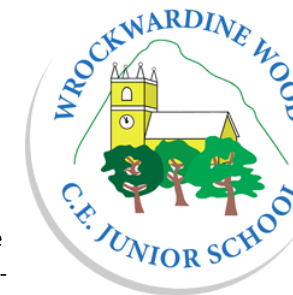


Wrockwardine Wood CE Junior School

Science Progression Document



Throughout our science curriculum we utilise and build on the children's previous substantive knowledge. The national curriculum presents this through a variety of topics which are taught in a progressive two-year cycle across the lower and upper key stages. Disciplinary knowledge and skills are taught alongside the substantive knowledge in each unit to ensure that scientific skills are embedded across the science curriculum. The progression of these skills are organised into 4 key areas: planning, obtaining and presenting evidence, considering evidence and evaluating and types of investigations.

Our science curriculum reflects teachers' careful thought about what is to be taught, the rationale for it, the sequencing of learning and the relationships between the substantive and disciplinary skills. With this in place, pupils know, remember and are able to do more.

Curriculum area	Year 3	Year 4	Year 5	Year 6
Animals Including Humans	<p>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</p> <p>identify that humans and some other animals have skeletons and muscles for support, protection and movement</p> <p>identify that humans and some other animals have skeletons and muscles for support, protection and movement</p> <p>Key Vocabulary: Movement, Muscles, Bones, Skull, Nutrition, Skeletons</p>	<p>describe the simple functions of the basic parts of the digestive system in humans</p> <p>identify the different types of teeth in humans and their simple functions</p> <p>construct and interpret a variety of food chains, identifying producers, predators and prey</p> <p>Key Vocabulary: Mouth, Tongue, Teeth, Oesophagus, Stomach, Small Intestine, Large Intestine, Herbivore, Carnivore, Canine, Incisor, Molar</p>	<p>describe the changes as humans develop to old age</p> <p>Key Vocabulary: Foetus, Embryo, Womb, Gestation, Baby, Toddler, Teenager, Elderly, Growth, Development, Puberty</p>	<p>identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</p> <p>recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</p> <p>describe the ways in which nutrients and water are transported within animals, including humans</p> <p>Key Vocabulary: circulatory, Heart, Blood Vessels, Veins, Arteries, Oxygenated, Deoxygenated, Valve, Exercise, Respiration</p>
Forces and Magnets	<p>compare how things move on different surfaces</p> <p>notice that some forces need contact between 2 objects, but magnetic forces can act at a distance</p> <p>observe how magnets attract or repel each other and attract some materials and not others</p> <p>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</p> <p>describe magnets as having 2 poles</p> <p>predict whether 2 magnets will attract or repel each other, depending on which poles are facing</p> <p>Key Vocabulary: Magnetic, Force, Contact, Attract, Repel, Friction, Poles, Push, Pull</p>		<p>explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</p> <p>identify the effects of air resistance, water resistance and friction, that act between moving surfaces</p> <p>recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> <p>Key Vocabulary: Air resistance, Water resistance, Friction, Gravity, Newton, Gears, Pulleys</p>	

Curriculum area	Year 3	Year 4	Year 5	Year 6
<p>Plants</p>	<p>identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</p> <p>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</p> <p>investigate the way in which water is transported within plants</p> <p>explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal</p> <p>Key Vocabulary: Air, Light, Water, Nutrients, Soil, Reproduction, Transportation, Dispersal, Pollination, Flower</p>			
<p>Light</p>	<p>recognise that they need light in order to see things and that dark is the absence of light</p> <p>notice that light is reflected from surfaces</p> <p>recognise that light from the sun can be dangerous and that there are ways to protect their eyes</p> <p>recognise that shadows are formed when the light from a light source is blocked by an opaque object</p> <p>find patterns in the way that the size of shadows change</p> <p>Key Vocabulary: Light, Shadows, Mirror, Reflective, Dark, Reflection</p>			<p>recognise that light appears to travel in straight lines</p> <p>use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye</p> <p>explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes</p> <p>use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p> <p>Key Vocabulary: rrefraction, Reflection, Light, Spectrum, Rainbow, Colour,</p>

