

Wykeham Primary School
Design and Technology Overview 2018-2019

	Autumn Term	Spring Term	Summer Term
Year 1	<p>QCA Unit 1a/NC 1b, 2d, 3b Moving Pictures FOCUS: Mechanisms</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> 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 <p>Evaluate</p> <ul style="list-style-type: none"> explore and evaluate a range of existing products evaluate their ideas and products against design criteria 	<p>QCA Unit 1D/NC 1e, 2d, 3a, b, 4a Homes FOCUS: Structures</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> 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 <p>Evaluate</p> <ul style="list-style-type: none"> explore and evaluate a range of existing products evaluate their ideas and products against 	<p>QCA Unit 1C/NC 1a, 2a, f, 3a, b Eat more Fruit and Vegetables FOCUS: Food</p> <p>Cooking and nutrition</p> <ul style="list-style-type: none"> use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from. <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> 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



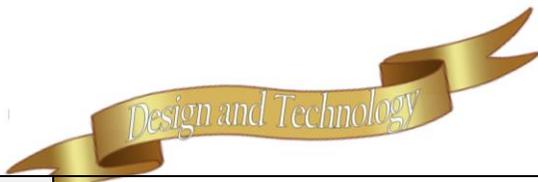
Wykeham Primary School
Design and Technology Overview 2018-2019

<p>Technical knowledge</p> <ul style="list-style-type: none">• 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 products.	<p>design criteria</p> <p>Technical knowledge</p> <ul style="list-style-type: none">• 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 products.	<p>characteristics</p> <p>Evaluate</p> <ul style="list-style-type: none">• explore and evaluate a range of existing products• evaluate their ideas and products against design criteria
--	---	---



Wykeham Primary School
Design and Technology Overview 2018-2019

	Autumn Term	Spring Term	Summer Term
Year 2	<p>QCA Unit 2B/NC 1a, 2a, e, 3a, b, 4a - Puppets FOCUS: Textiles</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> 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 <p>Evaluate</p> <ul style="list-style-type: none"> explore and evaluate a range of existing products evaluate their ideas and products against design criteria 	<p>QCA Unit 2D/NC 1e, 2a, c, e, 3a, b, 4a – Making masks and head dresses FOCUS: Textiles</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> 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 <p>Evaluate</p> <ul style="list-style-type: none"> explore and evaluate a range of existing products 	<p>QCA Unit 2C/NC 1b, 2a, d, 3a, b, 4a, b – Winding up FOCUS: Mechanisms/Structures</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> 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 <p>Evaluate</p> <ul style="list-style-type: none"> explore and evaluate a range of existing products

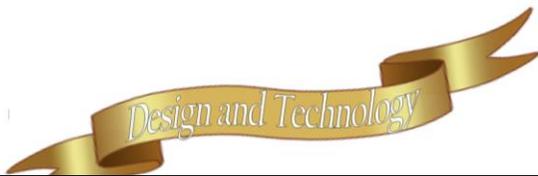


Wykeham Primary School
Design and Technology Overview 2018-2019

<p>Technical knowledge</p> <ul style="list-style-type: none">▪ 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 products. <p>Children to produce a puppet show.</p>	<ul style="list-style-type: none">▪ evaluate their ideas and products against design criteria <p>Technical knowledge</p> <ul style="list-style-type: none">▪ 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 products.	<ul style="list-style-type: none">▪ evaluate their ideas and products against design criteria <p>Technical knowledge</p> <ul style="list-style-type: none">▪ 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 products.
--	--	--



	Autumn Term	Spring Term	Summer Term
Year 3	<p>QCA Unit 3B/NC 1a, b, d, 2a, b, e, f, 3a, b, c – Sandwich Snacks. (Cross-curricular link with Numeracy) FOCUS: Food</p> <p>Cooking and Nutrition</p> <ul style="list-style-type: none"> 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. <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> select from and use a wider range of tools and 	<p>QCA Unit 3A/NC 1a, b, c, d, 2a, b, c, 4a, b – Packaging Cross-curricular link with ICT Combining Text and Graphics) FOCUS: Structures</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> select from and use a wider range of tools 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 	<p>QCA Unit 3C/NC 1a, b, c, d, 2a, b, c, d, e, 3a, b, c, 4a, c – Moving Monsters FOCUS: Control Mechanisms</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> select from and use a wider range of tools 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 <p>Evaluate</p>



Wykeham Primary School
Design and Technology Overview 2018-2019

	<p>equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <ul style="list-style-type: none"> ▪ 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>Evaluate</p> <ul style="list-style-type: none"> ▪ 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 <p>Technical knowledge</p> <ul style="list-style-type: none"> ▪ apply their understanding of how to strengthen, stiffen and reinforce more complex structures ▪ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] ▪ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] ▪ apply their understanding of computing to program, monitor and control their products. 	<p>Evaluate</p> <ul style="list-style-type: none"> ▪ 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 <p>Technical knowledge</p> <ul style="list-style-type: none"> ▪ apply their understanding of how to strengthen, stiffen and reinforce more complex structures ▪ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] ▪ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] ▪ apply their understanding of computing to program, monitor and control their products. 	<ul style="list-style-type: none"> ▪ 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 <p>Technical knowledge</p> <ul style="list-style-type: none"> ▪ apply their understanding of how to strengthen, stiffen and reinforce more complex structures ▪ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] ▪ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] ▪ apply their understanding of computing to program, monitor and control their products.
--	--	---	--



