

Science Progression of Knowledge and Skills Document

<u>Subject Area</u>	<u>Concept/Aspect</u>	<u>Nursery</u>	<u>Reception</u>	<u>Year 1</u>	<u>Year 2</u>
Humankind	Human Body	Skill Identify some of the different body parts from pictures. Broad Knowledge -The basic body parts are the head, arms, legs, nose, eyes, ears, mouth, hands and feet.	Skill Draw pictures of the human body and name some of the different body parts. Broad Knowledge -The basic body parts are the head, arms, legs, nose, eyes, ears, mouth, hands and feet. Different body parts are used for different things, such as the eyes are used to see.	Skill Draw and label the main parts of the human body and say which body part is associated with which sense. Core Knowledge -The basic body parts are the head, arms, legs, nose, eyes, ears, mouth, hands and feet. Skill Explore the five senses and the body parts associated with them. Core Knowledge -The five senses are hearing, sight, smell, taste and touch. Ears are used for hearing. Eyes are used to see. The nose is used to smell. The tongue is used to taste. The skin gives the sense of touch.	Skill Describe the stages of human development (baby, toddler, child, teenager, adult and elderly). Core Knowledge -Humans grow from baby to toddler to child to teenager to adult to elderly.
	Staying Safe	Skill Follow simple rules with the help of an adult. Broad Knowledge -It is important to listen to adults and follow simple rules to stay safe.	Skill Follow instructions when in different environments and when handling simple equipment, such as scissors. Core Knowledge -Plants need air, sunlight, warmth, water and nutrients from soil to grow.	Skill Describe ways to stay safe in some familiar situations. Core Knowledge -Ways to stay safe include: using sun cream and wearing a hat in the Sun; stopping, looking and listening when crossing the road; not touching sharp or hot objects; only eating or drinking what you know or have been given by an adult you trust.	Skill Describe what humans need to survive. Core Knowledge -Humans need water, food, air and shelter to survive.

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				Using sun cream and wearing a hat helps you to stay safe in the Sun.	
	Healthy Lifestyle	Skill Wash and dry hands after going to the toilet and before eating. Broad Knowledge -Washing their hands after going to the toilet and before eating helps people to stay healthy.	Skill Wash and dry hands regularly and say why this is important. Core Knowledge -It is important to wash and dry our hands after using the toilet and before eating to stop the spread of harmful germs. -It is important to wash our hands to stop the spread of germs.	Skill Explain why hand washing and cleanliness are important. Core Knowledge -Hand washing and good hygiene prevent the spread of germs.	Skill Describe the importance of a healthy lifestyle, including exercise, a balanced diet, good quality sleep and personal hygiene. Core Knowledge -A healthy lifestyle includes exercise, a balanced diet, good quality sleep and personal hygiene. -Germs spread from person to person through direct or indirect contact. -Risks associated with an unhealthy lifestyle include illness, obesity, tooth decay and mental health problems. -Germs are microorganisms that can cause illness in humans. -Germs get into the body through the eyes, nose or mouth. -Washing hands with soap and clean running water helps humans avoid getting ill and spreading germs to others.
Processes	Pattern Seeking	Skill Talk about the weather as being warm or cold. Broad Knowledge -The weather is colder in winter and warmer in summer.	Skill Notice and begin to describe patterns of weather in summer and winter. Core Knowledge -The weather, plants and animals in the local environment, change throughout the year. -The weather and environment changes with the seasons.	Skill Observe changes across the four seasons. Core Knowledge -The four seasons are spring, summer, autumn and winter. -Certain events and weather patterns happen in different seasons.	Skill Describe typical UK seasonal weather patterns. Core Knowledge -The UK has typical weather in each of the seasons. For example, winter is cold and sometimes frosty, whereas summer is warm and sometimes sunny. -Many animals behave differently in different seasons in the UK. These

