**Science Curriculum Quick view Bromesberrow**

**Class 1**

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| **Reception**  |
| **Autumn** **Marvelous Materials** (Knowledge of the World) **Children:****Materials and their properties:*** Children explore the world around them using their senses at a deeper level of play (demonstrating their prior knowledge and experiences of materials) e.g:

-When wanting to build a stage they decide not to use the foam blocks but use the crates and wooden blocks instead. They explain that the foam blocks are too squishy and soft and will not hold their weight. They choose the crate and wooden blocks because they are stronger and do not bend.-When exploring best material to use to make a ‘boat that floats’, they decide that paper will become ‘soggy’, soak up the water and sink. They discard cardboard for the same reason, although they did suggest that it would take longer to become soggy and sink. They decide to use ‘plastic’ as they felt this would float and not soak water up. They choose to use small Lego. They notice that sometimes their Lego models will float and other times they will sink. * Children use their vocabulary taught and acquired to explain their choices and reasoning whilst investigating **e.g. when describing the effect of water on paper using words like soggy, change, soaked, sink.**
* Children learn more about materials and recognise that different materials can be used for different things **e.g. wool is good for soaking up a water spillage and is warm to wear.**

**Changing Materials*** Children know that materials change, when ‘something happens’ e.g. they recognise that water can be changed by freezing it to make ice cubes and that these ice cubes can melt back to water; and that chocolate left in the sun will melt. They know that ‘heat’ and ‘cold’ make the change happen.
* Children use an increasing range of vocabulary to explain changes from their observation **e.g. when the sun heats up the chocolate it melts. It becomes all sticky and runny, not hard like chocolate usually is. If you put it in a fridge chocolate becomes really hard, so hard that I cannot bite it.**
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| **Spring** **Amazing Animals** (Knowledge of the World) **Children:** Use their senses to explore the natural world at a deeper level of play e.g:* They listen to the different bird calls of the blackbird and pheasants. They imitate these and can identify the birds from this.
* They discover that we have quite a few different beetles and bugs around. They decide to make them some homes after listening to the story ‘Bug Homes’ by Clover Robin. They use the story to decide that the beetles will need sticks, canes and straw. They collect some sticks. The following day 2 children bring in straw from home. They work together to create some homes.
* Children collect a worm in a bug pot. They look closely through the magnifier top. They notice the ‘saddle’ and the ridges on the worm. They decide to draw their own worms including these features.
* They sort and categorise animals based on their similarities and differences e.g. these are all cats so they go together and these are the dogs so they go together
* Children learn to identify, name and describe some of the animals they encounter regularly in their environment. They use taught vocabulary to support them in these descriptions.
* Children learn about their bodies and how these work e.g. my eyes let me see things, my teeth need cleaning and my hands need to be washed to keep germs at bay
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| **Summer** **Plants** (Knowledge of the World) **Children:** Use their senses to explore the natural world at a deeper level of play e.g:* They find some seeds left over from the ash tree (ash keys) and decide to plant these. They dig a hole, water the seeds and then cover them over carefully with soil. They then make a sign to alert everyone that a seed is growing. Thoughts then turn to how to keep the birds away…
* They notice that under our oak tree a small seedling is growing. They wonder how this happened. The adult shares ‘the life cycle of a tree book’. Together the child and adult use the illustrations to predict what stage the seedling will be at next. Other children join in and decide they need to protect the seedling from animals/children. They find some sticks and string to create a guard.
* Children learn to identify, name and describe some of the plants they encounter regularly in their environment and notice how these have changed throughout the year.
* They notice that the rain gauge has filled up more because it has rained heavily
* They see the changes to the environment depending on the season, noticing that in Autumn the leaves change colour and begin to fall from the trees.
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| **Year 1** |
| **Autumn** Marvelous Materials**Every Day Materials** |
| **Spring** Amazing Animals**Animals, including humans** |
| **Summer** **Plants** (seasonal changes explicitly taught here, but throughout the year)Weather diariesTemperature recording |
| **Class 2** |
| **Year 2/3** |
| **Autumn 1**Marvelous Materials**Uses of Everyday Materials (Y3)**Rocks Rock!**Rocks (Y3)** |
| **Spring 1**Awesome Animals! Marvelous Me!**Animals including humans (Y2 and Y3)** |
| **Summer 1**Plants**Plants (Y2 and Y3)** |
| **Autumn 2**Let there be light!**Light (Y3)** |
| **Spring 2**Forces and magnets**Forces and magnets (Y3)** |
| **Summer 2**Life on Earth**Living things and their habitats (Y2)** |
| **Class 3**  |
| **Y4, 5 and 6** |
| **Autumn 1**Materials Matter!**States of Matter (Y4)** |
| **Spring 1**Earth and Space**Earth and Space (Y5)** |
| **Summer 1**Fabulous Forces**Forces (Y5)** |
| **Autumn 2**Sound**Sound (Y4)**Life on Earth!Living Things and their habitats (Y4 and Y6) |
| **Spring 2**Matter Matters!**Properties and changes of material (Y5)** |
| **Summer 2**Awesome Animals including Humans!Animals including humans (Y4, 5 and 6) |
| **Autumn 3**Let there be light**!****Light (Y6)** |
| **Spring 3**Electrifying!**Electricity (Y4 and 6)** |
| **Summer 3**Inheritance and Evolution **Inheritance and Evolution ( Y6)** |