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| **William Barnes Primary School – Science** | | | | | |
| **Topic: Uses of Everyday Materials** | | **Strand: Chemistry / Physics** | | | **Year 2 Spring Term** |
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| **What should I already know?** |  | Scientific Learning - Additional Learning activities or experience |  | **Vocabulary** | |
| * Object are things that you can touch or see. * Objects are made from materials. * The names of some materials that objects are made from   (eg glass, wood, plastic).   * Some words that describe materials (eg shiny, soft, rough, absorbent). * How to group and compare a variety of everyday materials based on their simple properties (inc natural and man-made). | * Consider why some properties of materials make them suitable or unsuitable for different uses. * Investigate if some items can be made from more than one material (eg wooden spoons) and explain why. * Investigate if some materials can be used to make a variety of different objects and explain why their properties make them suitable for multiple uses. – Local environment walk * Investigate how some objects can be changed by squashing, bending, twisting and stretching. * Investigate the absorbency of paper towels making predictions and drawing conclusions * Investigate which materials make the best cover for a shelter by being waterproof, strong and flexible making predictions and drawing conclusions – following Wessex Water trip * Trip to Wessex Water to learn about water purification through filtration. Experiment with making a water filter system. Learn about the water cycle and water conservation. * Class recycling project to reduce waste – Global Learning | absorbent material that soaks up liquid easily  bendy an object that bends easily into a curved shape.  brick rectangular blocks of baked clay used for building walls, which are usually red or brown.  dull a colour or light that is not bright or a material that is not shiny.  elastic a rubber material that stretches when you pull it and returns to its original size and shape when you let it go  fabrics cloth or other material produced by weaving together cotton, wool or other threads.  foil sheets of metal as thin as paper.  glass a hard transparent material.  man-made things that are created by people.  metal a hard substance such as iron, steel, gold or lead.  natural things that exist in nature and are not made by people.  plastic a material which is light in weight and does not break easily.  process a series of actions used to produce something or reach a goal.  properties the qualities or features that belong to something and make it recognizable.  purpose the reason for which it is made or done.  recyclable waste and materials which can be processed and used again.  rock the hard substance which the Earth is made from.  rough uneven and not smooth.  shiny things that are bright and reflect light.  smooth no roughness, lumps or holes.  soft not rough or hard  squash pressed or crushed with such force that something loses its shape.  stiff firm or does not bend easily.  stretchy slightly elastic.  suitable something that is suitable for a purpose or occasion is right or acceptable for it.  transparent if an object or substance is transparent it allows light to pass through it and you can see detailed shapes through it.  twist turn something to make a spiral shape.  unsuitable someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it.  waterproof does not let water pass through it.  wood the material which forms that trunks and branches of trees. | |
| **What will I know by the end of the unit?** |
| **What are materials used for?**   * Materials are used for different purposes based on their properties. For example   + Wood is used to make furniture and floors.   + Metal is used to make coins, cans cutlery and coins.   + Glass can be used to make windows. * Names of materials include: glass, metal, rock, plastic, wood, water, brick, paper, fabric, canvas, felt, cotton, foil.     **What properties of materials make them suitable for a particular use?**   * Glass can be used to make windows because it is transparent. * Rulers can be made of wood, plastic or rubber because these materials are smooth and can be cut straight. * Spoons are made of metal, because it is waterproof and can be cleaned easily. They can also be made from plastic for children because plastic is light and it cannot hurt children’s growing teeth. * Different types of properties include: transparent, waterproof, opaque, stiff, soft, shiny, rough, absorbent, bright, bendy, stretchy, hard, smooth, dull.     **How can you change the shape of materials?**   * The shape of some materials can be changed when they are stretched, twisted, bent and squashed. |