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	All About Me	Under the Sea/Arctic	Transport Forces	Space	Animals and minibeasts	Traditional Tales (Materials and how the change)
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Key Vocabulary	Model and encourage children to use vocabulary such as: hair (black, brown, dark, light, blonde, ginger, grey, white, long, short, straight, curly), eyes (blue, brown, green, grey), skin (black, brown, white), big/tall, small/short, bigger/smaller, baby, toddler, child, adult, old person, old, young, brother, sister, mother, father, aunt, uncle, grandmother, grandfather, cousin, friend, family, boy, girl, man, woman Expose children to supplementary vocabulary such as: bald, elderly, wrinkles, male, female, freckles	Model and encourage children to use vocabulary such as: names of animals, live, on land, in water, jungle, desert, North Pole, South Pole, sea, hot, cold, wet, dry, snow, ice Expose children to supplementary vocabulary such as: environment, polar regions, ocean, camouflage	Model and encourage children to use vocabulary such as: float, sink, up, down, top, bottom, surface, move, roll, drop, fly, turn, spin, fall, fast, slow, faster, slower, fastest, slowest, further, furthest, wind, air, water, blow, bounce Expose children to supplementary vocabulary such as: force, rotate, solid, liquid, gravity	Model and encourage children to use vocabulary such as: Sun, Moon, Earth, star, planet, sky, day, night, space, round, bounce, float Expose children to supplementary vocabulary such as: sunrise, sunset, astronaut, astronomer, constellation, orbit, nocturnal, slow-motion, magnify	Model and encourage children to use vocabulary such as: plant, tree, bush, flower, vegetable, herb, weed, animal, names of plants and animals they see, name of a contrasting environment e.g. beach, forest Expose children to supplementary vocabulary such as: environment	Model and encourage children to use vocabulary such as: ice, water, frozen, icicle, snow, melt, wet, cold, slippery, smooth, big, bigger, biggest, smaller, smaller, smallest, hard, soft, bendy, rigid, wood, plastic, paper, card, metal, strong, weak, hot, apply heat, waterproof, soggy, not waterproof, best, change, change back Expose children to supplementary vocabulary such as: solid, liquid, gas, most suited

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Previous Knowledge	• Use all their senses in hands-on exploration of natural materials. (Nursery) • Begin to make sense of their own life-story and family's history. (Nursery) • Understand the key features of the life cycle of a plant and an animal. (Nursery) • Begin to understand the need to respect and care for the natural environment and all living things. (Nursery)	• Understand the key features of the life cycle of a plant and an animal. (Nursery) • Begin to understand the need to respect and care for the natural environment and all living things. (Nursery)	• Explore how things work. (Nursery) • Explore and talk about different forces they can feel. (Nursery) • Talk about the differences between materials and changes they notice. (Nursery)	• Explore and respond to different natural phenomena in their setting and on trips. (Birth to three)	• Use all their senses in hands-on exploration of natural materials. • Explore collections of materials with similar and/or different properties. • Begin to understand the need to respect and care for the natural environment and all living things.	• Use all their senses in hands-on exploration of natural materials. (Nursery) • Explore collections of materials with similar and/or different properties. (Nursery) • Talk about the differences between materials and changes they notice. (Nursery)
Future Learning	• Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. (Y1 – Animals, including humans)	• Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. (Y1 – Animals, including humans) • Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Y1 – Animals, including humans) • Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). (Y1 – Animals, including humans)	• Compare how things move on different surfaces. (Y3 – Forces and magnets) Observe how magnets attract or repel each other and attract some materials and not others. (Y3 – Forces and magnets) • 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. (Y3 – Forces and magnets) • Describe magnets as having two poles. (Y3 – Forces and magnets) • Predict whether two magnets will attract or repel each other, depending on which	• Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. (Y5 – Earth and space) • Describe the movement of the Moon relative to the Earth. (Y5 – Earth and space) • Describe the Sun, Earth and Moon as approximately spherical bodies. (Y5 – Earth and space) • Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky. (Y5 – Earth and space)	• Explore and compare the differences between things that are living, dead, and things that have never been alive. (Y2 – Living things in their habitat) • Identify and animals in their habitats, including microhabitats. (Y2 – Living things in their habitat)	• Distinguish between an object and the material from which it is made. (Y1 – Everyday materials) • Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. (Y1 – Everyday materials) • Describe the simple physical properties of a variety of everyday materials. (Y1 – Everyday materials) • Compare and group together a variety of everyday materials on the basis of their simple physical properties. (Y1 – Everyday materials)