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					different behaviours, such as migration and hibernation, are linked to their life cycles, with spring often being the time for new offspring.
	Changes	Skill Talk about things they can do on winter evenings and things they can do on summer evenings and begin to notice the difference in day length. Core Knowledge The weather is colder in winter and sometimes it snows. In winter the evenings get darker earlier.	Skill Notice and talk about the differences in day length between the seasons. Board Knowledge -The number of daylight hours varies throughout the year, according to the season. The days are longer in summer and shorter in winter.	Skill Observe and describe how day length changes across the year. Core Knowledge -Day length is the number of hours of daylight. -Day length is longer in the summer months and shorter in the winter months in the UK.	Skill Describe how some objects and materials can be changed and how these changes can be desirable or undesirable. Core Knowledge Some objects and materials can be changed by squashing, bending, twisting, stretching, heating, cooling, mixing and being left to decay.
	Earth	Skill Say what the daily weather is like. Core Knowledge The weather in spring can be rainy, windy, sunny warm or cold.	Skill Describe simply how weather changes as the seasons change. Core Knowledge -Winter is a season, is comes after Autumn. The weather is colder in winter with more snow, hail and rain. -Spring is a season. It comes after winter and before summer. -Spring weather is changeable. It can't be warm, cold, sunny, rainy and even snowy. -The weather and local environment changes with the seasons. -Spring weather is changeable. It can be warm, cold sunny rainy and even snowy.	Skill Observe and describe different types of weather. Core Knowledge Wind strength is measured by the Beaufort Scale. Different types of weather include sunshine, rain, hail, wind, snow, fog, lightning, storm and cloud. The weather can change daily and some weather types are more common in certain seasons, such as snow in winter.	Skill Describe features of Earth using words and pictures. Braod Knowledge The Earth is spherical and is covered in water and land. When it is daytime in one location, it is night time on the other side of the world.

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	Phenomena	Skill Notice and begin to describe natural phenomena, such as weather, rainbows and clouds. Core Knowledge	Skill Name and describe natural phenomena, such as the size of shadows, the colours of a rainbow, the speed of clouds moving across the sky and the strength of a wave. Core Knowledge Rain is drops of water that fall from clouds. A shadow is a dark shape that can be seen on a floor or wall. Shadows are made when a solid object blocks light.	Skill Explain in simple terms how shadows are formed. Board Knowledge -A shadow is formed when light from a light source, such as the Sun, is blocked by an opaque object, but not by transparent objects.	Skill Explain in simple terms how sounds are made. Broad Knowledge -When an instrument is played by plucking, striking or blowing, the air around or inside it vibrates. These vibrations travel as a sound wave to the ear.
	Modelling	Skill Play with and explore battery-powered toys and models. Core Knowledge -Machines need power to make them move or work. Some machines use batteries to make them work.	Skill Explore and describe electrical and non-electrical light sources. Core Knowledge -Dark is the absence of light. Batteries power some devices, such as torches and toys. -A battery is a store of electric power.	Skill Describe, following exploration, what simple electrical circuits can do. Broad Knowledge -Electrical circuits can light lamps or sound a buzzer. A switch turns an electrical circuit off and on.	Skill Make models with moving parts. Core Knowledge -Models can have moving parts that use levers, sliders, wheels and axles.
	Forces	Skill Talk about and play with objects that float and sink and describe different forces that they can feel. Core Knowledge -Some objects float and others sink.	Skill Describe, predict and sort things that float and sink and talk about the forces that they can feel. Broad Knowledge -Some objects float and others sink. When an object sinks it falls through water to the bottom of the	Skill Investigate weather using toys, models or simple equipment. Core Knowledge -Simple equipment can be used for measuring weather including	Skill Sort and group objects that float and sink. Core Knowledge -Some objects float and others sink.

