SOMERVILLE PRIMARY SCHOOL

SOMERVILLE FEDERATION

	AUTUMN	SPRING	SUMMER
RECEPTION	**Being Imaginative** Create simple representations of events, people and objects. Chooses particular colours to use for a purpose. Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories. **Expressive Art and Design** Experiments to create different textures. Understands that different media can be combined to create new effects. Manipulates materials to achieve a planned effect. Constructs with a purpose in mind, using a variety of resources. Uses simple tools and techniques competently and appropriately. Selects appropriate resources and adapts work where necessary. Selects tools and techniques needed to shape, assemble and join materials they are using. Early Learning Goal Children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function		

YEAR 1	How can we design a successful kite?	How can we make a moving picture?	What makes a healthy sandwich?
	Design Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. **Make** Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. **Evaluate** Explore and evaluate a range of existing products, Evaluate their ideas and products against design criteria. **Technical knowledge** Build structures, exploring how they can be made stronger, stiffer and more stable.	**Design** Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. **Make** Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. **Evaluate** Explore and evaluate a range of existing products, Evaluate their ideas and products against design criteria. **Technical knowledge** Build structures, exploring how they can be made stronger, stiffer and more stable. Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their	**What makes a healthy sandwich?** **Cooking & Nutrition** Use the basic principles of a healthy and varied diet to prepare dishes. Understand where food comes from.

		products.	
YEAR 2	**What makes the best pizza?** **Cooking & Nutrition** Use the basic principles of a healthy and varied diet to prepare dishes. Understand where food comes from.	**What does a superhero's cape need to do?** **Design** Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. **Make** Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]	**What is a vehicle?** **Design** Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. **Make** Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] Select from and use a wide range of

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YEAR 3	**How do we make a pencil case that can open and close?** **Design** Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. **Make** Select from and use a wider range of tools	**How is bread made?** **Cooking & Nutrition** Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	**STEM CHALLENGE DAY**

	and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities . **Evaluate** Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.		
YEAR 4	**How is bread made?** **Cooking & Nutrition** Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	**What makes the strongest design of bridge?** **Design** Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. **Make** Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.	**STEM CHALLENGE DAY**

		Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities . **Evaluate** Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Understand how key events and Individuals in design and technology have helped shape the world. **Technical knowledge** Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.	
YEAR 5	**How can I make fashionable clothing?** **Design** Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. **Make** Select from and use a wider range of tools	**What do people in Mexico eat?** **Cooking & Nutrition** Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed	**STEM CHALLENGE DAY**

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YEAR 6	**How can we make an effective security alarm?** **Design** Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. **Make** Select from and use a wider range of tools	**What makes and effective bird hide?** **Design** Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. **Make** Select from and use a wider range of tools	**STEM CHALLENGE DAY**

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