Science Learning Grid: What's It Made Of?

Ouctomes: STe-9ME - identifies that objects are made of materials that have observable properties.

**STe-10ME** - recognises how familiar products, places and spaces are made to suit their purpose.

STe-1VA - shows interest in and enthusiasm for science and technology, responding to their curiosity, questions and perceived needs, wants and opportunities.

STe-4WS - explores their immediate surroundings by questioning, observing using their senses and communicating to share their observations and ideas.

**STe-5WT** - uses a simple design process to produce solutions with identified purposes.

Science	Knowing	Understanding	Applying	Analysing	Creating	Evaluating
<u>Verbal</u> I enjoy reading, writing & speaking	Think of all the words you can use to describe your favourite toy at home.	Why are kid's cups made out of plastic instead of glass?	What material would you use to make a kid's tea set? Describe what it would look like to an adult.	Read "The Three Little Pigs". What would you build your house out of? Explain why you chose that material.	Write a speech and present it to your family about why you would choose a certain material for your future house. Wood, bricks or sticks?	Why would paper be a bad choice to make rain boots out of? Explain why in a short two minute talk.
Mathematical I enjoy working with numbers & Science	Count how many wooden items you have in the kitchen.	Predict what material is the strongest when wet: paper, plastic or metal. Explain your prediction to your adult.	Go for a walk around your street with an adult. Make a picture map of three things you saw on your walk and label what they are made from.  Example: Play equipment in the park — made from plastic and metal.	Investigate an object at home. Example: What is the object? A block. What is it made of? Wood. Can you describe the object? Brown and small. Can you describe the material that the object is made of? Hard, smooth and heavy.	Using tin foil or playdough, create a 'scaled-down' model of 3 plastic items in your house.	Find something in your house made out of plastic. Does it work well? How could it be improved? Sketch the better model.

Visual/Spatial I enjoy drawing & visualising	Create a texture rub of objects around your house with a pencil and paper. Work on all different surfaces.	Draw and label your house. What materials have been used and where? E.g. My house has a tin roof, wooden frame and bricks on the outside.	Draw a picture of your favourite building.	Draw a car made out of wood. Discuss the differences between your wooden car and a metal car with an adult.	Design and draw a house suitable for the Three Little Pigs to stay safe in. Label your drawing.	Why do backpacks have shoulder straps, zippers and separate pockets? Design a backpack that doesn't have these things.
Kinaesthetic I enjoy doing hands-on activities	Find some things that are bumpy, smooth, spongey, soft, rough, hard and sticky at home.	Look at what buildings are made of. Feel the different textures of the materials.	Sort 10 objects in your bedroom into four different piles based on what they are made from: fabric, plastic, metal and wood.	Find 4 things: one made of wood, one made of plastic, one made of fabric and one made of metal.  With your adult, find out which ones sink and which ones float. Are any waterproof?	Make a texture chart by collecting small things around the house, gluing them on and labelling them by how they feel.	Make a small sculpture for the school garden. What did you use? Was it strong? Is everything that you used waterproof?
Musical I enjoy listening to music	Listen to the story of The Three Little Pigs on YouTube.	While listening to your favourite song, make a list of everything you know that is made out of metal.	Collect some objects from around the house and talk about what sound they make when they are bumped against a hard surface.	Create a dance to a song of your choice, showing the difference between a building made of metal and bricks and a building made of jelly.	Use things from your house to make a musical instrument. Example: rice in a toilet paper roll with the ends covered.	Pick something in your house to act as an instrument. Does it work well?
Intrapersonal I enjoy working by myself	Group 10 of your toys into two groups: flexible (bendy) and not flexible (can't bend).	Find 5 things in the house. What are they made of?	Make a mind map of things that are waterproof if they are left outside.	Think about the playground at school. What do you like about it? What don't you like about it? Discuss with an adult.	Search magazines for pictures and create a chart to show wooden objects and plastic objects.	Why is it important to know what happens when things get wet when it is being used outside?