



## Science Year 1

|                          | Animals including humans - Animals  | Animals including humans -Humans  | Everyday Materials 1  | Everyday Materials 2   | Plants  | Seasonal Change  |
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| <b>Previous Learning</b> | <ul style="list-style-type: none"> <li>Describe animals that live on a farm, explaining how some products can be produced by an animal.</li> <li>Know all about bears</li> <li>Describe the difference between fleas, spiders and centipedes, understanding which creatures are insects and invertebrates.</li> <li>Understand the stages of a chicken's life, including explaining where eggs come from.</li> <li>Understand the stages of a cow's life, explaining where milk and butter comes from.</li> </ul> | <ul style="list-style-type: none"> <li>Explain how I use my arms, legs and chest, giving examples and labelling body parts.</li> <li>Explain how my hands and feet can be used.</li> <li>Know what the eyes and nose are, where they can be found on the body and what they are used for.</li> <li>Explain how ears work, the function of the mouth and the function of hair.</li> <li>Understand how humans grow, describing changes in the body.</li> <li>Explain why exercise is good</li> </ul> | <ul style="list-style-type: none"> <li>Explain what products come from sheep.</li> <li>Explain what float and sink means, grouping objects based on whether they float or sink.</li> <li>Know how mixing materials together can make salt dough.</li> </ul> | <ul style="list-style-type: none"> <li>Explain why wool is good for clothing.</li> <li>Explain what materials make good reflectors.</li> </ul> | <ul style="list-style-type: none"> <li>Explain where plants come from, explaining the life cycle of a plant.</li> <li>Explain what a plant needs to live, understanding that a plant grows from a seed.</li> <li>Know the features of a plant.</li> <li>Know that plants are living and can be compared to humans.</li> </ul> | <ul style="list-style-type: none"> <li>Know what clothes you wear in the rain.</li> <li>Explain the difference between rain, ice and water.</li> <li>Understand the role of clouds.</li> <li>Understand wind direction, describing what causes wind and that wind is the movement of air.</li> <li>Explain what snow is, knowing that snow melts when the weather gets warmer.</li> <li>Describe what happens to the tree during the 4 seasons.</li> <li>Understand how</li> </ul> |

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|                              |   | <p>for you.</p> <ul style="list-style-type: none"> <li>• Understand what first aid is, recalling items from a first aid kit.</li> <li>• Identify key senses of the human body, explaining what the senses do and labelling the parts of the body associated with each sense.</li> <li>• Explain how I use my sense of hearing and sight.</li> <li>• Understand the words feel and taste, describing the taste of something and finding objects without seeing it.</li> </ul> |  |   |  | <p>a rainbow is formed, including the colours that make a rainbow.</p>   |
| <b>Substantive Knowledge</b> | <ul style="list-style-type: none"> <li>• Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</li> </ul> | <ul style="list-style-type: none"> <li>• Identify, name, draw and label the basic parts of the human body and say which part of the body is</li> </ul>   | <ul style="list-style-type: none"> <li>• Distinguish between an object and the material from which it is made</li> </ul> | <ul style="list-style-type: none"> <li>• Compare and group together a variety of everyday materials on</li> </ul> | <ul style="list-style-type: none"> <li>• Become familiar with common names of flowers and plant structures including seeds.</li> </ul> | <ul style="list-style-type: none"> <li>• Observe changes across the 4 seasons</li> <li>• Observe and describe weather associated with</li> </ul> |

