LO: To compare and group together every day materials.

HOM: Thinking flexibly

Collect objects from around your house that are made of different materials.

 EG. Clingfilm

What does the term ‘property’ mean when used in science? Brainstorm the different properties of materials that could be used for grouping and classifying.

Transparent

Match up the property to the description and then to the object which it could be.

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| Translucent |  | These materials are very difficult to break |  | Sponge |
| Waterproof |  | These materials soak up water and let water pass through them |  | Wooden spoon |
| Strong |  | These materials allow some light to pass through them; can be described as semi-transparent |  | Chair |
| Brittle |  |  These materials do not let water through and do not soak up water. |  | Window |
| Absorbent |  | These materials do not let any light through (you cannot see through them). |  | A hand |
| Opaque |  | These materials are easy to bend. |  | Green glass milk bottle |
| Conductor |  | These materials are not easy to bend. |  | Wellies |
| Flexible |  | These (iron) materials are attracted to magnets. |  | Scarf |
| Transparent |  | Some materials do not allow heat or electricity to travel through them. |  | Paperclip |
| Insulator |  | Some materials allow heat or electricity to pass through them easily. |  | Clothes |
| Magnetic |  | These materials do let light through (you can see through them). |  | Saucepan |

From the objects that you’ve gathered, try and identify what they are made of by feeling them.

Use scientific terminology to describe the properties e.g. flexible, rigid, transparent, translucent, opaque, conductor, insulator or magnetic.

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| Object | Properties of Material |
| Clingfilm | Transparent |
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What do these words mean? Look these up on google.

Permeability: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Absorbency:

Hardness:

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Solubility:

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Transparency:

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Conductivity:

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What types of conductivity are there?

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Response to magnets:

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For each property identify a way of testing whether materials have the property or not.

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**Plenary**

Which materials are similar? Which materials are very different?

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