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			vessel. An object that floats stays at the water's surface.	windsocks, thermometers and rain gauges.	
Creativity	Report and Conclude	Skill Begin to offer simple explanations for why things happen. Core Knowledge -Some leaves change colour in autumn and fall from the trees. -Some materials are shiny and others are not shiny. -When water freezes it becomes ice. When ice melts it becomes water again. -Bird eggs are laid by female birds.	Skill Represent scientific observations by mark making, drawing or creating simple charts and tables. Offer explanations for why things happen, making use of vocabulary, such as, because, then and next. Core Knowledge -Some dinosaurs ate plants and some dinosaurs ate other dinosaurs. -Plants draw up water through their roots and it travels through the stem to the leaves and petals. -Water turns to ice when the temperature is very cold. -Heat causes ice to melt. When ice melts it becomes water again. Plants need water, sunlight, air and warmth to grow.	Skill Talk about what they have done and say, with help, what they think they have found out. Core Knowledge -Results are information that has been found out from an investigation.	Skill Begin to notice patterns and relationships in their data and explain what they have done and found out using simple scientific language. Core Knowledge -Results from an investigation can be used to answer a question.
	Gather and Record Data	Skill Core Knowledge	Skill Record data in simple tables and pictograms. Broad Knowledge -Data can be recorded in tables and pictograms.	Skill With support, gather and record simple data in a range of ways (data tables, diagrams, Venn diagrams). Broad Knowledge -Data can be recorded and displayed in different ways, including tables, pictograms and drawings.	Skill Use a range of methods (tables, charts, diagrams and Venn diagrams) to gather and record simple data with some accuracy. Core Knowledge -A timeline is a linear diagram. -A life cycle is a circular diagram.

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Investigation	Questioning	Skill Ask or answer a simple scientific question. Core Knowledge -During the day there is sunlight. At night there is no sunlight so the sky is dark. -We can see our reflections in shiny surfaces.	Skill Ask a relevant scientific question to find out more, explain how things work and why they might happen. Core Knowledge -There is no sunlight at night so the sky is dark. -The stars and Moon are always in the sky but the Sun's bright light hides them in the daytime. -Living things including dinosaurs lived millions of years ago. -Dinosaur remains are called fossils. -Dinosaurs were living things that lived on Earth millions of years ago. They are now extinct. -Dinosaur means terrible lizard. -A volcano is a mountain with a large hole at the top. Lava comes out of the top of the volcano. -We can see our reflections in mirrors and other shiny surfaces. -Smooth, shiny surfaces reflect light. -Sound is created when something vibrates. -Bird eggs are laid by female birds. -Birds eggs are surrounded by a shell. -Animals including birds, fish, frogs and some reptiles lay eggs.	Skill Ask simple scientific questions. Core Knowledge -Question words include what, why, how, when, who and which.	Skill Ask and answer scientific questions about the world around them. Core Knowledge -Questions can help us find out about the world.
	Measurement	Skill Place two to three items in order based on length, height or capacity. Core Knowledge	Skill With support, use simple equipment, such as timers, rulers and containers, to measure length, height, capacity and time.	Skill With support, use simple equipment to measure and make observations. Broad Knowledge -Simple equipment is used to take measurements and observations.	Skill Use simple equipment to measure and make observations. Broad Knowledge -Simple equipment is used to take measurements and observations.

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			Broad Knowledge -Simple equipment can be used to measure distance, height, weight and time.	Examples include metre sticks, measuring tapes, egg timers and hand lenses.	Examples include timers, hand lenses, metre sticks and trundle wheel.
	Investigation	Skill Find different ways to do things when playing and exploring and use all their senses in hands on exploration of natural materials. Core Knowledge	Skill Observe how activities are going and adapt their ideas if necessary. Core Knowledge -Water turns to ice when the temperature is very cold. -Heat causes ice to melt. When ice melts it becomes water again.	Skill With support, follow instructions to perform simple tests and begin to talk about what they might do or what might happen. Core Knowledge -Simple tests can be carried out by following a set of instructions.	Skill Follow a set of instructions to perform a range of simple tests, making simple predictions for what might happen and suggesting ways to answer their questions. Core Knowledge -Tests can be carried out by following a set of instructions. *A prediction is a best guess at what might happen in an investigation.
	Observation	Skill Talk about some of the things that they have observed using simple scientific vocabulary. Core Knowledge -When water freezes it becomes ice. When ice melts it becomes water again. -Living things including dinosaurs lived millions of years ago. -Snails have soft bodies and a spiral shell. -There are lots of different animals. Some animals including fish, whales, sharks and dolphins live in the seas and oceans.	Skill With support, observe, record and talk about materials and living things. Core Knowledge -The weather and some plants and trees change with the seasons. In autumn, the weather starts to turn colder and some leaves change colour and fall from the trees. -Owls are nocturnal birds. They are awake during the night and sleep during the day. -Nocturnal animals are awake during the night and sleep in the daytime. -Some materials are waterproof, meaning water cannot pass through. Other materials are not	Skill Observe objects, materials, living things and changes over time, sorting and grouping them based on their features. Broad Knowledge -Objects, materials and living things can be looked at and compared.	Skill Observe objects, materials, living things and changes over time, sorting and grouping them based on their features and explaining their reasoning. Broad Knowledge -Objects, materials and living things can be looked at, compared and grouped according to their features.

