|  |
| --- |
|  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 AprilBasic First Aid Day – 9th AprilWorld Bee Day / Endangered Species Day – 20th MayWorld Ocean Day – 10th June |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Week 1 – Link itExplore materials - wood, plastic, glass and metalProvide 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 itObjects and materialsComplete 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 itExplore 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 scalesKey vocabulary: rock, hard, heavy, light, rough, smooth | Week 4 – Learn it/Show itMelt and freezeObserve 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 itFloat 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 itDoes 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 itTransparent 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 itSustainability – PlasticWhite Rose Science Y2How is plastic helpful and harmful?Sort between single-use plastic objects (e.g. straws, plastic cutleryand 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 itDesign 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 ChangesExploration 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 |

|  |  |
| --- | --- |
| 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.
 |