Wykeham Primary School
Design and Technology Overview 2018-2019

	Autumn Term	Spring Term	Summer Term
Year 4	<p>QCA Unit 4A/NC 1a, b, d, 2a, b, c, d, e, 3a, b, c, 4a, b – Money Containers FOCUS: Structures: Textiles</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> select from and use a wider range of tools 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 <p>Evaluate</p> <ul style="list-style-type: none"> investigate and analyse a range of existing 	<p>QCA Unit 4B/NC 1a, b, c, d, 2a, d, e, 3a, b, c, 4a, d – Story Books FOCUS: Control Mechanisms</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> select from and use a wider range of tools 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 	<p>QCA Unit 4E/NC 1a, b, c, d, 2a, b, d, e, 3a, b, c, 4a, b, c – Lighting it up FOCUS: Control: electrical, computer</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> select from and use a wider range of tools 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 <p>Evaluate</p> <ul style="list-style-type: none"> investigate and analyse a range of existing



Wykeham Primary School
Design and Technology Overview 2018-2019

	<p>products</p> <ul style="list-style-type: none"> ▪ 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 <p>Technical knowledge</p> <ul style="list-style-type: none"> ▪ apply their understanding of how to strengthen, stiffen and reinforce more complex structures ▪ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] ▪ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] ▪ apply their understanding of computing to program, monitor and control their products. ▪ apply their understanding of computing to program, monitor and control their products. 	<p>Evaluate</p> <ul style="list-style-type: none"> ▪ 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 <p>Technical knowledge</p> <ul style="list-style-type: none"> ▪ apply their understanding of how to strengthen, stiffen and reinforce more complex structures ▪ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] ▪ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] ▪ apply their understanding of computing to program, monitor and control their products. 	<p>products</p> <ul style="list-style-type: none"> ▪ 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 <p>Technical knowledge</p> <ul style="list-style-type: none"> ▪ apply their understanding of how to strengthen, stiffen and reinforce more complex structures ▪ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] ▪ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
--	--	---	--



Wykeham Primary School
Design and Technology Overview 2018-2019

	Autumn Term	Spring Term	Summer Term
Year 5	<p>QCA Unit 5C/NC 1a, b, c, d, 2a, b, d, e, 3a, b, c, 4a, b, c – Moving Toys FOCUS: Control Mechanisms</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> select from and use a wider range of tools 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 <p>Evaluate</p> <ul style="list-style-type: none"> investigate and analyse a range of existing 	<p>QCA Unit 5A/NC 1a, b, c, d, 2a, b, c, d, e, 3a, b, c, 4a, b – Musical Instruments FOCUS: Structures</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> select from and use a wider range of tools 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 	<p>QCA Unit 5D/NC 1a, b, c, d, 2a, b, c, e, f, 3a, b, c, 4a, b – Biscuits/ Pizza FOCUS: Food</p> <p>Cooking and Nutrition</p> <ul style="list-style-type: none"> 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. <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> select from and use a wider range of tools and equipment to perform practical tasks



Wykeham Primary School
Design and Technology Overview 2018-2019

	<p>products</p> <ul style="list-style-type: none"> ▪ 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 <p>Technical knowledge</p> <ul style="list-style-type: none"> ▪ apply their understanding of how to strengthen, stiffen and reinforce more complex structures ▪ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] ▪ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] ▪ apply their understanding of computing to program, monitor and control their products. 	<p>Evaluate</p> <ul style="list-style-type: none"> ▪ 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 <p>Technical knowledge</p> <ul style="list-style-type: none"> ▪ apply their understanding of how to strengthen, stiffen and reinforce more complex structures ▪ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] ▪ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] ▪ apply their understanding of computing to program, monitor and control their products. 	<p>[for example, cutting, shaping, joining and finishing], accurately</p> <ul style="list-style-type: none"> ▪ 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>Evaluate</p> <ul style="list-style-type: none"> ▪ 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 <p>Technical knowledge</p> <ul style="list-style-type: none"> ▪ apply their understanding of how to strengthen, stiffen and reinforce more complex structures ▪ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] ▪ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] ▪ apply their understanding of computing to program, monitor and control their products.
--	--	---	---



Wykeham Primary School
Design and Technology Overview 2018-2019

	Autumn Term	Spring Term	Summer Term
Year 6	<p>Making bread FOCUS: Food technology</p> <p>Cooking and Nutrition</p> <ul style="list-style-type: none"> 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. <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and 	<p>Fairground: to design and make a model of a fairground ride FOCUS: Control: electrical</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> select from and use a wider range of tools 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 	<p>Designing and making shelters FOCUS: Structures</p> <p>Design</p> <ul style="list-style-type: none"> 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 <p>Make</p> <ul style="list-style-type: none"> select from and use a wider range of tools 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 <p>Evaluate</p> <ul style="list-style-type: none"> investigate and analyse a range of existing products



Wykeham Primary School
Design and Technology Overview 2018-2019

	<p>finishing], accurately</p> <ul style="list-style-type: none"> 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>Evaluate</p> <ul style="list-style-type: none"> 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 <p>Technical knowledge</p> <ul style="list-style-type: none"> apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] apply their understanding of computing to program, monitor and control their products. 	<p>Evaluate</p> <ul style="list-style-type: none"> 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 <p>Technical knowledge</p> <ul style="list-style-type: none"> apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] apply their understanding of computing to program, monitor and control their products. 	<ul style="list-style-type: none"> 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 <p>Technical knowledge</p> <ul style="list-style-type: none"> apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] apply their understanding of computing to program, monitor and control their products.
--	---	---	--