KS1 Design Technology Curriculum Overview

Year 1 and 2	(8/12 hrs per project - 1 project per term).

Pupils should develop knowledge, understanding and skills needed to engage in an iterative process of designing and making. The should work in a range of relevant contexts (for example, the home and school, gardens and playground the local community, industry and the wider environment).

Cooking and Nutrition – Pupils should use the basic principles of a healthy and varied diet to prepare dishes and understand where food comes from.

	Autumn	Spring	Summer
Year 1	**Mechanisms – Sliders and Levers**	**Structures – Free Standing Structures**	**Cooking and Nutrition – Preparing Fruits and Vegetables.**
	Designing • Can generate ideas based on simple design criteria and their own experiences, explaining what they could make. • Develop, model and communicate their ideas through drawings and mock ups with card and paper. **Making** • Plan by suggesting what to do next • Select and use tools explaining their choices to cut, shape and join paper and card.	**Designing** • Generate ideas based on simple design criteria and their own experiences, explaining what they could make. • Develop, model and communicate their ideas through talking, mock-ups and drawings. **Making** • *Plan by suggesting what to do next.* • Select and use tools, skills and techniques, explain their choices. • Select new and reclaimed materials and construction kits to build their choices.	**Designing** • Design appealing products for a particular user based on simple design criteria. • Generate initial ideas and design criteria through investigating a variety of fruit and vegetables. • Communicate ideas through talk and drawing. **Making** • Use simple utensils and equipment to peel, cut, slice, squeeze and chop safely. • Select from a range of fruits and vegetables according to their characteristics e.g colour, texture and taste to create a chosen product.

	• Use simple finishing techniques to suitable for the products they are creating. **Evaluating** • Explore a range of existing books and everyday products that use simple sliders and levers. • Evaluate their product by discussing how well it works in relation to the purpose and the user and where it meets the design criteria. **Technical Knowledge** • Explore and use sliders and leavers. • Understand that different mechanisms produce different types of movement. • Know and use technical vocabulary relevant to the project. – *slider, leaver, pivot, slot.*	• Use simple finishing techniques suitable for the structure they are creating. **Evaluating** • Explore a range of freestanding structures in the school and local environment e.g everyday products and buildings. • Evaluate their product by discussing how well it works in relation to the purpose, the user, and whether it meets the original design criteria. **Technical Knowledge** • Know how to make freestanding structures stronger, stiffer and more stable. • Know and use technical vocabulary relevant to the project.	• Children can follow procedures for safety and hygiene. **Evaluating** • Taste and evaluate a range of fruit and vegetables to determine intended users preferences. • Evaluate ideas and finished products against design criteria, including intended user and purpose. **Technical Knowledge** • To understand where a range of fruit and vegetables come from e.g farmed or grown at home. • Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of *The Eatwell Plate.* • Know and use technical and sensory vocabulary relevant to the project.
Vocabulary	• **Slider** • **Lever** • **Pivot**	• **cut** • **fold** • **join**	• Fruit and vegetable names • Name of equipment and utensils

Slot **Bridge/guide** **Card** **Masking tape** **Paper fastener** **Join** **Design** **Make** **Evaluate** **User** **Purpose** **Idea** **Design criteria** **Product** **function**	**fix** **structure** **wall tower** **framework** **weak** **strong** **base** **top** **underneath** **side** **edge** **surface** **thinner** **Thicker** **Corner** **Point** **Straight** **Curved** **Design** **Make** **Evaluate** **User** **Purpose** **Idea** **Design criteria** **Product** **Function**	**Sensory Vocabulary** - Soft, juicy, crunchy, sweet sticky smooth, sharp, crisp, sour, hard **Flesh** **Skin** **Seed** **Pip** **Core** **Slicing** **Peeling** **Cutting** **Squeezing** **Healthy diet** **Choosing** **Ingredients** **Planning** **Investigating** **Tasting** **Arranging** **Popular** **Design** **Evaluate** **criteria's**

Year 2	Cooking and Nutrition – Preparing fruit and vegetables	Mechanisms – Wheels and Axles	Textiles – Templates and joining techniques
	Designing - Design appealing products for a particular user based on simple design criteria. - Generate initial ideas and design criteria through investigating a variety of fruit and vegetables. - Communicate ideas through talk and drawing. **Making** - Use simple utensils and equipment to peel, cut, slice, squeeze and chop safely. - Select from a range of fruits and vegetables according to their characteristics e.g colour, texture and taste to create a chosen product. - Children can follow procedures for safety and hygiene. **Evaluating** - Taste and evaluate a range of fruit and vegetables to determine intended users preferences.	**Designing** - Can generate ideas based on simple design criteria and their own experiences, explaining what they could make. - Develop, model and communicate their ideas through drawings and mock ups. **Making** - Select and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing. - Select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics. **Evaluating** - Explore a range of existing products with wheels and axles. - Evaluate their ideas throughout and their products against original criteria. **Technical Knowledge and Understanding**	**Designing** - Design a functional and appealing product for a chosen user and purpose based on simple design criteria. - Generate, develop, model and communicate their ideas as appropriate through talking, drawing, templates, mock-ups and information and communication technology. **Making** - Select from and use a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing. - Select from and use textiles according to their characteristics. **Evaluating** - Explore and evaluate a range of existing textile products relevant to the project being undertaken. - Evaluate their ideas throughout and their final products against original design criteria. Technical Knowledge and Understanding

	• Evaluate ideas and finished products against design criteria, including intended user and purpose. **Technical Knowledge and Understanding** • To understand where a range of fruit and vegetables come from e.g farmed or grown at home. • Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of *The Eatwell Plate.* • Know and use technical and sensory vocabulary relevant to the project.	• Explore and use wheels, axles and axle holders. • Distinguish between fixed and freely moving axles • Know and use technical vocabulary relevant to the project.	• Understand how simple 3-D textile products are made, using a template to create two identical shapes • Understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling. • Explore different finishing techniques e.g. using painting, fabric crayons, stitching, sequins, buttons and ribbons. • Know and use technical vocabulary relevant to the project.
Vocabulary	• Fruit and vegetable names • Name of equipment and utensils **Sensory Vocabulary** • Soft, juicy, crunchy, sweet sticky smooth, sharp, crisp, sour, hard • **Flesh** • **Skin** • **Seed**	• **Vehicle** • **Wheel** • **Axel** • **Axle holder** • **Chassis** • **Body** • **Cab** • **Assembling** • **Cutting**	• **Name of existing products,** • **Joining and finishing techniques** • **Tools** • **Fabrics and components** • **Tenplate** • **Pattern pieces** • **Mark out** • **Join** • **Decorate**

	• Pip • Core • Slicing • Peeling • Cutting • Squeezing • Healthy diet • Choosing • Ingredients • Planning • Investigating • Tasting • Arranging • Popular • Design • Evaluate • criteria's •	• Joining • Shaping • Finishing • Fixed • Free • Moving • Mechanism • Names of tools • Equipment and materials used • Design • Make • Evaluate • User • Purpose • function	• Finish • Features • Suitable • Quality mock up • Design brief • Design criteria • Make • Evaluate • User • Purpose • function

Founded 1871