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			waterproof, meaning the water can pass through. -Living things live in different habitats. -Gardens are habitats for many plants, trees and animals. -Butterflies are insects. They feed on nectar from flowers. -Materials have different textures they can feel soft, hard, rough, smooth, wet, sticky or dry. -We use our senses to explore the world. -Some plants produce seeds so that they can grow new plants. -Different types of animals grow to different lengths and heights. -Molluscs such as snails, clams and mussels have shells to protect them. -Animals live in different habitats. -Rock pools are habitats for many animals, such as starfish, crabs, anemones, mussels, barnacles and periwinkles. -Birds are animals that have beaks and feathers and lay eggs.		
Materials	Identification and Classification	Skill Explore and sort everyday items, with support, into groups of the same material. Core Knowledge -Some materials are shiny and others are not shiny. -We can see our reflections in shiny surfaces.	Skill Name and sort everyday items into groups of the same material. Core Knowledge -Shiny materials reflect light. -Soft materials bend easily. They are not hard or rough to touch. -Hard materials are difficult to bend break and cut.	Skill Identify and name what an object is made from, including wood, plastic, glass, metal, water and rock. Core Knowledge -A material is what an object is made from. -Everyday materials include wood, plastic, glass, metal, water, rock, brick, paper and fabric.	Skill Observe what happens when a range of everyday materials, including foods, are heated and cooled, sorting and grouping them based on their observations. Broad Knowledge -Some foods, such as ice and chocolate, melt when heated, but then harden (solidify or freeze) when cooled.

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	Properties and Uses	Skill Explore and talk about materials which are waterproof. Core Knowledge -Waterproof materials keep us dry.	Skill Identify that materials have different properties and explore and sort magnetic and non-magnetic materials through play and exploration. Core Knowledge -Some materials are magnetic, which means that they are attracted to (pull towards) a magnet. -Some metals are magnetic. Other materials are non-magnetic, such as wood, dough and glass.	Skill Investigate and describe the simple physical properties of some everyday materials, such as hard or soft; stretchy or stiff; rough or smooth; opaque or transparent; bendy or rigid and waterproof or not waterproof. Core Knowledge -Materials have different properties, such as hard or soft; stretchy or stiff; rough or smooth; opaque or transparent; bendy or rigid; waterproof or not waterproof.	Skill Compare the suitability of a range of everyday materials for particular uses, including wood, metal, plastic, glass, brick, rock, paper and cardboard. Core Knowledge -A material's physical properties make it suitable for particular purposes, such as glass for windows and brick for building walls. -Objects can be made from one material, more than one material or different materials with similar properties.
Nature	Identification and Classification	Skill Care for growing seeds and plants and describe observable features of different types of plants and trees. Core Knowledge -Plants need air, sunlight, warmth, water and soil to grow. -Plants need water, sunlight, air and warmth to grow. Skill Name a variety of domestic and wild animals. Core Knowledge -There are lots of different animals. Some animals such as rabbits, badgers and foxes live in a woodland.	Skill Begin to name and group plants and trees according to their observable features. Core Knowledge -Parts of a plant include the roots, stem, leaves, flowers and petals. Skill Match animals to their young. Core Knowledge -Animal babies are known by different names than adult animals, such as cow and calf or sheep and lamb. -Not all animal babies have the same features as their parents when they are born.	Skill Identify, compare, group and sort a variety of common wild and garden plants, including deciduous and evergreen trees, based on observable features. Core Knowledge -Plants are living things. -Trees are large, woody plants and are either evergreen or deciduous. Trees that lose their leaves in the autumn are called deciduous trees. -Plants are important because they provide food, shelter and materials for animals, including humans. The leaves of most deciduous trees are wide and flat. -The leaves of most evergreen trees are thin and pointed.	Skill Identify and name a variety of plants and animals in a range of habitats and microhabitats. Core Knowledge -A habitat is a place where plants and animals live. -A microhabitat is a very small habitat. -Invertebrates are animals without a backbone. -Invertebrates include worms, molluscs, crustaceans, insects, arachnids and myriapods. Skill Revise the Identification of a variety of common animals, including fish, amphibians, reptiles, birds,