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			poles are facing. (Y3 – Forces and magnets) • Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. (Y5 – Forces) • Identify the effects of air resistance, water resistance and friction, that act between moving surfaces. (Y5 – Forces)			
Key Objectives	• Talk about members of their immediate family and community. • Name and describe people who are familiar to them.	• Recognise some environments that are different to the one in which they live	• Explore the natural world around them. • Describe what they see, hear and feel whilst outside.	• Explore the natural world around them • Describe what they see, hear and feel whilst outside.	• Draw information from a simple map. • Explore the natural world around them. • Describe what they see, hear and feel whilst outside. • Recognise some environments that are different to the one in which they live.	• Explore the natural world around them. • Describe what they see, hear and feel whilst outside.
Misconceptions	Some children may think: • sons look like their fathers and daughters look like	Some children may think: • animals are furry and have four legs • a bee is not an animal because it is an insect	Some children may think: • all light objects float and all heavy objects sink objects made of the same material will always float or sink.	Some children may think: • the Earth is flat • the Moon and Sun are discs		Some children may think: • material only means fabric • all plastic/wood etc. is the same.

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	their mothers.	• animals adapt to their surroundings, e.g. a brown bear turns white and becomes a polar bear • animals living in the soil breathe by coming to the surface dragons and other mythical creatures are real animals		• stars are a pointed 'star' shape • the Moon appears only at night • at night, the Sun is turned off • at night, the Sun goes behind the clouds.		
Key knowledge to be assessed	• Can describe themselves, family, friends and community • Can create pictures of themselves, family, friends and community and identify their distinguishing features. • Can talk about what they see when using a mirror. • Can compare hand, foot and fingerprints and talk about how they are different. • Can talk about how they look after themselves and how other people look after them.	• Children ask questions, make observations and talk about what they have found out about: • Children can name and describe animals that live in different habitats. Can describe different habitats.	• Can talk about how they changed objects to make them float or sink. • Can talk about how they changed how cars move down ramps or gutters. • Can talk about how they changed how wheels turn when sand or water is poured through them. • Can talk about how they changed how balls bounce. • Can compare how different boats and aeroplanes performed. • Can describe how objects fall with and without a parachute. • Can describe how a marble moves through different liquids.	• Can identify the Sun, Moon and stars and talk about how they are different from Earth. • Can identify differences between day and night. • Can talk about animals that are active at night. • Can talk about some differences between being on Earth and travelling in space.	• Can name and describe plants and animals in the school grounds and their environment. • Children do not damage the living things they encounter in the natural environment.	• Can name the material they are using and why. • Can talk about multiple properties of the material and why it is suited for its purpose. • Can observe changes in their natural world and say why it is different now or will change in the future. • Can compare and describe how materials change over time and in different conditions.

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What adults can do	• Encourage children to look at photographs of different people and to describe them. • Encourage children to describe their friends and family using photographs to help them. • Encourage children to talk about how their friends and family are the same and different. • Encourage children to compare themselves to characters in books • Encourage children to compare their hand, foot and fingerprints with their friends. • Encourage children to talk about the people who look after them, both within their family and the wider community e.g. teachers, doctors, dentists etc. • Encourage children to ask a dentist, nurse, meal supervisor/school cook, road crossing supervisor etc. questions.	• Encourage children to name and describe animals that live in different habitats while reading books, watching videos, looking at pictures or playing matching games. • Encourage children to ask questions about different animals and the habitats they live in. • Encourage children to describe habitats. • Encourage children to talk about how animals are cared for when they live outside their natural habitat. • Encourage children to move like different animals.	• Encourage children to talk about how they changed objects to make them float or sink. • Encourage children to count and record how small objects different 'boats' can hold before they sink. • Encourage children to talk about how they changed how the cars rolled down ramps/gutters. • Encourage children to talk about what happened when they poured sand/water through wheels and down gutters and how they changed this. • Encourage children to compare how objects fall, including with or without parachutes. • Encourage children to explore and talk about how they changed how different balls bounced.	• Encourage children to safely observe changes in the sky at different times of the day. • Support children to link changes in the sky to other observations e.g., changes in temperature and brightness. • Encourage children to observe the evening/night sky with their family. • Model asking questions about space and space travel. • Encourage children to ask questions about space and space travel. • Encourage children to move as if they were in space or on the Moon. • Encourage children to use observations from books and video clips when painting their model planets. • Encourage children to talk about how binoculars or a telescope make distant objects appear larger and closer. • Encourage children to sort animals by when they are active. • Support children to decide criteria for the 'best' rocket. • Support children to describe the	• Ensure children are careful when observing minibeasts and return them to where they found them. • Encourage children to talk about the minibeasts they find. • Support children to name the minibeasts they find. •	• Encourage children to talk about the natural materials they explore, using their senses. • Encourage children to talk about the materials they are using when making pictures. • Encourage children to choose from a range of materials, including natural materials, when making models and identify a key property that was required. • Encourage children to reuse materials and talk about what can be recycled to care for the natural world. • Support children to list the properties the material has. • Encourage children to test that their model is fit for purpose and that the materials are suitable. • Encourage children to compare and describe how materials change over time and in different conditions.

