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| Science Knowledge Map |
| **KS1 Cycle A** |
| Autumn: Everyday materials and their uses |
| * I can look at an object and say what material it is made from.
* I can identify and name a variety of everyday materials including wood, plastic, glass, metal, water and rock.
* I can describe the physical properties of a variety of everyday materials, e.g. bendy/ not bendy, stretchy/ stiff, hard/ soft, rough, smooth, shiny/dull, waterproof/ not waterproof, absorbent/ not absorbent, opaque/ transparent, magnetic/ not magnetic etc.
* I can compare and group together a variety of everyday materials on the basis of their simple physical properties.
* I can identify and compare the suitability of different materials for particular uses, e.g. A window is made of glass so we can see through it and a house is made of bricks so that it is strong.
* I know that you can change the shapes of some materials by squashing, bending, twisting and stretching them.

**Working Scientifically*** I can ask questions and then answer them. What is the best material to make an item for a purpose?
* I can sort objects according to the material which they are made from/different properties of materials.
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| Spring: Animals including Humans |
| * I can identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.
* I know that carnivores eat meat, herbivores eat plants and omnivores eat both meat and plants and can identify and name animals that fall into these groups.
* I can describe and compare the structure of variety of common animals, including fish, amphibians, reptiles, birds, mammals and pets.
* I know that most living things live in a habitat to which they are most suited.
* I can describe how different habitats provide for the different needs of different types of animals and plants and how they depend on each other.
* I can describe how a food chain works and can make a simple one using plants and animals.

**Working Scientifically*** I can sort and group living things into the different animal groups.
* I can ask questions and use secondary sources to find answers.
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| Summer: Plants |
| * I can explore and compare the differences between things that are living, dead or things that have never been alive.
* I can identify and name a variety of plants and animals in their habitats including micro habitats.
* I can identify and name a variety of common wild and garden trees, including deciduous and evergreen trees.
* I can identify and describe the basic structure of a variety of common flowering plants including trees.
* I can observe and describe how seeds and plants grow into mature plants.
* Find out how plants need water, light and a suitable temperature to grow and stay healthy.

**Working Scientifically*** I can keep a record of how the plants change over time (observing changes in our school grounds, recording the growth of a forced hyacinth (roots and flowers) and measuring the growth of our class sunflowers).
* I can perform simple scientific enquiries regarding what plants require to grow.
* Ask scientific questions, for example, can a plant grow without light? Through observations they are able to draw simple conclusions and suggest answers to their questions.
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| **Key Stage 1 Cycle B** |
| Autumn: Everyday materials and their uses |
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| Spring: Animals including humans |
| * I can identify, name, draw and label the basic parts of the human body.
* I can say which part of the body is associated to which sense.
* I know that animals including humans have offspring which develop into adults.
* I know about the basic needs of humans for survival (water, food and air)
* I can describe the importance for humans of exercise.
* I can describe the importance for humans of eating the write amounts of different types of food.
* I describe the importance for humans of hygiene.

**Working Scientifically*** I can ask and answer questions about what humans need to be healthy.
* I can use simple secondary sources to find answers to scientific questions.
* I can communicate my findings in a range of ways using simple scientific language.
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| Summer: Seasonal changes |
| * I know that animals have offspring which develop into adults.
* Find out about the basic needs of animals including humans for survival (water, food and air).
* I can describe how the seasons change across the four seasons.
* I can describe weather associated with the seasons and how day length varies.

**Working Scientifically*** I can explore the world around me and ask and answer questions.
* I can make relevant observations to simple scientific enquiries.
* I can use simple measurements and equipment to gather data. For example, temperature.
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