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		-All animals have special features such as whiskers, paws, beaks, tails and wings. -Some animals including owls, foxes and bats are awake at night and sleep during the day. -There are places in the world where it is always cold and snowy. -Animal babies are known by different names than adult animals, such as cow and calf or sheep and lamb. -There are lots of different animals. Some animals including sea birds, crabs and starfish live at the sea shore. -There are lots of different animals. Some animals including starfish, crabs and limpets live in rock pools.		Skill Identify, compare, group and sort a variety of common animals, including fish, amphibians, reptiles, birds, invertebrates and mammals, based on observable features. Core Knowledge -Humans are living things. They belong to a group of animals called mammals. -Humans normally have the same body parts. -Humans look different from each other. -Animals are living things. -Fish, amphibians, reptiles, birds, invertebrates and mammals are groups of animals.	invertebrates and mammals, based on observable features. Core Knowledge -Humans are living things and a type of animal called a mammal that grows, changes, and has senses and body parts with specific functions. Skill Describe the basic life cycles of some familiar animals (egg, caterpillar, pupa, butterfly; egg, chick, chicken; spawn, tadpole, froglet, frog). Core Knowledge -Animals are born or hatch from eggs. The young grow and change until they become adults that can reproduce. -A life cycle can be drawn as a circular diagram.
	Parts and Functions	Skill Begin to talk about and draw plants with attention to their parts. Core Knowledge -Flowers have different parts including petals, stems and leaves. Skill Begin to talk about and name the body parts of common animals, including pets. Core Knowledge -Bats are animals that are awake during the night and sleep during the day.	Skill Name and describe basic features of plants and trees. Core Knowledge -A sunflower is a type of plant that usually has a very tall stem and a yellow flower with lots of long, thin, petals. -Plants need air, sunlight, warmth, water and nutrients from soil to grow. -Seeds need water, air and warmth to begin to grow. Skill Identify common features for different groups of animals,	Skill Label and describe the basic structure of a variety of common plants. Core Knowledge -The basic plant parts include root, stem, leaf, flower, petal and fruit. -Trees have a woody stem called a trunk. -Plants grow from seeds or bulbs. Skill Label and describe the basic structures of a variety of common animals, including fish, amphibians, reptiles, birds and mammals. Core Knowledge	Skill Describe how plants need water, light and a suitable temperature to grow and stay healthy. Core Knowledge -Plants need water, light and a suitable temperature to grow and stay healthy. -Many plants grow from seeds or bulbs. -Plants have roots, stems, leaves, flowers and fruit. -A bulb contains a tiny plant and all the food needed to grow.

