. To make a simple mirror and create a list of the key uses.	

Spring 2 - Unit 4 - How does your garden grow?

**** In each section there are a range of activities to choose from. Those here are only suggested. Not all activities have to be completed and some could be part of an exploration area / table.**

Week	Unit	National Curriculum strand	Activity Title	Subject knowledge Learning outcomes	Working scientifically learning outcomes
1	Plant parts	Plants	Plant parts	To identify and describe the functions of the different parts of flowering plants	To set up simple practical enquiries
2	Plant parts	Plants	Water transportation The very thirsty cactus	To identify and describe the functions of the different parts of flowering plants	To set up simple practical enquiries
3	Plant parts	Plants	Water transportation Cool celery tubes	To identify and describe the functions of the different parts of flowering plants.	To set up simple practical enquiries
3	Plant parts	Plants	Water transportation Lovely leaf prints	To identify and describe the functions of the different parts of flowering plants	To set up simple practical enquiries
4	Long live plants	Plants	Let's get growing	To explore exactly what plants need to live and grow, and how these requirements vary from plant to plant	To ask relevant questions and use different types of scientific enquiry to answer them
	Long live plants	Plants	Let there be light	To explore exactly what plants need to live and grow, and how these requirements vary from plant to plant	To ask relevant questions and use different types of scientific enquiry to answer them
5	Flower Power	Plants	What is pollen?	To explore the role that flowers play in the life cycles of plants, from	To record the findings using drawings and labelled diagrams

				pollination to seed spreading	
6	Flower Power	Plants	Seed spreading	To explore the role that flowers play in the life cycles of plants, from pollination to seed spreading	To record the findings using drawings and labelled diagrams
	Flower Power	Plants	Pollination playtime	To explore the role that flowers play in the life cycles of plants, from pollination to seed spreading	To record the findings using drawings and labelled diagrams
	Flower Power	Plants	It's harvest time!	To explore the role that flowers play in the life cycles of plants, from pollination to seed spreading	To record the findings using drawings and labelled diagrams

Summer 1 – Unit 5 - Opposites attract

**** In each section there are a range of activities to choose from. Those here are only suggested. Not all activities have to be completed and some could be part of an exploration area / table.**

Week	Unit	National Curriculum strand	Activity Title	Subject knowledge Learning outcomes	Working scientifically learning outcomes
1	Magnetic forces	Forces and magnets	What do magnets do?	To observe the forces that magnets produce	To report and present findings from enquiries
2	Magnetic forces	Forces and magnets	Investigating magnets	To observe the forces that magnets produce	To report and present findings from enquiries
4	Is it magnetic?	Forces and magnets	Magnetic circus	To observe the forces that magnets produce	To report and present findings from enquiries
5	Poles to pole	Forces and magnets	What are magnetic poles?	To observe the forces that magnets produce	To report and present findings from enquiries
5	Poles to pole	Forces and magnets	The magnetic rule	To observe the forces that magnets produce	To report and present findings from enquiries

Summer 2 - Unit 6 - We are astronauts

**** This topic is an additional creative topic and goes beyond National Curriculum requirements.**

Week	Unit	National Curriculum strand	Activity Title	Subject knowledge Learning outcomes	Working scientifically learning outcomes
1	What's out there?	**Space	Dark side of the Moon	To observe and draw the Moon from real life and secondary sources	Make systematic and careful observations
2	What's out there?	**Space	Making rockets	Use knowledge of materials and forces	To make a rocket and explain how it works, carry out an investigation and how to improve it
3	The Landings	**Space	The first human in space	To describe what happened in the 'Space Race' in the 1960.	
4	The Landings	**Space	Can we land on the Moon?	Use knowledge of materials and forces	To develop and build some model rockets and a Moon lander.
5	Space survival	**Space	Space food	To identify which foods are best to take into space and explain why	To carry out practical activities
6	Space survival	**Space	Making spacesuits	To know what factors affect the design of a space suit.	To carry out practical activities