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			• Encourage children to make different aeroplanes and compare how far they fly by marking where they land. • Encourage children to describe how sand or water moves down pipes or gutters, or marbles travel down a marble run, and how they changed this. • Encourage children to notice and talk about the objects in the playground that are moved by the wind. • Encourage children to explore and talk about what they observe when turning bottles filled with different liquids and a marble upside down. • Encourage children to ask questions about forces, such as "What happens if I …"	movements of astronauts.		

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Enrichment/Role Play	Opportunities in the role-play corner to show how people take care of them • Doctor •Nurse •Dentist •Optician • *Visit from someone who helps us*	Opportunities in the role play area • Zookeeper • Safari centre • Aquarium • Explorer/Naturalist	Opportunities in the role play area • Boat builder • Aircraft engineer • Rocket designer • Engineer	Opportunities in the role-play corner to learn about space • Astronomer • Astronaut on a space station or rocket • Rocket designer	Opportunities in the role play area • Entomologist • Ecologist • Environmentalist • Environmental scientist • Beekeeper *Visit Harlow Carr* • *Visit from Lion Learners*	Opportunities in the role play area • Builder • Architect • Structural engineer • *Den building day*
Cross Curricular links/Texts	I Love My Hair by Natasha Anastasia Tarpley What I Like About Me by Alia Zobel-Nolan	Lost and Found by Oliver Jeffers Shark in the Park by Nick Sharratt One Day on our Blue Planet: In the Antarctic by Ella Bailey Poles Apart by Jeanne Willis Bears by Sally Morgan Usborne Beginners Bears by Helen Helbrough	Mr Gumpy's Outing by John Burningham Mr Archimedes' Bath by Pamela Allen Who sank the boat? by Pamela Allen Stickman by Julia Donaldson Flotsam by David Wiesner Blown Away by Rob Biddulph	Whatever Next! by Jill Murphy Astro Girl by Ken Wilson-Max Look Up! by Nathan Bryon How to Catch a Star by Oliver Jeffers Owl Babies by Martin Waddell	Incey, Wincey Spider Ladybird, Ladybird Fly Away Home Bad-Tempered Ladybird by Eric Carle Mad About Minibeasts by David Wojtowycz & Giles Andreae Ben Plants a Butterfly Garden by Kate Petty Norman the Slug with the Silly Shell by Sue Hendra Aargh a Spider by Lydia Monks Insects: A Close-up Look by Peter Seymour We're Going on a Bear Hunt by Michael Rosen and Helen Oxenbury	*Traditional Tales*
Working scientifically opportunities	**Classification** • Sort images of people according to their characteristics. **Researching using secondary sources** • Find out information from visitors (dentist, nurse etc.). **Pattern seeking** • Are taller children faster? Are taller children stronger?	**Classification** • Sort animals according to where they live. **Researching using secondary sources** • Learn how animals from a different habitat are cared for. • Learn about animals in a different habitat. **Comparative testing** • How quickly do ice cubes melt in different areas of the playground?	**Comparative testing** • How many cubes/small plastic animals can fit in different 'boats' • Compare how cars move down ramps/gutters. • Compare how wheels turn when sand or	**Comparative testing** • Make and testing air-propelled rockets to find out which is the 'best'. **Pattern seeking** • Find simple patterns in how light levels and temperature change with the movement, or obscuring of, the Sun. Research using secondary sources	**Classification** • Name and describe animals they find in the school grounds. **Pattern seeking** Look for minibeasts in different areas of the school grounds.	**Comparative testing** • How are pizza bases different when made with different flours? • How does a loaf cook differently in different tins? • How do cupcakes cook if they have different amounts of mixture? Observing over time • How does cake mixture/bread dough change as it is cooked?

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		• How does the block of ice change over time? • How does a snowman change over time?	water is poured through. • Compare how objects fall. • Compare how objects fall with and without parachutes. • Compare how different balls bounce. • Compare how things move when blown.	• Find out about the Solar System, stars and space travel. Find out about nocturnal animals.		• Who can build the tallest tower? • Which material is the strongest? **Classification** Sort materials using simple properties.

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