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		-Paw is the name for an animal's foot. -Whiskers are the long hairs that grow out of an animal's face. -Birds grow feathers on their skin. -Reptiles including crocodiles and tortoises have scaly skin.	including wild and domestic animals. Core Knowledge -Animals live in different habitats. Animals such as rabbits, badgers and foxes live in a woodland habitat. -All animals have special features or ways of behaving that help them to survive. -Nocturnal animals including owls, foxes and bats are awake during the night and asleep during the day. -Dinosaurs were prehistoric reptiles that lived millions of years ago. -Living things are different in different places around the world. -Animals have special features that help them live in their environment. -Living things are different in different places around the world. -Animals have special features that help them live in their environment. -There are many different species of animals. -Reptiles are animals that have dry, scaly skin and lay eggs. -Birds are animals that have beaks and feathers and lay eggs. -Insects have six legs, three body parts, antennae and most have one or two pairs of wings. -Crabs have five pairs of legs. The first pair of legs has pincers.	-Different animal groups have some common body parts.	
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			-Fish use gills to breathe. They use their tails to swim and have fins to keep them upright.		
	Nutrition	Skill Describe what a familiar animal or pet eats. Broad Knowledge -Animals, including pets, eat different kinds of foods.	Skill Match animals to the foods that they eat. Core Knowledge -Animals eat different kinds of food, including other animals, plants or both animals and plants.	Skill Group and sort a variety of common animals based on the foods they eat. Core Knowledge -Carnivores eat other animals (meat), herbivores eat plants and omnivores eat other animals and plants.	Skill Interpret and construct simple food chains to describe how living things depend on each other as a source of food. Core Knowledge -Food chains show how living things depend on one another for food. -Plants always start a food chain because they are producers that make their own food using sunlight. -Prey animals have different ways to avoid capture by predators. -Plants have adaptations that protect them from being eaten by animals.
	Survival	Skill Begin to talk about ways to care for a plant or animal. Core Knowledge -Plants need water, sunlight, air and warmth to grow. -There are lots of different types of animals. -Some animals are pets and are kept in peoples' homes. -Pets need food, water, sleep, exercise and play to keep them happy and healthy. -Caterpillars eat lots of food as they grow.	Skill Describe some ways that plants or animals should be cared for in order for them to survive. Core Knowledge -In winter the days are short and the nights are cold. Some birds need us to feed them during winter to help them survive. -Plants need water, sunlight and air to grow and survive. -Gardeners use compost to help plants grow. -Plants need water, sunlight and air to survive. -Many plants grow from seeds. -Plants need water, sunlight, air and warmth to grow.	Skill Describe how to care for plants and animals, including pets. Core Knowledge -Living things need to be cared for in order for them to survive. -Living things need water, food, warmth and shelter.	Skill Explain how animals, including humans, need water, food, air and shelter to survive. Core Knowledge -An animal's habitat must provide water, food, air and shelter for the animal to survive. -Animals eat food that is found in their habitat. Herbivores eat plants. Omnivores eat plants and animals (meat). Carnivores eat other animals (meat).

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			-Pets need food, water, sleep, exercise and play to keep them happy and healthy.		
Place and Space	Habitats	Skill Begin to observe and talk about living things in the local environment. Core Knowledge -Some leaves change colour in autumn and fall from the trees. -During the day there is sunlight. At night there is no sunlight so the sky is dark. -Parks and gardens contain lots of different plants and animals. -We can use our senses; hearing, sight, touch, taste and smell help us to find out about the world around us. -There are many animals including snails, spiders, butterflies and woodlice that live in gardens. -Minibeasts is another name for animals such as insects, spiders and snails.	Skill Observe and describe living things and their habitats within the local environment. Core Knowledge -Living things live in different habitats. -Gardens are habitats for many plants, trees and animals. -Different animals live in different places. -A farm is an area of land and its buildings used for growing crops and rearing animals. -Animals such as snails, spiders and insects live in gardens, fields, parks and woodlands. -Animals live in different habitats. -Rock pools are habitats for many animals, such as starfish, crabs, anemones, mussels, barnacles and periwinkles. -Animals live in different habitats. -The ocean is the habitat for many animals, such as fish, dolphins, whales, sharks and turtles.	Skill Observe the local environment throughout the year and ask and answer questions about living things and seasonal change. Core Knowledge -The local environment is a habitat for living things and can change during the seasons.	Skill Describe a range of local habitats and habitats beyond their locality (beaches, rainforests, deserts, oceans and mountains) and what all habitats provide for the things that live there. Core Knowledge -A habitat is a place where plants and animals live. -Local habitats include parks, woodland and gardens. Habitats beyond the locality include beaches, rainforests, deserts, oceans and mountains. -A habitat provides food, water, shelter and space. -Humans can damage or destroy habitats. Their actions can harm and even kill living things. -Humans can help habitats. They can create new habitats, make habitats safer or provide food and shelter for living things.
Comparison	Physical Things	Skill Make simple comparisons between objects and materials, such as bigger and smaller, and softer and harder.	Skill Compare and group objects and materials according to simple given criteria.	Skill Compare and group materials in a variety of ways, such as based on their physical properties; being natural or human-made and being recyclable or non-recyclable.	Skill Compare and group things that are living, dead or have never been alive. Core Knowledge -Living things are those that are alive.

