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| Squirrels Class Medium Term Planning for **Science Summer Term 2024** | |
| **Topic: Heroes**  Materials - identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular use | Whole School Events:  World Health Day – 8th April  Basic First Aid Day – 9th April  World Bee Day / Endangered Species Day – 20th May  World Ocean Day – 10th June |

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| Week 1 – Link it  Explore materials - wood, plastic, glass and metal  Provide a selection of objects made with different materials, large hoops, symbols. Sort objects by their materials. Discuss properties and uses.  Key vocabulary: wood, plastic, glass, metal, property, material, soft, hard, shiny, dull | Week 2 – Learn it/Show it  Objects and materials  Complete a material hunt around school/classroom. Identify what materials objects are made from. Add labels to objects they find or mark on a tick list.  Key vocabulary: object, material, metal, wood, plastic, glass, rock, wool | Week 3 – Learn it/Show it  Explore materials - rock    Provide resources to facilitate sorting:  • a selection of rocks for children to sort,  • large hoops  • hand lenses  • labels: hard, heavy, light, rough, smooth  • balance scales  Key vocabulary: rock, hard, heavy, light, rough, smooth | Week 4 – Learn it/Show it  Melt and freeze  Observe ice melting and discuss the process. Show children the water the ice has created. How can we turn this back into ice?  Key vocabulary: solid, liquid, melt, freeze, ice, reversable change | Week 5 – Learn it/Show it  Float or sink?  Complete a floating and sinking experiment with different materials. Make predictions. Sort results into 2 categories.  Key vocabulary:  Material, object float, sink, heavy, light, |
| Week 6 – Learn it/Show it  Does it absorb water?  Investigate which materials absorb water. Make predictions and sort results into catergories. Could extend by ringing out materials to see which absorbed the most water.  Key vocabulary: absorb, investigation | Week 7 – Learn it/Show it  Transparent or opaque?  Investigate which material would make the best curtains. Test materials over a hole in a cardboard box and shine a torch through.  Key vocabulary: transparent, translucent, opaque, investigation | Week 8 – Check it  Sustainability – Plastic  White Rose Science Y2  How is plastic helpful and harmful?  Sort between single-use plastic objects (e.g. straws, plastic cutlery  and plates) and plastic objects that can be used multiple times (e.g.  lunch boxes, plastic water bottles, plastic toys).  Collect single-use plastic e.g. bottles and grow new plants in them. Highlight the importance of recycling bins. Go on a litter pick in school grounds or local area.  Key vocabulary: plastic, man-made material, recycle, single-use plastic, | Week 9 – Know it  Design a superhero costume and gadget. What would they be made from and why?  For example: waterproof suit for swimming, hard shield to protect myself… | Week 10 – Check It (links to work on seasons throughout the year)  Summer Seasonal Changes  Exploration of our outdoor area to look at changes since Spring.  Collect and record data: Large display chart to record weather pictorially. Take a photo of outdoor area to represent Summerg. We will compare this to other seasons earlier and later in the year.  Key Vocabulary: Summer |

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| Substantive Knowledge (Content) | Disciplinary Knowledge (Skills) |
| **KS1 Observing and Measuring Changes**  observe the natural and humanly constructed world around them;  b observe changes over time;  c use simple measurements and equipment;  d make careful observations, sometimes using equipment to help them observe carefully.  **Identifying, Classifying, Recording and Presenting Data**  use simple features to compare objects, materials and living things;  **b** decide how to sort and classify objects into simple groups with some help;  **c** record and communicate findings in a range of ways with support;  **d** sort, group, gather and record data in a variety of ways to help in answering questions such as in simple sorting diagrams, pictograms, tally charts,  block diagrams and simple tables.  .  **KS2 Drawing Conclusions, Noticing Patterns and Presenting** **Findings**  a draw simple conclusions from their results;  **b** make predictions; | **EYFS - UTW-TNW**   * Explore the natural world around them, making observations and drawing pictures of animals and plants. * Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. * Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.   **KS1 – Seasonal changes**   * observe changes across the four seasons * observe and describe weather associated with the seasons and how day length varies. |