# Enquiry Skills Progression- Y1

| | Observe changes over time | Pattern seeking | Grouping and classifying | Comparative Tests | Secondary Sources/Research |
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| **Plants** | Observe a tree throughout the year | Based on observations, encourage children to identify patters e.g. after comparing size of leaves on different plants, children may suggest 'bigger plants have bigger leaves'.<br><br>*Do trees with bigger leaves lose their leaves first in autumn?*<br>*Is there a pattern in where we find moss growing in the school grounds?* | Allow children to classify leaves, flowers and seeds according to their own criteria e.g colour, shape, texture, etc. | *Which type of compost grows the tallest sunflower?*<br><br>*Which tree has the biggest leaves?* | Use secondary sources to name plants (including trees) based on observations of leaves, seeds, flowers, buds and bark.<br><br>*What are the most common British plants and where can we find them?*<br><br>**Famous Scientists:**<br>Beatrix Potter<br>Author & Botanist |
| **Animals including humans** | Observe animals in the local environment throughout the year. | Children generate questions for investigation such as:<br>*Do people with longer arms have longer legs?*<br>*If you are older does it mean that you have a bigger shoe size?*<br>*Do all animals with … have …?* | Classify animals they have seen/have first-hand experience of based on physical structure.<br><br>Classify animals based on what they eat (plants, other animals, both). | Can I taste the difference between different flavoured crisps/skittles/smarties?<br><br>*Is our sense of smell better when we can't see?* | Use secondary sources to name animals seen in the local environment that they may not currently be able to name (birds: magpies, blackbird)<br>Research what animals they have first-hand experience of eat.<br><br>*How are the animals in Australia different to the ones we find in Britain?*<br>*Do all animals have the same senses as humans?*<br><br>**Famous Scientists:**<br>Chris Packham-Animal Conservationist |

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| **Everyday materials** | | *Is there a pattern in the types of materials that are used to make objects in a school?*<br><br>*Why are so many toys made from plastic?*<br>*Why are all the windows made from glass?*<br>*What are the walls made from brick?* | Classify objects made from same material (e.g. lots of things made from plastic)<br><br>Classify one object made from different materials (e.g. cups made of different materials) How might the purpose change?<br><br>Classify different fabrics based on texture (e.g. make a feely-box for a baby)<br><br>Classify paper/plastic/fabrics<br><br>*Which materials are waterproof?*<br>*Which materials float and which will sink?* | Test objects made of different materials to see how effective they are e.g. umbrellas/hats/coats for waterproofness, cloths/nappies for absorbency, socks for elasticity, bounciness of balls, sunglasses for protection from the sun, picnic plates for stiffness, door mats for wiping feet, different paper for writing on/painting etc.<br><br>*Which materials are the most flexible?*<br>*Which materials are the most absorbent?* | *Which materials can be recycled?*<br><br>**Famous Scientists:**<br>William Addis<br>Toothbrush Inventor<br><br>Charles Mackintosh<br>(Waterproof coat)<br><br>John MacAdam- roads<br>Chester Greenwood-<br>Earmuffs |
| **Seasonal changes** | Take weather measurements and make observations over time. Record/photograph what children are wearing Make observations of daylight hours e.g. send a diary and toy bear home children to record their activities. The bear must go to bed when it is dark and the children must record the time this happens (this gathers evidence, over time, that day length changes and so do the activities). | At the end of the year, look for patterns in evidence e.g. Does it rain more in the spring? Do we have more sunny days in the summer? Which was the coldest month?<br><br>*Does the wind always blow the same way?* | *How would you group these things based on which season you are most likely to see them in?* | *In which season does it rain the most?* | *Are there plants that are in flower in every season? What are they?*<br><br>**Famous Scientists**<br>Dr Steve Lyons<br>(Extreme Weather)<br><br>Holly Green<br>(Meteorologist) |