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|                               | <ul style="list-style-type: none"> <li>• Identify and name a variety of common animals that are carnivores, herbivores and omnivores</li> <li>• Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</li> </ul> | associated with each sense  | <ul style="list-style-type: none"> <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> | <p>the basis of their simple physical properties</p> <ul style="list-style-type: none"> <li>• Describe the simple physical properties of a variety of everyday materials</li> </ul> | <ul style="list-style-type: none"> <li>• Identify and describe the basic structure of a variety of common flowering plants, including trees</li> <li>• Become familiar with common names of flowers and plant structures.</li> <li>• Identify and name a variety of common wild and garden plants.</li> <li>• Identify and name a variety of deciduous and evergreen trees.</li> <li>• Understand how plants change over time • Observe the growth of planted flowers Become familiar with plant structures Keep records of how plants change over time</li> </ul> | the seasons and how day length varies  |
| <b>Disciplinary Knowledge</b> | <ul style="list-style-type: none"> <li>• Use their observations and ideas to suggest answers to questions</li> </ul>  | <ul style="list-style-type: none"> <li>• Identify and classify</li> <li>• Use their observations and</li> </ul> | <ul style="list-style-type: none"> <li>• Perform simple tests</li> </ul>  | <ul style="list-style-type: none"> <li>• Perform simple tests</li> <li>• Identify and classify</li> </ul>   | <ul style="list-style-type: none"> <li>• Ask simple questions</li> </ul>   | <ul style="list-style-type: none"> <li>• Perform simple tests</li> <li>• Use their observations and</li> </ul> |

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|                   | <ul style="list-style-type: none"> <li>• Group and sort</li> </ul>  | <p>ideas to suggest answers to questions</p> <ul style="list-style-type: none"> <li>• Gather and record data to help in answering questions.</li> <li>• Perform simple tests</li> </ul> | <ul style="list-style-type: none"> <li>• Observe closely, using simple equipment</li> <li>• Identify and classify</li> <li>• Gather and record data to help in answering questions</li> </ul> | <ul style="list-style-type: none"> <li>• Use their observations and ideas to suggest answers to questions</li> </ul>   | <ul style="list-style-type: none"> <li>• Observe closely and use simple equipment</li> <li>• Use their observations and ideas to suggest answers to questions</li> <li>• Identify and classify</li> <li>• Compare and contrast familiar plants</li> <li>• Draw diagrams showing the parts of different plants, including tree</li> <li>• Gather and record data</li> </ul> | <p>ideas to suggest answers to questions</p> <ul style="list-style-type: none"> <li>• Gather and record data to help in answering questions.</li> <li>• Identifying and classifying</li> </ul> |
| <b>Vocabulary</b> | <p>fish<br/>amphibian<br/>reptile<br/>mammal<br/>bird<br/>feather<br/>warm -blooded<br/>characteristic backbone<br/>hatchling<br/>gills<br/>scale<br/>cold -blooded<br/>herbivore<br/>carnivore</p> | <p>head<br/>body<br/>skeleton<br/>limb<br/>joint<br/>brain<br/>eyelash<br/>eye<br/>sight<br/>pupil<br/>sound<br/>ear<br/>sign language<br/>vibration</p>                                | <p>material<br/>fabric<br/>wood<br/>plastic<br/>metal<br/>object<br/>glass<br/>property<br/>brick<br/>elastic<br/>opaque<br/>transparent<br/>dull<br/>stiff</p>                               | <p>solid<br/>strong<br/>brick<br/>clay<br/>wind<br/>waterproof<br/>absorbent<br/>non -absorbent<br/>roof<br/>slate<br/>transparent<br/>opaque<br/>suitable</p> | <p>seed<br/>plant<br/>tree<br/>soil<br/>predict<br/>stem<br/>petal<br/>leaf<br/>root<br/>flower<br/>environment<br/>weed<br/>daisy<br/>dandelion</p>   | <p>season<br/>spring<br/>summer<br/>autumn<br/>winter<br/>autumn<br/>hibernate<br/>weather<br/>protect<br/>harvest<br/>weather<br/>frost<br/>sleet</p>   |

