

## Knowledge organiser Nursery – Year 2

## Subject: Science

Aspect	Nursery	Reception	Year 1	Year 2
<b>Working Scientifically</b>	-ask questions about the world around them -use open ended resources with some support and scaffolding from adults -explore the natural environment	-ask and answer questions about the world around them -explore the natural environment and be motivated to find out by explaining what they are doing	-Know what a fair test is -perform simple tests and investigations which are adult directed -make predictions	-plan fair tests -ask a range of scientific questions -record and explain results and say what they may have done differently next time -know and use the terms 'control' and 'variable'
<b>Plants</b>	-plant seeds and bulbs and know how to take care of them when they are growing -observe and discuss changes observed using appropriate vocabulary -begin to name parts of plant; leaf, flower, root	-name and label the parts of a plant; leaf, stem, root, petal, flower	-know about the difference between evergreen and deciduous plants -know the basic structure of plants; leaf, stem, root, flower, petal and the function of these parts	-know the basic structure of plants; leaf, stem, root, flower, petal and the function of these parts -understand and explain why plants need light, water and correct temperature to grow
<b>Animals including humans</b>	-know how humans and animals move using a range of verbs; running, jumping, crawling -name animals and compare differences between animals who live on the farm and animals who live in the zoo -learn simple names for garden insects and understand how to respect the habitat of insects	-know the body parts of insects; thorax, legs, abdomen, head, antennae -know and understand the life cycle of a butterfly and sea creatures	-know the five senses -identify, name and label basic parts of the human body and skeleton -classify animals into different groups amphibians, reptiles, mammals, birds, fish -know about the habitat, diet and behaviour of animals -compare the diet of herbivores, omnivores and carnivores animals	-understand how humans can keep themselves healthy -explain the life cycle of a penguin -Compare and identify the differences between things that are living, dead and things that never lived. -Identify how animals are adapted to their environment – explain how penguins have blubber and feathers to live in Antarctica -Identify microhabitats within a habitat

				<ul style="list-style-type: none"> <li>-know the food chain of a different animals including penguins</li> <li>-know the parts and functions of the parts of the human digestive system</li> <li>-</li> </ul>
<b>Seasonal Changes</b>	<ul style="list-style-type: none"> <li>-know how to dress for seasonal changes</li> <li>-observe changes in the natural environment and comment on changes observed</li> <li>-know it is 'today' and understand 'now' and 'next'</li> <li>-know the days of the week in order</li> </ul>	<ul style="list-style-type: none"> <li>-know the names of the four seasons and some features of the seasons through the text 'a tiny seed'</li> <li>-understand and use the words 'today', 'yesterday' and 'tomorrow'</li> </ul>	<ul style="list-style-type: none"> <li>-know and record the weather for each season</li> <li>-know the different types of clouds; cumulus, nimbus, Columbus, stratus</li> <li>-know and use the vocabulary 'this week'</li> </ul>	<ul style="list-style-type: none"> <li>-know which months are in each season</li> <li>-know the months of the year in order</li> </ul>
<b>Materials</b>	<ul style="list-style-type: none"> <li>-describe the texture of materials; hard, soft, bumpy, rough, smooth</li> <li>-choose and use materials for a purpose and talk about why they have chosen that material</li> </ul>	<ul style="list-style-type: none"> <li>-know and understand the terms 'waterproof' and 'not waterproof'</li> <li>-use materials to achieve a planned effect</li> </ul>	<ul style="list-style-type: none"> <li>-distinguish and identify between an object and the material that it is made from.</li> <li>-know and understand the terms 'opaque', 'translucent' and 'transparent'</li> <li>-use and understand the terms 'waterproof' and 'absorbent'</li> </ul>	<ul style="list-style-type: none"> <li>-test the suitability of materials for a purpose and explain results</li> <li>-know how materials can change by bending, snapping, twisting</li> </ul>