Curriculum area	Year 3	Year 4	Year 5	Year 6
States of Matter		<p>compare and group materials together, according to whether they are solids, liquids or gases</p> <p>observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)</p> <p>identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature</p> <p>Key Vocabulary: Solid, Liquid, Gas, Evaporation, Condensation, Particles, Temperature, Freezing, Heating</p>	See properties and changes in materials	
Rocks	<p>compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</p> <p>describe in simple terms how fossils are formed when things that have lived are trapped within rock</p> <p>recognise that soils are made from rocks and organic matter</p> <p>Key Vocabulary: fossils, Soils, Sandstone, Granite, Marble, Pumice, Crystals, Absorbent</p>			
Living Things and their Habitats		<p>recognise that living things can be grouped in a variety of ways</p> <p>explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</p> <p>recognise that environments can change and that this can sometimes pose dangers to living things</p> <p>Key Vocabulary: Vertebrates, Fish, Amphibians, Reptiles, Birds, Mammals, Invertebrates, Snails, Slugs, Worms, Spiders, Insects, Environment, Habitats</p>	<p>describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</p> <p>describe the life process of reproduction in some plants and animals</p> <p>Key Vocabulary: mammal, Reproduction, Insect, Amphibian, Bird, Offspring</p>	<p>describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals</p> <p>give reasons for classifying plants and animals based on specific characteristics.</p> <p>Key Vocabulary: Classification, Vertebrates, Invertebrates, Micro-organisms, Amphibians, Reptiles, Mammals, Insects</p>

Curriculum area	Year 3	Year 4	Year 5	Year 6
Evolution and Inheritance	See rocks			<p>recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago</p> <p>recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution</p> <p>Key vocabulary: Fossils, Adaptation, Evolution, Characteristics, Reproduction, Genetic</p>
Sound		<p>identify how sounds are made, associating some of them with something vibrating</p> <p>recognise that vibrations from sounds travel through a medium to the ear</p> <p>find patterns between the pitch of a sound and features of the object that produced it</p> <p>find patterns between the volume of a sound and the strength of the vibrations that produced it</p> <p>recognise that sounds get fainter as the distance from the sound source increases</p> <p>Key vocabulary: Volume, Vibration, Wave, Pitch, Tone, Speaker</p>		
Electricity		<p>identify common appliances that run on electricity</p> <p>construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <p>identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery</p> <p>recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p> <p>recognise some common conductors and insulators, and associate metals with being good conductors</p> <p>Key vocabulary: cells, Wires, Bulbs, Switches, Buzzers, Battery, Circuit, Series, Conductors, Insulators</p>		<p>associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit</p> <p>compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches</p> <p>use recognised symbols when representing a simple circuit in a diagram.</p> <p>Key vocabulary: cells, Wires, Bulbs, Switches, Buzzers, Battery, Circuit, Series, Conductors, Insulators, Amps, Volts, Cell</p>

Curriculum area	Year 3	Year 4	Year 5	Year 6
Earth and Space			<p>describe the movement of the Earth, and other planets, relative to the Sun in the solar system</p> <p>describe the movement of the Moon relative to the Earth</p> <p>describe the Sun, Earth and Moon as approximately spherical bodies</p> <p>use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky</p> <p>Key Vocabulary: Earth, Sun, Moon, Axis, Rotation, Day, Night, Phases of the Moon, star, constellation</p>	
Properties and Changes of Materials		See states of matter	<p>compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets</p> <p>know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</p> <p>use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</p> <p>give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</p> <p>explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p> <p>demonstrate that dissolving, mixing and changes of state are reversible changes</p> <p>Key Vocabulary: hardness, Solubility, Transparency, Conductivity, Magnetic, Filter, Evaporation, Dissolving, Mixing</p>	

Year 3 Working Scientifically

Planning	Obtaining and presenting evidence	Considering evidence and evaluating	Types of investigations
<p>Can they use different ideas and suggest how to find something out?</p> <p>Can they make and record a prediction before testing?</p> <p>Can they plan a fair test and explain why it was fair?</p> <p>Can they set up a simple fair test to make comparisons?</p> <p>Can they explain why they need to collect</p>	<p>Can they take accurate measurements using different equipment and units of measure?</p> <p>Can they record their observations in different ways? - labelled diagrams, charts etc.</p> <p>Can they describe what they have found using scientific language?</p>	<p>Can they explain what they have found out and use their measurements to say whether it helps to answer their question?</p>	<p>Children should have the opportunity to investigate</p> <p>Observing changes over different periods of time</p> <p>Noticing patterns</p> <p>Grouping and classifying</p> <p>Carrying out comparative and fair tests</p> <p>Finding things out using secondary resources</p>