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|  | omnivore<br>predator<br>canines<br>pet<br>wild<br>shelter<br>veterinary<br>natural<br>similarities differences<br>compare<br>unsuitable<br>climate | deafness<br>tongue<br>mouth<br>taste<br>flavour<br>sweet<br>touch<br>fingertips<br>skin<br>organ<br>brain<br>smell<br>odour<br>nose<br>nostril<br>hair | natural<br>man made<br>factory<br>rubber<br>polyester<br>predict<br>float<br>sink<br>submerge<br>buoyant<br>absorbent<br>sponge<br>waterproof umbrella<br>soak | window pane<br>window frame fabric<br>furniture<br>cotton<br>mattress<br>soft<br>wool<br>weather<br>jumper<br>suitable<br>evaluate<br>material<br>properties<br>tile<br>garden | wild<br>deciduous<br>evergreen<br>seasons<br>branch<br>bush<br>supermarket<br>fruit<br>vegetable<br>farm<br>tractor<br>growth<br>seedling<br>young plant<br>adult plant<br>observe | temperature<br>compare changes<br>grow chick summer<br>warm sun protection<br>temperature<br>heatwave<br>rainfall<br>measuring<br>record<br>results<br>graph |
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## Retrieval

| Animals including humans – Animals – Term 1 |   |
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| Week  | Retrieval Practice Questions  |
| 1   | Last week: n/a<br>Last term: n/a<br>Last year: What are the names of the different animals?   |
| 2   | Last week: What are the 5 groups of animals? What groups do different animals belong to?<br>Last term: n/a<br>Last year: Where does a camel live? |
| 3   | Last week: What is the difference between a mammal and a bird?<br>Last term: n/a  |

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|                        | Last year: Where does a fish live?   |
| 4                      | Last week: Which type of animals have scales?<br>Last term: n/a<br>Last year: What do birds eat?   |
| 5                      | Last week: What is a carnivore, herbivore and omnivore?<br>Last term: n/a<br>Last year: Where do different animals live?   |
| 6                      | Last week: Give an example of an animal that can be kept as a pet. What are the 5 groups of animals?<br>Last term: n/a<br>Last year: What animals live on a farm?        |
| WOW days / experiences | <ul style="list-style-type: none"> <li>• Zoo/farm visit</li> <li>• Visitor into school: animals</li> <li>• Staff to bring in pet</li> <li>• Real food to sort</li> </ul> |

| Animals including humans – Humans – Term 2 |   |
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| Week                                       | Retrieval Practice Questions  |
| 1  | Last week: n/a<br>Last term: What are the animal families?<br>Last year: Where are your arms, your legs and your chest?   |
| 2  | Last week: Where is your heart? What does it do? Where is your brain? What is a skeleton?<br>Last term: What is the difference between a mammal and a bird?<br>Last year: What are our hands and feet used for? |
| 3  | Last week: What does the pupil and iris do?<br>Last term: What is the difference between amphibians, reptiles and fish?<br>Last year: How do we smell and how do we see?  |
| 4  | Last week: How do we hear sounds?   |

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|                        | Last term: What type of food do living things eat?<br>Last year: What is the purpose of hair?   |
| 5                      | Last week: What are your taste buds and what do they enable us to do?<br>Last term: What is the difference between wild animals and pets?<br>Last year: How have you changed since you were a baby? |
| 6                      | Last week: What does our sense of touch allow us to do?<br>Last term: What are the characteristics of animals?<br>Last year: Compare yourself to a friend.  |
| WOW days / experiences | <ul style="list-style-type: none"> <li>Sense walk</li> </ul>  |

| Every day materials – Term 3 |   |
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| Week                         | Retrieval Practice Questions  |
| 1                            | Last week: n/a<br>Last term: What are the parts of the human body?<br>Last year: What substances melt?  |
| 2                            | Last week: Name everyday materials.<br>Last term: What do our eyes do?<br>Last year: What process happens to chocolate to make an Easter egg? |
| 3                            | Last week: Sort the materials by what they are made from.<br>Last term: What do our ears do?<br>Last year: Why is wool good for clothing?     |
| 4                            | Last week: Describe the properties of the objects below.  |

