## Bushfield Road Infants School - Science Curriculum Map

	<u> Bushfield Road Infants School - Science Curriculum Map</u>				
	Biology				
Year 1	Animals including humans	Plants	Living things and their habitats		
Vocabulary Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem,	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals Identify and name a variety of common animals that are carnivores, herbivores and omnivores Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees Identify and describe the basic structure of a variety of common flowering plants, including trees.	Not covered in Y1		
bark, stalk, bud Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves Senses, touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue	What body parts can you think of? Name and label body parts. Discuss senses and play senses feely bag game.  Taste and smell foods from giant's food shopping.  Listening walk in school.  Choose an adjective and match to an object (linked to touch).  Hot and cold climates - which animals live there, what are their features and what do they eat?  Blubber experiment - how do polar bears keep warm?  Identify and name local animals and describe their observable features (legs, paws, eyes, feathers, quills etc).  Sort local animals according to what they eat (carnivores, herbivores, omnivores).  Group local animals/pets into mammals, reptiles, amphibians, fish, birds, mammals.	Identify and name local plants throughout the year during Autumn, Spring, Summer hunt.  Explore differences between deciduous and evergreen trees - link to Christmas trees.  Name, identify and sort plants (common and wild).  Label parts of the plant.			
Year 2 Vocabulary Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, names of local habitats e.g. pond, woodland etc., names of	Notice that animals, including humans, have offspring which grow into adults Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Observe and describe how seeds and bulbs grow into mature plants Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Explore and compare the differences between things that are living, dead, and things that have never been alive Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other Identify and name a variety of plants and animals in their habitats, including micro-habitats Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.		
micro-habitats e.g. under logs. Plants - As for year 1 plus - light, shade, sun, warm, cool, water, grow, healthy, germinate Offspring, reproduction, growth, child, young/old stages (e.g - chick/hen, baby/child/adult, caterpillar/butterfly), exercise, heartbeat, breathing, hygiene, germs, disease, food types (examples - meat, fish, vegetables, bread, rice, pasta)	What does Bob need to survive on the moon? What three things do all animals including humans need to survive? Research and create a balanced plate. Understand what is meant by a balanced lunch - Create a healthy lunch for Bob. Why is exercise important? Identify the effects exercise has on the body. Germ investigation - Glitterbugs. Use glitter to represent germs in handwashing experiment. Create a poster about how to be healthy. Name the different stages in the human timeline. Create life cycles of living things. How do the living things in their habitat depend on each other to stay alive? Visit to Yorkshire Wildlife Park.	Can plants survive on the Moon? Bean in a bag experiment (hydroponics) Observe growth.  Life cycle of a bean.  Do bigger seeds grow into bigger plants?  Cress heads - know that cress seeds need water and the right temperature to germinate and grow. Record cress growth.  Seed sorting challenge.  Match the seed to the plant.  Plants we eat - Give examples of food crops and which part of the plant we eat.  Can plants survive in the desert?  Life cycle of a sunflower.  Walk in Central Park to observe plants living in the local area (Spring and Summer Term).	Identify and sort items into living, no longer living and never been alive. Look for evidence of and explore living things in out playground.  What do animals need to survive? Can you remember the seven life processes (MRS GREN)? What do all living things do?  Do all living things like living in the same microhabitats?  British habitats - Sort living things into urban, coastal, woodland and pond habitats.  How do we know which dinosaurs are herbivores or carnivores?  What is a food chain? Create three and four part food chains.  Sort animals into world habitats (desert, ocean, rainforest, arctic)  Create bug hotels and observe living things found there over time.  Create a desert food chain.  Explain how a Meerkat is suited to its habitat.		

## Bushfield Road Infants School - Science Curriculum Map

	Chemistry	Physics
Year 1	Materials	Seasonal changes
Vocabulary Object, material, wood, plastic, glass, metal,	<ul> <li>Distinguish between an object and the material from which it is made</li> <li>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</li> <li>Describe the simple physical properties of a variety of everyday materials</li> <li>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</li> </ul>	<ul> <li>Observe changes across the four seasons</li> <li>Observe and describe weather associated with the seasons and how day length varies.</li> </ul>
water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see through, not see through Weather (sunny, rainy, windy, snowy etc.), seasons (Winter, Summer, Spring, Autumn), sun, sunrise, sunset, day length, monsoon, khareef, thunder storm	<ul> <li>Materials hunt - class room. Local environment.</li> <li>What materials are used in buildings today? What materials were used in buildings in Tudor times?</li> <li>Explore properties of selection of materials.</li> <li>Baking bread - what materials are used? Describe them. How does the dough change when baked?</li> <li>Sort and compare materials and their properties.</li> <li>What materials were used to build castles? Armour? Weapons?</li> </ul>	<ul> <li>Using eyes go on an Autumn hunt - discuss weather and plants. Link to the senses.</li> <li>Experiment - giant's shadow over the day - draw in chalk on the hour. How has the shadow changed? Why?</li> <li>Go on a Spring hunt - discuss weather and plants. Link to the senses.</li> <li>Experiment - giant's shadow over the day - draw in chalk on the hour. How has the shadow changed? Why?</li> <li>Go on a Summer hunt - discuss weather and plants. Link to the senses.</li> <li>Weather diary.</li> </ul>
Year 2 Vocabulary	<ul> <li>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</li> <li>Find out how the shapes of solid objects made from some materials can be changed by squashing,</li> </ul>	Not covered in Year 2
Names of materials - increased range from year 1 Properties of materials - as for year 1 plus opaque, transparent and translucent, reflective, non- reflective, flexible, rigid, shape, push/pushing, pull/puling, twist/twisting, squash/squashing. Bend/bending, stretch/stretching	<ul> <li>bending, twisting and stretching.</li> <li>Sort and classify materials. Identify a classroom object and show what material/s it is made from.</li> <li>Materials hunt around school.</li> <li>Explain which properties make some materials suitable or unsuitable for different purposes.</li> <li>Egg drop experiment - which material is best for protecting our egg in transport?</li> <li>Explain and demonstrate four ways the shapes of some objects can be changed.</li> <li>How do we keep warm in winter?</li> <li>What are natural materials? Sort the materials into two groups, Natural or Man made.</li> <li>Explore how materials change.</li> <li>Experiment - which material is best for a waterproof coat for Beegu?</li> <li>Experiment - which material is best for mopping up the wee in the Meerkat den?</li> <li>Waterproofing materials - Charles Mackintosh</li> <li>Answer questions - what if all materials were transparent? Flexible? Rigid? Made of chocolate? Made of glass? Made of playdough.</li> </ul>	