Possible greater depth activities

<p>Can they record and present what they have found using scientific language, drawings, labelled diagrams, bar charts and tables?</p>	<p>Can they explain their findings in different ways (display, presentation, and writing)?</p> <p>Can they use their findings to draw a simple conclusion?</p> <p>Can they suggest improvements</p>	<p>Can they suggest how to improve their work if they did it again?</p>		
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Year 4 Working Scientifically

Planning	Obtaining and presenting evidence	Considering evidence and evaluating	Types of investigations
<p>Can they plan and set up a fair test and isolate variables, explaining why it was fair and which variables have been isolated?</p> <p>Can they suggest improvements and predictions?</p> <p>Can they ask their own questions?</p> <p>Can they decide which information needs to be collected and decide what the best way to collect it is?</p> <p>Can they use their findings to draw a simple conclusion?</p>	<p>Can they take measurements using different equipment and units of measure and record what they have found in a range of ways?</p> <p>Can they use a range scientific equipment's to take accurate measurements or readings?</p> <p>Can they explain their findings in different ways (display, presentation, writing)?</p> <p>Can they record data using diagrams, labels, classification keys, tables, scatter graphs, bar graphs and line graphs?</p>	<p>Can they find any patterns in their evidence or measurements?</p> <p>Can they evaluate and communicate their methods and findings?</p> <p>Can they make a prediction based on something they have found out?</p> <p>Can they ask further questions based on their data and observations?</p> <p>Can they evaluate what they have found using scientific language, drawings, labelled diagrams, bar charts and tables?</p> <p>Can they identify differences, similarities or changes related to simple scientific ideas or</p>	<p>Observing changes over different periods of time</p> <p>Noticing patterns</p> <p>Grouping and classifying</p> <p>Carrying out comparative and fair tests</p> <p>Finding things out using secondary resources.</p>
Possible greater depth activities			
<p>Can they plan and carry out an investigation by controlling variables fairly and accurately?</p> <p>Can they use test results to make further predictions and set up further comparative</p>	<p>Can they record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models?</p>	<p>Can they report findings from investigations through written explanations and conclusions?</p> <p>Can they use a graph or diagram to answer scientific questions?</p>	<p>Can they use a range of variables to investigate?</p>

Year 5 Working Scientifically

Planning	Obtaining and presenting evidence	Considering evidence and evaluating	Types of investigations
<p>Can they plan and carry out a scientific enquiry to answer questions, including recognising and controlling variables where necessary?</p> <p>Can they make a prediction with reasons?</p> <p>Can they use test results to make predictions to set up comparative and fair tests?</p>	<p>Can they take measurements using a range of scientific equipment with increasing accuracy and precision?</p> <p>Can they take repeat readings when appropriate?</p> <p>Can they record more complex data and results using scientific diagrams, labels, classification keys, table, scatter graphs,</p>	<p>Can they use a graph to answer scientific questions?</p> <p>Can they present a report of their findings through writing, display and presentation?</p>	
Possible greater depth activities			
<p>Can they explore different ways to test an idea, choose the best way and give reasons?</p> <p>Can they vary one factor whilst keeping the others the same in an experiment?</p> <p>Can they use information to help make a prediction?</p> <p>Can they explain, in simple terms, a scien-</p>	<p>Can they decide which units of measurement they need to use?</p> <p>Can they explain why a measurement needs to be repeated?</p>	<p>Can they find a pattern from their data and explain what it shows?</p> <p>Can they link what they have found out to other science?</p> <p>Can they suggest how to improve their work and say why they think this?</p>	

