St Bernadette's Catholic Primary Voluntary Academy Science Medium Term Planning - KS1 Advent Term Cycle B - Blast from the Past - Materials

MATERIALS	Learning Objective	Activity	Key Knowledge (By the end of the lesson)		Vocabulary (Tier 3)
			Substantive	Disciplinary	
Lesson 1	L.O.23: To be able to identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.	Naming main materials groups - introduce groups within the classroom Main naming initially - wood, plastic, glass, metal	 Know the names of a everyday materials - wood, plastic, glass and metal Identify examples of these materials 		wood plastic metal glass
Lesson 2	L.O.23: To be able to identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.	Material hunt around school. Name other material groups INCLUDE wood, plastic, glass, metal, water, rock, brick, paper, fabric, rubber	 Know the names of a everyday materials - wood, plastic, glass, metal, water, rock, brick, paper, fabric, rubber Identify examples of these materials 		water brick paper fabric stone rock rubber
Lesson 3	L.O.22: To be able to distinguish between an object and the material from which it is made.	Materials toys are made from. Talk about the word 'material' and what is meant by it. Distinguish between the object and the material. Sorting toys and other objects that are made from the same material - large hoops	 Know the difference between the material and the object Know that all objects are made of one or more materials 	 <u>Identify and classify -</u> Group different objects made of the same material 	object material
Lesson 4	L.O.24: To be able to describe the simple physical properties of a variety of everyday materials.	Sorting same toys/classroom objects according to simple properties eg soft, hard, shiny, dull, rough, smooth, heavy, light	• Know how to describe some simple physical properties of materials - soft, hard, shiny, dull, rough, smooth, heavy, light	 <u>Make observations, Identify and</u> <u>Classify</u> Use sense to make observations Group different objects according to their properties 	properties hard, soft shiny, dull rough, smooth heavy, light

Lesson 5	L.O.24: To be able to describe the simple physical properties of a variety of everyday materials.	Feely bag - describing properties - INCLUDE flexible, rigid, stretchy and stiff	• Know how to describe the physical properties of materials - flexible, rigid, stretchy and stiff.	Make observations - • Use sense to make observations	flexible, rigid stretchy. stiff
Lesson 6	L.O.25: To be able to compare and group together a variety of everyday materials on the basis of their simple physical properties.	Introduction of magnets/poles and what a magnetic material is. Use of magnets to sort materials - attracted or not attracted by a magnet. Focus on metals	• Know materials that are magnetic and non-magnetic	Make observations, identify and classify-•Make observations•Group together magnetic, non-magnetic materials•Make comparisons	magnet magnetic pole north South attract repel
Lesson 7	L.O.26: To be able to identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (INVESTIGATION)	ENQUIRY APPROACH FOCUS - Identifying, grouping and classifying Problem – we need to make some curtains/blinds for (toy). Identify the question that is to be tested. How could we find out which is the best material? Plan the investigation verbally as a class. Make predictions, complete equipment and method.	 Know that in an investigation there is always a question to be tested. Know there are different parts to an investigation. 	• Make a prediction about what will happen	suitable test question prediction equipment method
Lesson 8	YEAR 1 L.O.4: To be able to identify and group things they observe, with support. YEAR 2 L.O.4: To be able to identify and classify things they observe.	Carry out the investigation using torches seeing which materials let light through. Comparing and grouping materials according to their suitability. Record their results and draw relevant conclusions. Introduce vocab for transparent etc	 Knows that there are different parts to an investigation Know why materials are chosen for specific tasks (transparent and opaque) 	 ENQUIRY APPROACH FOCUS - Identifying, grouping and classifying Compare and group materials according to suitability Use observations to say which is the best material (opaque) 	compare results conclusion transparent opaque

Lesson 9	L.O.26: To be able to identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (INVESTIGATION)	ENQUIRY APPROACH FOCUS - Identifying, grouping and classifying Problem – we need to help make a suit /item for toy How could we find this out? Identify the question that is to be tested. How could we find out which is the best material? Plan the investigation verbally as a class. Make predictions, complete equipment and method.	• Know the parts of an investigation.	• Make a prediction about what will happen	test question prediction equipment method
Lesson 10	YEAR 1 L.O.4: To be able to identify and group things they observe, with support. YEAR 2 L.O.4: To be able to identify and classify things they observe.	Carry out the investigation seeing which material is waterproof. Comparing and grouping materials according to their suitability. Record their results and draw relevant conclusions.	 Know the parts of an investigation. Know why materials are chosen for specific tasks (waterproof) 	 ENQUIRY APPROACH FOCUS - Identifying, grouping and classifying Compare and group materials according to suitability Use observations to say which is the best material (waterproof) 	compare results conclusion waterproof absorbent
Lesson 11	L.O.26: To be able to identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.	Toy house and real house - comparing. Explaining why. Assessment	• Know why materials are chosen for specific tasks and give reasons for these		Purpose (suitable)
Lesson 12	L.O.27: To be able to find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	Explore materials eg a big lump of plasticine, lots of loose wool etc. Introduce the idea that you can change the shape of some materials but with some objects you cannot.	 Know some materials which can be changed by squashing, bending, twisting and stretching Know the names of some materials that change - and stay that shape or go back to the 	 <u>Perform simple tests, Identify and</u> <u>Classify</u> Perform simple tests on different materials Compare and group materials according to 	squash bend twist stretch

	Introduce the idea for the children to explore that some objects you can change the shape and then they stay that shape or sometimes they go back to the original shape eg elastic band.	original shape	whether they can be changed.	
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