



Preston Grange Primary School

Design and Technology Curriculum

Nursery Overview

Term	Objectives covered
Autumn 1	Make marks on a range of scales with a range of tools and grips. Make marks with a wide range of tools and grips.
Autumn 2	Make marks with large tools using arms and shoulders. Make Marks on a range of scales with a range of tools and grips. Actively explore the properties of everyday materials through spontaneous experimentation. Make marks with a wide range of tools and grips.
Spring 1	Make marks with different size pens with a palmer grip. Take turns with verbal prompts from adults to pass over equipment. Choose and locate resources they need to achieve a goal. Focus on marks as they are being created by a range of tools. Explain how things work, e.g windup toys pulleys. Use materials for a purpose. Use mark making tools to make enclosed shapes.
Spring 2	Use pincer movements to pick up small items or nip malleable materials. Post and thread. Choose the tools and materials they need to achieve their goal. Make continuous linear marks and other effects with hands and tools on a range of scales. Ascribe meaning to 3D shapes when building, according to their properties. Process language to fill and empty containers. Process language to create structures or arrangements longer, shorter, taller, wider than mine. Talk about the differences between materials and changes they notice. Join materials for a purpose. Use mark making tools to make a range of enclosed shapes.
Summer 1	Choosing resources. Ask and answer why questions. Develop techniques for working simple mechanism. Create a range of marks with different tools and talk about their purposes. Use absolute measurement vocabulary to describe everyday objects such as heavy, tall, big, tiny empty. Compare lengths by aligning and accurately identify longer, taller and shorter. Join materials in a range of ways to make things for a purpose. Use mark making tools with control to add detail to shapes.
Summer 2	Follow two part instructions. Use a tripod grip to make marks, including enclosed spaces. Repeat the same mark making movement with control and ascribe meaning to marks. Combine 2D and 3D shapes to make new shapes and narrate the effects created. Use mark making tools to make very simple representational drawings.

ReceptionOverview

Term	Objectives covered
Autumn 1	<p>Follow one step instructions.</p> <p>Thread, peg and sew on cards.</p> <p>Cut along straight lines.</p> <p>Use squashing techniques including rolling pins to achieve desired effects.</p> <p>Use marks or some letters for meaning.</p> <p>Write labels.</p> <p>Describe changes of state with 'cement' and clay and with ingredients when cooking.</p>
Autumn 2	<p>Formulate and respond to I wonder, why? and how? questions.</p> <p>Follow two step instructions.</p> <p>Join and separate small construction kit components by clicking and twisting.</p> <p>Use small hammers accurately.</p> <p>Cut and turn along outlines.</p> <p>Articulate and demonstrate hand washing and food preparation.</p> <p>Identify healthy ingredients in healthy snacks.</p>
Spring 1	<p>Weave, thread and tie.</p> <p>Articulate simple problem solving approaches.</p> <p>Design with 2D shapes. Make 2D shapes out of other 2D shapes.</p> <p>Twist, wrap and weave with pressure and precision, narrating choices about colour and texture.</p>
Spring 2	<p>Safely use a wider range of food preparation tools including chopping boards and knives, graters and fruit squeezers.</p> <p>Use fine mark-making tools to create texture and pattern in clay.</p>
Summer 1	<p>Process and follow three step instructions.</p> <p>Join with tape and glue.</p> <p>Dismantle objects and mechanisms using a range of hand actions.</p> <p>Articulate the reasons for success or failure in a challenge.</p> <p>Name and describe attributes of 3D shapes in relation to their usefulness when model building.</p>
Summer 2	<p>Use hand moulding and building techniques with malleable materials.</p> <p>Use fine pincer mark-making tools with precision.</p> <p>Use a range of tools to dismantle mechanisms.</p> <p>Set simple goals and articulate how they will set out to achieve them.</p> <p>Shape and mould wet sand and clay with hand tools to create particular effects.</p>

KS1 and KS2 Overview



Year	Unit 1	Unit 2
1	Structures: Freestanding Structures	Cooking and Nutrition: Healthy salads
2	Mechanism: Wheels and Axles	Cooking and Nutrition: Healthy Smoothie
3	Textiles: 2D Shapes from 3D Shapes	Cooking and Nutrition: Healthy Plate Meals
4	Structures: Shell Structures	Cooking and Nutrition: Savoury Dish from Another Culture
5	Mechanisms: Mechanisms: Pulleys, Gears and Cams	Cooking and Nutrition: Seasonal Cooking: Winter
6	Electrical Systems: Complex Switches and Circuits	Cooking and Nutrition: Seasonal Cooking: Summer