Year 6 Working Scientifically

Planning	Obtaining and presenting evidence	Considering evidence and evaluating	Types of investigations
<p>Can they explore different ways to test an idea, choose the best way, and give reasons?</p> <p>Can they identify the key factors when planning a fair test?</p> <p>Can they vary one factor whilst keeping the others the same in an experiment? Can they explain why they do this?</p> <p>Can they use information to make a prediction and give reasons for it?</p> <p>Can they use test results to make further predictions and set up further comparative tests?</p> <p>Can they explain, in simple terms, a scientific idea and what evidence supports it?</p>	<p>Can they explain why they have chosen specific equipment? (Including ICT based equipment)</p> <p>Can they decide which units of measurement they need to use?</p> <p>Can they make precise measurements?</p> <p>Can they explain why a measurement needs to be repeated?</p> <p>Can they record their measurements in different ways? (including bar charts, tables and line graphs)</p> <p>Can they read and record measurements systematically using a range of scientific equipment with increasing accuracy and precision?</p> <p>Can they present a report of their findings through writing, display and presentation?</p>	<p>Can they find a pattern from their data and explain what it shows?</p> <p>Can they use a graph to answer scientific questions?</p> <p>Can they link what they have found out to other science?</p> <p>Can they suggest how to improve their work and say why they think this?</p> <p>Can they record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models?</p> <p>Can they draw conclusions from their work?</p> <p>Can they report findings from investigations through written explanations and conclusions using appropriate scientific</p>	<p>Children should have the opportunity to investigate through:</p> <p>Recognising and controlling variables accurately and fairly, including changes over different periods of time</p> <p>Noticing patterns, groupings and classifying</p> <p>Carrying out comparative and fair tests</p> <p>Finding things out using a wide range of secondary sources.</p>
Possible greater depth activities			
<p>Can they choose the best way to answer a question and use information from different sources to plan an investigation?</p> <p>Can they make a prediction which links with other scientific knowledge?</p>	<p>Can they plan which equipment they will need and use it effectively?</p> <p>Can they explain qualitative and quantitative data?</p>	<p>Can they identify scientific evidence that has been used to support or to refute ideas or arguments and link their conclusions to it?</p> <p>Can they explain how they could improve their way of working?</p> <p>Can they 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?</p> <p>Can they choose the best way to answer a question and use information from different sources to plan an investigation?</p> <p>Can they make a prediction which links with other scientific knowledge?</p>	

Science & Story Links - Light

Story	Suitable for	Possible Questions to Investigate
The Dark—Lemony Snickett	KS2	Does The Dark really behave like it does in the story?
The Gruffalo's Child—Julia Donaldson	EYFS, KS1, KS2	How could the mouse make his shadow even bigger/smaller? How could the mouse change the shape of his shadow?
Can't You Sleep Little Bear? - Martin Waddell	EYFS, KS1	What could little bear use to make it brighter in the cave?
The Owl Who Was Afraid of the Dark	KS1, KS2	Can owls see in the dark? If not, how do they hunt? What is 'dark'? Can you explain why Plop needn't be afraid?
Goodnight Mr Tom—Michelle Morgan	KS2	Which material will be best to blackout our windows?
Blackout—John Rocco	EYFS, KS1	What light can we find at night? What if we didn't have electric lights at school?
The Game in the Dark—Herve Tullet	EYFS, KS1, KS2	How are shadows formed? How can we change the shape/size of shadows? Which materials would be best for a book like this that casts shadows?

Other Related Stories:

Keesha's Bright Idea—Eleanor May

The Firework Maker's Daughter—Philip Pullman

The Darkest Dark—Chris Hadfield

Orion and the Dark—Emma Yarlett

Science & Story Links - Forces



Story	Suitable for	Possible Questions to Investigate
Up and Down—Oliver Jeffers	EYFS, KS1, KS2	Do all things that go up come down? Why can some birds fly and some can't? Can animals other than birds fly? How does a bird's wing shape affect how it flies?
Old Bear—Jane Hissey	KS2	Which material is best for a parachute for a teddy?
Stuck—Oliver Jeffers	EYFS	Something is stuck in a tree in our outdoor area! How can we get it down?
The Lighthouse Keeper's Lunch — Ronda & David Armitage	KS2	Can we create a pulley system to get lunch to the lighthouse keeper?
The Tin Snail—Cameron McAlist	KS1, KS2	Can we create a vehicle that will shield its passengers from bumps in the road? How strong is an eggshell? What is the best container to transport eggs in to prevent them from breaking?
Act Normal, Don't Tell Anyone about the Rhinoceros Magnet—Christian Darkin	EYFS	Which materials are attracted to magnets? Are rhinoceroses attracted to magnets?