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|                        | Last term: What do our mouths do?<br>Last year: Where does your knitted jumper come from?   |
| 5                      | Last week: Sort the materials into manmade and natural.<br>Last term: What is the sense of touch?<br>Last year: How does water change?                              |
| 6                      | Last week: Sort the objects into objects which float and which objects sink.<br>Last term: What does our nose do?<br>Last year: What materials are good reflectors? |
| WOW days / experiences | <ul style="list-style-type: none"> <li></li> </ul>  |

| Every day materials – Term 4 |  |
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| Week                         | Retrieval Practice Questions   |
| 1                            | Last week: n/a<br>Last term: Name the everyday materials<br>Last year: What products come from sheep?  |
| 2                            | Last week: What material can withstand wind?<br>Last term: What is the difference between an object and the material it is made from?<br>Last year: Why is wool good for clothing? |
| 3                            | Last week: Name a waterproof material.<br>Last term: What are the properties of an everyday material?<br>Last year: What objects sink and what objects float?                      |



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| 4                      | Last week: What are the properties of glass?<br>Last term: What objects are natural and what are manmade?<br>Last year: What materials are needed to make a home?              |
| 5                      | Last week: What furniture can you make with different materials?<br>Last term: What objects sink and what objects float?<br>Last year: List ways of making a jumper from yarn? |
| 6                      | Last week: Name different fabrics.<br>Last term: What materials are best for different objects?<br>Last year: How do you make salt dough?                                      |
| WOW days / experiences | <ul style="list-style-type: none"> <li>• Builder visit</li> <li>• Visit to a new house estate to talk to builders/builders company</li> </ul>                                  |

| Plants – Term 5 |   |
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| Week            | Retrieval Practice Questions  |
| 1               | Last week: n/a<br>Last term: What materials can withstand wind?<br>Last year: Name 3 fruit  |
| 2               | Last week: Where can you find plants?<br>Last term: Name a waterproof material.<br>Last year: What is the life cycle of a plant?            |
| 3               | Last week: Name the plants we looked at in the last lesson<br>Last term: What is glass used for?<br>Last year: What does a plant grow from? |
| 4               | Last week: What is the difference between a garden flower and wild flower   |

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|                        | Last term: What furniture can be made from different materials?<br>Last year: What are the features of a plant?  |
| 5                      | Last week: What is happening to the apples in each picture?<br>Last term: Name different materials.<br>Last year: Identify 3 types of vegetable  |
| 6                      | Last week: Tell your partner two things you know about plants.<br>Last term: What are the uses of materials?<br>Last year: Where do vegetables grow?   |
| WOW days / experiences | <ul style="list-style-type: none"> <li>• Visit to a farm: looking at fields where crops are grown</li> <li>• Park visit to see wild plants</li> <li>• National trust house/gardens to look at wild and garden plants</li> <li>• Garden centre visit</li> </ul> |

| Seasonal Change – Term 6 |  |
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| Week                     | Retrieval Practice Questions   |
| 1                        | Last week: n/a<br>Last term: What do seed grow into?<br>Last year: What clothes do you wear in the rain?   |
| 2                        | Last week: Name the 4 seasons.<br>Last term: What are the basic parts of a plant and tree?<br>Last year: What is the difference between rain, ice and water? |
| 3                        | Last week: Identify a change that takes place in Autumn.<br>Last term: Name 3 wildflowers<br>Last year: What is the role of clouds?                          |
| 4                        | Last week: Identify a change that takes place in Winter.<br>Last term: What is the difference between an evergreen and deciduous tree?                       |

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|                           | Last year: What is wind?  |
| 5                         | Last week: Identify a change that takes place in Spring.<br>Last term: What is a fruit and what is a vegetable?<br>Last year: What is snow?                               |
| 6                         | Last week: Identify a change that takes place in Summer.<br>Last term: How does a plant change over time?<br>Last year: How is a rainbow formed and what are the colours? |
| WOW days /<br>experiences | <ul style="list-style-type: none"> <li>• Park visit</li> <li>• Doctor visit: sun protection</li> </ul>  |