Pandas Wider Curriculum Medium Term Plan

Term	Weeks
Autumn	1-3
Unit Title	
Wonderful Materials	

Linked Curriculum Areas	
Science	DT
National Curriculum statements *(from LT curriculum map)*	
Everyday Materials • Distinguish between an object and the material from which it is made • Identify and name a variety of everyday materials • Describe the simple physical properties of materials	Materials and Design • Select from and use a range of tools and materials • Build structures and products • Evaluate existing products
Specific skills and knowledge that <u>this</u> class needs to focus on to achieve these objectives *(identified using the current year group statements alongside all prior year group statements within the school's progression of skills documents)*	
All • Using and describing different materials. • Using the right material to make bridges, houses, Raincoats. Most • Distinguish between an object and the material from which it is made. • Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. • Describe the simple physical properties of a variety of everyday materials. • Compare and group together a variety of everyday materials on the basis of their simple physical properties. Some	All • To use one handed tools and equipment, e.g.makes snips in paper with child scissors. • To understand that equipment and tools have to be used safely Most • Cut materials safely using tools provided. • Measure and mark out using non-standard measures. • Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling). • Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen). Some

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• Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.	• Measure and mark out to the nearest centimetre. • Choose suitable techniques to construct products or to repair items. • Strengthen materials using suitable techniques.

Assessment Questions *(What will the children be able to answer now, next term, next year?)*

Is the chair an object or a material?

What material is the chair made from?

Can you name some materials that you can see in the classroom?

Which material is hard? Metal/Wool/Sponge?

Which material would be best for an umbrella? Why?

The wolf is coming! Which material would you choose to make a shelter to protect the pigs? Why?

What would you use to join two pieces of cardboard together?

Tell me about the shelter you made for the little pigs?

Mantle

Pupils become product testers investigating materials used in everyday objects and creating shelters to protect the pigs from the wolf and weather.

Critical Pathway *(order of learning)*

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Key Learning Event 1	Key Learning Event 2	Key Learning Event 3	Key Learning Event 4	Key Learning Event 5	Key Learning Event 6
What will children learn?					
The difference between an object and a material.	Describe simple properties of a material.	Select suitable materials for a particular purpose and explain their choice.	Select and use a range of materials. Plan a structure for a purpose. Choose materials based on their properties.	Select and use a range of tools and materials. Build a simple structure. Test whether a product meets its intended purpose.	Evaluate an existing product. Explain how material properties affected the success of the shelter.
What new vocabulary will they learn?					
Material, object, wood, plastic, metal, glass, paper, cardboard, fabric, rubber, hard, soft, strong, weak, smooth, rough, bendy, stiff, stretchy, waterproof, absorbent, transparent, opaque, shiny, dull, design, build, construct, tool, join, cut, measure, select, suitable, structure, product, tester, evaluate, improve, successful, failure, stronger, better, compare, explain					
What will teaching and learning look like? (Specific details)					
The children receive a message from the Three Little Pigs asking them to become a team of *materials detectives*. They need to investigate objects around the classroom and report back what they are made from. Activities- Introduce the difference between an object and a material.	The pigs have sent the children a mystery materials testing kit. Before they can design a shelter, the children need to find out which materials are strong, bendy, waterproof etc. Activities – Testing activity with a simple tick or cross option. Mystery bag – children to describe what they	The next job as product testers is to investigate everyday products and decide whether they have been made from suitable materials. Activities – Material investigation hunt around the school – object? Material? Why is it suitable? Look at transparent/opaque.	The wolf has returned! The pigs have contacted us again, asking for advice on what to build their houses from. It must protect them from the wolf and from the weather. Activities – Examine examples of simple shelters. Discuss what makes a good shelter. Children choose materials from a selection. Complete a design sheet:	The children now need to build mini versions of the shelters to see if they will be suitable. Children to make shelters from a selection of materials. They will then test their product for strength and if it is waterproof etc.	The Three Little Pigs need us to report back. Which shelters were successful? Which materials worked best? What should the builders change? Complete a product tester evaluation.

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Materials hunt around the classroom. Sort objects/materials into groups. Create a class materials investigation chart. Children draw and label 3 objects and identify their materials.	can feel in the bag. Can they guess the material? Material/object hunt by it's property. Use an ipad to take a picture of something shiny, bendy, hard etc. Waterproof testing station.		Draw their shelter. Label materials. Explain why they chose them. Identify the tools they will need.		
How will learning be assessed?					
Observations and discussions. Success of clarification task.	Can children describe a material using an appropriate property?	Can children explain why a material is suitable for a particular use?	Can children select appropriate materials and explain their choices?	How successful was the shelter?	End of unit quiz - kahoot/blooket

Stand Alone Wider Curriculum Subjects			
RSHE (Relationships)	Music	RE	Computing
Week 1 – Unique Me Week 2 – Friendships Week 3 – How to ask for help		What do Christians believe God is like? Week 1- What can we say many Christians believe about God? Week 2- What can we find out about the Christian story of the Lost Son? Week 3- What might the Lost Son story show many	

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		Christians about God?	