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		Core Knowledge -Soft materials bend easily. They are not hard or rough to touch.	Core Knowledge -Materials can feel soft, smooth, rough, squashy thick and thin. -Objects can be grouped according to how they feel. -Soft materials bend easily. They are not hard or rough to touch. -Hard materials are difficult to bend break and cut. -Smooth materials have no lumps, bumps or holes. -Some objects block light and make a shadow. -Some objects let light through. Buildings are made from different materials, including brick, wood, glass, wood, plastic and metal. -Materials have special properties, which make them useful for different jobs.	Core Knowledge -A property is a quality a material has. -Materials with different properties have different uses.	-Dead things are those that were once living but are no longer. Some things have never been alive. -The seven life processes of living things are moving, breathing, using their senses, feeding, getting rid of waste, having offspring and growing.
	Phenomena	Skill Play with objects or their own body outside to create shadows. Core Knowledge -A shadow is a dark shape that can be seen on a floor or wall.	Skill Make a shadow bigger or smaller using toys, play equipment and a light source. Core Knowledge -Shadows are made when a solid object blocks a source of light. -A shadow is a dark shape on a floor or wall. -A shadow is made when a solid object blocks light.	Skill Compare shadows made by different objects and materials. Broad Knowledge -Shadows are normally the same shape as the object that cast them. Shadows change during the day as the Sun appears to change position in the sky. -Shadows occur where light is blocked by an opaque object.	Skill Compare the volume and pitch of sounds made by instruments, their voices or other objects. Broad Knowledge -Volume is how loud or quiet a sound is. Pitch is how high or low a sound is.
Change	Living Things	Skill Say how a living thing has changed over time.	Skill Explore the natural world around them and give simple descriptions, following observation, of changes.	Skill Describe, following observation, how plants and animals change over time.	Skill Observe and describe how seeds and bulbs change over time as they grow into mature plants.

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		Core Knowledge -Tadpoles grow into frogs.	Core Knowledge -The weather and some plants and trees change with the seasons. -In autumn, the weather starts to turn colder and some leaves change colour and fall from the trees. -Living things change over time. In autumn some leaves change colour and fall from the trees. -A female butterfly lays eggs. -Caterpillars hatch from a butterfly's eggs. -Caterpillars grow, then form a chrysalis or cocoon. -A butterfly emerges from a chrysalis. -Frogs lay frogspawn in ponds. Tadpoles hatch out of the frogspawn and grow into frogs.	Core Knowledge -Deciduous trees change across the four seasons. -Changes happen to animals across the four seasons. -Changes happen to plants across the four seasons. -Changes happen to plants as they grow and mature. -Changes happen to flowers over time.	Core Knowledge -A seed is a small object made by a plant that can grow into a new plant. -Seeds need water and warmth to start growing (germinate). -As the plant grows bigger, it develops leaves and flowers. -The flowers of plants produce seeds. -The flowers on some plants develop into fruit that contains seeds. -Seeds also form inside cones.
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