



Curriculum Subject Outline – Design and Technology

2016-2017

Technology Team Leader: Paul McCool

	Aut I	Aut II	Spring I	Spring II	Summer I	Summer II
Year 1	Paws, Claws and Whiskers	Superheroes	Bright lights Big City	Rio de Vida	Memory Box	Dinosaur planet
	design purposeful, functional, appealing products for themselves and other users based on design criteria	use the basic principles of a healthy and varied diet to prepare dishes explore and evaluate a range of existing products	explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. build structures, exploring how they can be made stronger, stiffer and more stable understand where food comes from. design purposeful, functional, appealing products for themselves and other users based on design criteria select from and use a wide range of	design purposeful, functional, appealing products for themselves and other users based on design criteria select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics evaluate their ideas and products against design criteria	use the basic principles of a healthy and varied diet to prepare dishes select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

			materials and components, including construction materials, textiles and ingredients, according to their characteristics			
Year 2	Muck, Mess and Mixtures	Beat Band Boogie	Beachcombers	Towers, Tunnels and Turrets	Land Ahoy!	Bounce
	<p>explore and evaluate a range of existing products</p> <p>understand where food comes from.</p> <p>use the basic principles of a healthy and varied diet to prepare dishes</p> <p>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their</p>	<p>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p> <p>evaluate their ideas and products against design</p>	<p>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p>	<p>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>build structures, exploring how they can be made stronger, stiffer and more stable</p> <p>evaluate their ideas and products against design criteria</p>	<p>explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p> <p>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>build structures, exploring how they can be made stronger, stiffer and more stable</p> <p>evaluate their ideas and products</p>	<p>explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p> <p>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p>

	<p>characteristics</p> <p>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p> <p>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p>				<p>against design criteria</p>	
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Year 3	Scrumdiddlyumptious	Tribal Tales	Heroes and Villains	Tremors	Predator	Mighty Metals
	<p>investigate and analyse a range of existing products</p> <p>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed</p>	<p>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</p> <p>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</p> <p>evaluate their ideas and products against their own design</p>	<p>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</p>	<p>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</p> <p>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</p> <p>apply their understanding of how to strengthen, stiffen and reinforce more</p>	<p>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</p>	<p>investigate and analyse a range of existing products</p> <p>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</p> <p>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</p> <p>select from and use</p>

	<p>at particular individuals or groups</p> <p>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <p>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</p>	<p>criteria and consider the views of others to improve their work</p> <p>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p>		<p>complex structures</p>		<p>a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>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</p> <p>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p>
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Year 4	Potions	I am warrior	Road trip USA	Burps Bottoms and Bile	Traders and Raiders	Misty Mountain Sierra
	<p>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>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</p> <p>evaluate their ideas and products against their own design criteria and consider the views of others to improve their</p>	<p>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</p> <p>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>understand how key events and individuals in design and technology have helped shape the world</p>	<p>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>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</p>	<p>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>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</p> <p>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>use research and develop design criteria to inform</p>	<p>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</p> <p>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</p> <p>select from and use a wider range of tools and equipment to perform practical tasks</p>	<p>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p>

	work		groups	<p>the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</p> <p>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p>	<p>[for example, cutting, shaping, joining and finishing], accurately</p>	
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Year 5	Peasants Princes and Pestilence	Alchemy Island	Beast Creator	Star Gazers	Allotment	Pharaohs
	<p>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</p> <p>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p>	<p>understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</p> <p>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</p>	<p>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>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</p> <p>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p>	<p>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</p> <p>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</p> <p>evaluate their ideas and products against their own design criteria and consider the views of others to improve their</p>	<p>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>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</p> <p>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p> <p>apply their</p>	<p>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p> <p>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</p>

				work	understanding of how to strengthen, stiffen and reinforce more complex structures	
Year 6	Darwin's Delights, Revolution		Frozen Kingdom	A Child's War	Gallery Rebels	ID
	<p>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</p> <p>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p>		<p>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p>	<p>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p> <p>select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic</p>	<p>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>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</p> <p>understand and use electrical systems in their</p>	<p>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>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</p>

				qualities	products [for example, series circuits incorporating switches, bulbs, buzzers and motors]	
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