P3 Materials

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| **Research** | **Observe** | **Investigate** | **Experiment** | **Present** |
| Can you make a list of 10 materials and find out where they come from?Using the list above, can you sort the materials into natural and synthetic (man-made)? Now can you think of 5 properties for each material? E.g. hard, soft, smooth, rough, heavy, light, waterproof…  | Go on a material hunt around your home – draw or write down all the different materials you find and list some of their properties ( are they heavy, soft, transparent, magnetic…?).  | How quickly does sugar dissolve in different conditions? Time how long it takes sugar to dissolve:1. In cold water – no stirring
2. In cold water – stirring
3. In warm water – no stirring
4. In warm water – stirring

Make a prediction first and see if you were right.What did you find out?How did you make it a fair test?  | Design and make an invention using as many different materials as possible. Why have you chosen particular materials?What does your invention do? | Write your own version of The Three Little Pigs. Choose different materials for them to make their houses out of – what happens when the wolf tries to blow them down? Be creative; they could use metal, shells, fur, bubble-gum, candy floss, sand…  |
| Write a definition for these words:DissolveSolubleInsolubleSolution | Compare a range of clothing at home – are they made out of different materials? Do they have different properties? Are they designed for different uses? | With an adult, select 6 ingredients from your kitchen. Predict whether they will be soluble or insoluble in water.Test them and record your results.  | Build the tallest, free-standing tower you can. Which materials work best?Why?  | Write a list of as many materials as you can. Choose two properties at random (e.g. hard and rough). Create a Venn diagram and fit all materials listed into it. Example below. |

silk

rock

sandpaper

glass

**HARD**

**ROUGH**