Year 5 Science Work – Week 7

LI: I can test properties of different materials.

Properties and Materials Investigation

Look for 5 objects in your home. You are going to test them for their proprieties.
Follow these instructions to test the properties of different materials.

Magnetism test.

Touch a fridge magnet to each material. If it is attracted to the magnet, it is a magnetic material. If it is not attracted to a magnet, it is not magnetic. Cross or tick to show whether each material is magnetic.

Hardness test.

Carefully try to scratch the surface of each material. Number the materials from 1 to 5, with 1 being the softest material and easiest to scratch, and 5 being the hardest material and hardest to scratch

Transparency test.

Hold each material in front of your eyes. If you can completely see through it, it is transparent. If you can see through it a bit, it is translucent. If you can't see through it at all, it is opaque. Cross or tick to show whether each material is transparent.

Flexibility test.

Flexibility means how much a material will bend without breaking.

Try to gently bend each material over the edge of the table. Number the materials from 1 to 5, with 1 being the least flexible material and hardest to bend, and 5 being the most flexible material and easiest to bend.

Permeability test.

If a material is permeable, it allows liquids to go through it. Impermeable materials do not allow liquids through, so they are waterproof.

Place each material over a sink. Pour a tiny bit of water onto the material. If the material is permeable, some or all of the water will go through it into the sink. If it is impermeable, the water will stay on the material or run off it. Cross or tick to show whether each material is permeable.

Materials	Magnetic Y or N	Hardness 1-5	Transparent 1-5	Flexibility 1-5	Permeable Y or N
Example: Kitchen spoon	Y	4	N	4	N

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Task 2: Write an evaluation of results. Think about these questions when writing a summary of your findings.

What did you find out about each item?

Were there any patterns? E.g., were all magnetic items flexible?

Did anything from your investigation surprise you? What did you predict would happen and why?