Science & Story Links - Sound



Story	Suitable for	Possible Questions to Investigate
Peace at Last—Jill Murphy	EYFS, KS1, KS2	What sounds can we hear in the classroom? In the outdoor area? In the dinner hall? What would be the best material for some ear muffs for Mr Bear?
What the Ladybird Heard—Julia Donaldson	EYFS, KS1, KS2	Can you hear where sounds are coming from? Which are the clearest sounds over distance?
Polar Bear, Polar Bear, What do you Hear? - Eric Carle	EYFS	What sounds do different animals make? What animals would you find in a polar environment?
Moonbird—Joyce Dunbar	KS1	What if we didn't have our sense of hearing?
What the Jackdaw Saw—Julia Donaldson	EYFS, KS1, KS2	How can we communicate without sound? Do all animals communicate with sound?

Other Related Stories:

Horrid Henry Rocks— Francesca Simon

Little Beaver and the Echo—Amy Macdonald

The Sound of Silence—Katrina Goldasito & Julia Kuo

Zin! Zin! Zin! A Violin! - Llyod Moss

Science & Story Links - Space

Story	Suitable for	Possible Questions to Investigate
Hidden Figures—Margot Shetterly	KS2	How many people does it take to get one person to the Moon? What jobs are involved in space exploration?
Whatever Next! - Jill Murphy	EYFS, KS1	What would you need to pack for a trip to the Moon? What are spacesuits made out of?
The Darkest Dark—Chris Hadfield	KS2	Is it dark in space?
Curiosity, the Story of a Mars Rover—Markus Motum	KS2	Can we design a shock-absorbing system that will allow a Mars Rover to land undamaged on the surface of Mars?
Bob, Man on the Moon—Simon Bartram	KS1, KS2	What does the surface of the Moon look like? Why are there craters on the Moon? How are craters formed? How does the size of a meteorite affect the size/shape/depth of a crater?
Dinosaurs and All That Rubbish—Michael Foreman	KS2	Can any of the other planets in our solar system support life?

Other Related Stories:

Space Tortoise—Ross Montgomery

Fortunately the Milk—Neil Gaiman

I Love You, Michael Collins—Lauren Baratz-Logstead

Margaret and the Moon—Dean Robbins

George's Secret Key to the Universe—Lucy & Stephen Hawking

Science & Story Links - Life Cycles

Story	Suitable for	Possible Questions to Investigate
Tadpole's Promise—Jeanne Willis & Tony Ross	KS1, KS2	What are the similarities and differences in the life cycles of a frog and a butterfly? What other insects go through metamorphosis?
Monkey Puzzle—Julia Donaldson	EYFS, KS1	Do all baby animals look like their mothers? How do different animals change as they grow?
The Very Hungry Caterpillar—Eric Carle	EYFS, KS1, KS2	How do caterpillars change over time? What do caterpillars eat? Is there a link between the size of a caterpillar and the size of the butterfly it turns into?
Cicada—Shaun Tan	KS2	How is a real cicada's life cycle similar/different to the one in the story?
The Boy in the Tower—Polly Ho-Yen	KS2	How do different plants reproduce? Which plants reproduce using spores?
Other Related Stories:		
The Tiny Seed—Eric Carle		
Ten Munching, Crunching Caterpillars—Sheridan Cain		
Once There Were Giants—Martin Waddell		
Tad—Benji Davis		

Science & Story Links - Rocks, Fossils & Soils

Story	Suitable for	Possible Questions to Investigate
A Pebble in My Pocket—Meredith Hooper	KS2	What clues can we see in our rocks of the journey they have been on? How can we group and sort our collection of rocks?
Pebble: A Story about Belonging—Susan Milord	KS2	What makes one rock different from another? Which rock is the odd one out and why?
Other Related Stories:		
Stone Girl, Bone Girl—Laurence Anholt		
Dinosaurs and All That Rubbish—Michael Foreman		



Science & Story Links - Habitats

Story	Suitable for	Possible Questions to Investigate
Lost and Found—Oliver Jeffers	EYFS, KS1, KS2	What animals live in a polar climate? How do animals survive in very cold places? Do all penguins live in cold places? How are those that don't adapted to their environment differently to those in very cold places?
Meerkat Mail—Emily Gravett	KS2	Which habitats would be suitable for meerkats to live in if they lost their home?
The Night Flower—Lara Hawthorne	KS2	Are plants/flowers different shapes during the night and the day? How does the shape/position of a flower change over the course of a day?
Other Related Stories:		
Dear Greenpeace—Simon James		
Dinosaurs and All That Rubbish—Michael Foreman		
The Great Kapok Tree—Lynne Cherry		

