# Year I: Science Knowledge Mat 

Seasonal Changes

| Key | ocabulary | Images/ diagrams | Core Knowledge |
| :---: | :---: | :---: | :---: |
| Autumn | The time of year between September and Novemeer. Many leaves fall off the |  | In the UK we have four seasons: spring, summer. autumn, winter. |
| Spring | $\begin{aligned} & \text { The time of year between } \\ & \text { March and May. You wiul } \end{aligned}$ |  |  |
| Summer | UK. From June to August. The longest day is June 21 st . |  | season and winter is the <br> coldest. In autumn the weather <br> begins to get colder. In spring |
| Winter | The coldest season in the UK. We can have snow. From December to February. |  | the weather begins to get warmer. |
| Seasons | There are four seasons in a year. Each lasting three months. |  | > It sometimes snows in winter. It can be hot and sunny in the sunny in the |
| weather | What the sky and the air |  | season. |
| temperature | $\begin{aligned} & \text { A measure of hot or cold. } \\ & \text { Measure using a } \\ & \text { thermometer. } \end{aligned}$ |  | > We wear different types of clothing depending on the |
| weather <br> symbol | $\begin{aligned} & \text { Shernsmether. } \text { Selp us } \\ & \text { understand } \text { our daily } \\ & \text { weother. } \end{aligned}$ |  | In autumn leaves fall off the |
| daylight | When it is light outside. The amount of daylight changes each season. |  | trees. In spring buds begin to grow. |
| nocturnal | Animals that are active at |  | Daylight is Longer in summ |
| blossom | Flowers that grow on trees in Spring before the fruit grows. |  | - Animals adapt in different seasons e.g. they hibernate in the winter. |

## Year I Autumn I: Science Knowledge Mat

My Body and the Senses

| Key Vocabulary |  | Images/ diagrams | Core Knowledge |
| :---: | :---: | :---: | :---: |
| skeleton | Our bones which help to hold us up. | 5 SENSES | I know the names and can label the basic parts of the human body. <br> > I know which part of the body is associated with each sense. |
| $b o d y$ | The bones, flesh and organs of $a$ person or animal. |  |  |
| sense | A feeling that your body experiences. |  |  |
| sensitive | To be aware of feelings using the senses. |  | I know that I have five senses (taste, hearing, sight, smell, touch) and I can explain what the senses $d o$. |
| bitter | A sharp or bad taste that is not sweet or salty. |  | I know how to ask questions about the senses. |
| vertebrates | Humans and animals with a backbone. | - | I know that my skeleton holds my body up and helps |
| predict | To say what you think will happen. |  | to protect my internal organs. |
| investigate | To look at something closely to help you learn the facts. |  | I know how to record my results in a table and explain what I have found $\sigma$ ut. |
| function | The purpose of something. |  | I know how to make a simple prediction. |

Year I Autumn 2: Science Knowledge Mat
All about Animals

| Key | ocabulary | Images/ diagrams | Core Know-ledge |
| :---: | :---: | :---: | :---: |
| $f i s h$ | A fish is a scaly skinned creature with a spine that swims in water and breathes using gills. |  | I know that a shark is a fish. <br> I know that a dolphin is a mammal not a fish. <br> I know that frogs and newts are amphibians. <br> I know that a penguin is a bird but it can't fly <br> I know that crocodiles, lizards and snakes are reptiles. <br> I know that a lion is a carnivore, a cow is a herbivore and $a d \sigma g$ is an omnivore. <br> I know how to care for animals taken from their habitat and I understand the need to return them safely after study. <br> I know the names of all 5 senses. <br> I know the names of body parts: head, neck, arms, elbows, legs, knees, face, eyes, ears, hair, mouth, teeth. |
| amphibians | All amphibians begin their life in water with gills and tails. |  |  |
| reptiles | Are animals that are coldblooded. Most lay eggs and their skin is covered with hard, dry scales. |  |  |
| $b i r d s$ | Birds have feathers and wings. They lay eggs and are warm-blooded animals. |  |  |
| mammals | Mammals are also warmblooded animals. They breath air and have a backbone. |  |  |
| carnivore | A carnivore is a meat-eating animal that gets its food from killing other animals. |  |  |
| herbivore | A herbivore eats plants. |  |  |
| omnivore | An omnivore eats plants and meat. |  |  |
| wild | Living in the natural environment and not belonging to humans. |  |  |
| senses | Sight, hearing, touch, taste, smell. |  |  |

## Year I Spring: Science Knowledge Mat

Materials

| Key | ocabulary | Images/ diagrams | Core Knowledge |
| :---: | :---: | :---: | :---: |
| material | What something is made of, e.g. wood or plastic. |  | I know these materials: fabric, plastic, wool, cotton, wood, metal, water. <br> I know fabric is used for clothes, bedding, shoes and curtains. <br> I know plastic is a man-made material that can be moulded or shaped to any shape. |
| stretchy | Can be pulled to make it longer or wider without breaking. |  |  |
| dull | Doesn't reflect light. Doesn't look bright or shiny. |  |  |
| shing | Sparkly or glossy and sometimes glittery. | TRANSPARENT \| TRANSLUCENT - OPAQUE | I know wool is used for jumpers, socks, coats and hats. |
| rough | Looks or feels uneven or bumpy. |  | we wear on warmer days and for shirts. |
| $s m \sigma \sigma t h$ | No lumps or bumps. |  |  |
| bendy | Can be folded easily. |  | I know wood comes from trees and varies in hardness. |
| stiff | Firm, hard and not bendy or flexible. |  | I know metal is tough and strong |
| absorbent | It soaks water up. | 180 | and is used to build cars, trains and tall buildings. |
| waterproof | Material that doesn't let water through. |  | I know glass is used for: Windows |
| opaque | Can't be seen through |  | in houses and cars to see through. <br> Mirrors - to see yourself - reflection. |
| transparent | Can be seen through. |  |  |

Year I Summer: Science Knowledge Mat
Plants

| Key Vocabulary | Images/ diagrams |
| :--- | :--- |


| garden <br> plants | Plants people choose to <br> plant in the garden. |
| :---: | :--- |
| wlants | Plants that don't grow in <br> our gardens and are self- <br> seeded. |
| weeds | Wild plants that don't <br> giow where we want <br> them. |
| evergreen | Trees that have leaves <br> all year round. |
| deciduous | Trees that lose their <br> leaves in Autumn and are <br> bare in Winter. |
| roots | Hold the plant in the soil <br> and take in nutrients. |
| bulbs | The resting stage of a <br> plant that is usually <br> formed underground. |
| seeds | In the middle of a fruit. <br> They form new plants. |
| stem/trunk | Holds the plant up and <br> carriies water and <br> nutrients to the leaves <br> and flowers. |
| flowers | Attract insects and birds. |
| petals | Colourful part of flower. |
| leaves | Take in sunlight to make <br> energy. |



Light

$$
\frac{-0_{0}^{9}}{0} 0
$$

Gases from the air

##  <br> Nutrients



Water


Room to grow
 Correct

Core Knowledge
> To know that trees purify the air and provide food and shelter for all sorts of animals.
> To know that water and nutrients travel up the tree trunk, through the branches and all the way out to the leaves.
> To know that some trees can live for thousands of years.
> To know plants need sunlight and water to grow.
> To recognise an evergreen tree e.g. pine and a deciduous tree e.g. oak.
> To name the parts of the plant and to know what they are for.
> To know and recognise some flowers e.g. dandelion, daisy, daffodil.