Science & Story Links - Plants

Story	Suitable for	Possible Questions to Investigate
The Tiny Seed—Eric Carle	EYFS, KS2	Do all seeds look the same? How can we sort them? How are seeds dispersed? What is the most effective shape for a seed that is dispersed by wind?
Jasper's Beanstalk—Nick Butterworth	EYFS, KS1	How fast do plants grow? Do all plants grow at the same speed? What affects the speed at which plants grow?
The Night Flower—Lara Hawthorne	KS2	Are plants/flowers different shapes during the night and the day? How does the shape/position of a flower change over the course of a day?
The Owl Tree—Jenny Nimmo	KS2	How many different animals live in/obtain food from a single tree? Do different kinds of tree house different kinds of animals?
A Seed is Sleepy—Dianna Aston & Sylvia Long	KS1, KS2	What is inside a seed/bulb? Do smaller seeds germinate and grow more slowly?
Other Related Stories:		
Bloom—Nicola Skinner		
Under the Canopy—Iris Volant		

Science & Story Links - Animal Classification

Story	Suitable for	Possible Questions to Investigate
What the Ladybird Heard—Julia Donaldson	EYFS	Can we identify an animal just by hearing the noise it makes? How can we sort & group farmyard animals?
Giraffes Can't Dance—Giles Andreae	EYFS, KS1	How do different animals move? How does this help them catch food/avoid predators?
The Gruffalo—Julia Donaldson	KS1, KS2	How could we classify the animals in the story? How could we classify the Gruffalo?
Beetle Boy—M G Leonard	KS2	How could we classify the small creatures living in our outdoor area? Could we create a classification key to help others identify them?



Science & Story Links—Evolution & Adaptation

Story	Suitable for	Possible Questions to Investigate
Moth—Isabel Thomas	KS2	What coloured moths would be best camouflaged in our school environment?
The Molliebird—Jules Pottle & Rufus Thomas	KS2	From how far can we see differently coloured things on our playground? On the grass?
Giraffes Can't Dance—Giles Andreae	KS2	Which animals use courtship displays to attract a mate?
Lost & Found—Oliver Jeffers	KS2	Do all penguins live in cold places? How are different kinds of penguin suited to different habitats?
Other Related Stories:		
One Smart Fish—Chris Wormell		
The Arrival—Shaun Tan		
Dogs—Emily Gravett		
What Mr Darwin Saw—Mick Manning		

Science & Story Links - Properties & Changes of Materials 1

Story	Suitable for	Possible Questions to Investigate
Little Lumpty—Miko Imai	EYFS, KS1, KS2	Which material will be best to catch a falling egg? How far can an egg fall without breaking? Is an egg more likely to break if it falls on its side or its head?
Santa is Coming to Leeds—Steve Smallman (other cities available)	EYFS, KS1	It's very rainy in Leeds! Which material will be best to cover the presents on Santa's sleigh to stop them getting wet?
NoBot—Sue Hendra	EYFS, KS1, KS2	Which material will be the best to stick Bernard the robot's bottom back on?
Hansel and Gretel—Bethan Woollvin	EYFS, KS1, KS2	Willow the witch needs to build a new house after the horrible children ate it. Which chocolate bar/biscuit will be the best to build with?
Aliens Love Underpants—Claire Freedman	KS1, KS2	Which underpants have the best pingy pants elastic for catapulting aliens around?
The Haunted House—Kazuno Kohara	EYFS, KS2	The little witch has found some more ghosts! Where will be the best place to put them after washing so that they dry quickly?
Lost & Found—Oliver Jeffers	EYFS, KS1	Which material(s) will be best to make a boat to transport a penguin back to the Sout Pole?

Science & Story Links - Properties & Changes of Materials 2

Story	Suitable for	Possible Questions to Investigate
Supertato—Sue Hendra	EYFS	The Evil Pea has frozen some carrots in blocks of ice! What is the quickest way to melt the ice and free them?
Stick Dog Dreams of Ice Cream—Tom Watson	KS2	Which material will be best to keep our ice cream solid?
Other Related Stories:		
George's Marvellous Medicine — Roald Dahl		
Charlie and the Chocolate Factory—Roald Dahl		
The Three Little Wolves and the Big Bad Pig—Eugene Trivisas		
Itch—Simon Mayo		



