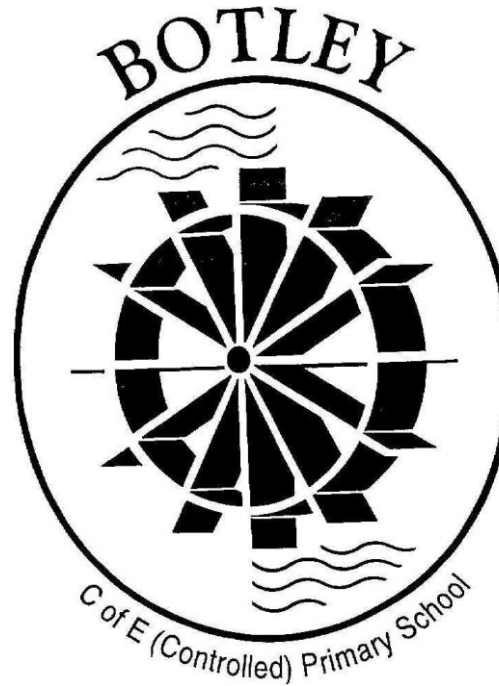


Botley C of E Primary School



Curriculum Subject Map: Years 1-6

Design and Technology

Year 1/2 Cycle A

Autumn 1

Theme Title: Toy Time Travellers

Objectives from National Curriculum:

- Generate, develop, model and communicate their ideas through talking, drawing, mock-ups
- Select from and use wide range of materials and components, including construction materials
- Consider their own and others' needs, wants.
- Draw on disciplines such as mathematics, science, and art.
- Learn how to take risks, becoming resourceful innovative citizens.
- Evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. Contribution to understanding of creativity, culture
- **Design-** Design purposeful, functional, appealing products for themselves
- Generate, ideas through 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 textiles and ingredients, according to their characteristics
- **Evaluate-** Explore and evaluate a range of existing products

Task: Photo frames for photo of family member e.g. Grandparent



Autumn 2

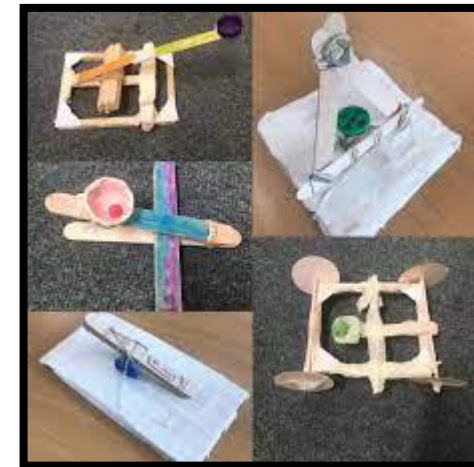
Spring 1

Theme Title: "Turrets, Towers and Tunnels " (Spring)

Objectives from National Curriculum:

- Generate, develop, model and communicate their ideas through talking, drawing, mock-ups
- Select from and use wide range of materials and components, including construction materials
- Explore and use mechanisms [for example, wheels and axles], in their products
- Use levers to make catapults within context of firing over castle walls.
- Solve real and relevant problems (how can King Arthur/ St George succeed?) within a variety of contexts, considering their own and others' needs, wants and values.

Task: make a catapult.



Spring 2

Summer 1	
Summer 2	<p>Theme Title: Amazing Asia</p> <p>Objectives from National Curriculum:</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• Make and evaluate a purposeful, functional and appealing product (regional dishes) for others based on design criteria.• Cooking- Tasting related to different regions.• Explore and evaluate a range of existing products• Contribute to understanding of culture, and well-being of the nation <p>Task: Rice paper rolls (Vegetable sushi)</p>



Year 1/2 Cycle B

Autumn 1

Autumn 2

Theme Title: Who's Afraid of the Big Bad Wolf?

- Using and joining textiles.
- Design purposeful, functional, appealing products for themselves and other users based on design criteria
- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- Explore and evaluate a range of existing products
- Evaluate their ideas and products against design criteria

Task: Design puppets to be used in within English learning to retell famous fairy tales.

Spring 1

Spring 2

Summer 1

Theme Title: Bright Lights, Big City

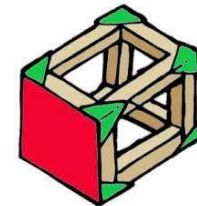
- Design and create a model city as a class using woodwork.
- Consider the features of a building and how these can be included within their model.
- Design purposeful, functional, appealing products for themselves and other users based on design criteria
- Build structures exploring how they can be made stronger, stiffer and more stable.
- Explore and use mechanisms [for example, levers and sliders], in their products.

Task: Make building structures.

Cooking and Nutrition

- Make and evaluate a purposeful, functional and appealing product (regional dishes) for others based on design criteria.
- Cooking- Tasting related to different regions; Shortbread- Scotland, Bubble and Squeak Ireland etc.
- Explore and evaluate a range of existing products
- Contribute to understanding of culture, and well-being of the nation.

Task: Make biscuits



Summer 2

Theme Title: Botley Time Travellers

- Using and joining textiles
- Design purposeful, functional, appealing products for themselves and other users based on design criteria
- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- Explore and evaluate a range of existing products
- Evaluate their ideas and products against design criteria





	Task: Using their designs from computing, create bunting to decorate Botley High Street.
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Year 3/4 Cycle A

Autumn 1	
Autumn 2	<p>Theme Title: Scrumdiddlyumtious</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. • Design, make and cook a Pizza • -use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose • -Generate, develop, model and communicate their ideas using computer-aided design • Make & select from a wider range of tools and equipment to perform practical tasks • 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 and apply the principles of a healthy and varied diet • prepare and cook a pizza using a range of cooking techniques <p>Task: Children to make their own healthy pizza and serve to their parents.</p>
Spring 1	
Spring 2	<p>Theme Title: Raiders or Traders?</p> <ul style="list-style-type: none"> • evaluate flags. • plan own logo for a flag • learn sewing skills in order to sew the motif onto the flag effectively to a high standard using sewing skills and evaluate final product against the design brief • generate, develop, model and communicate their ideas through discussion, annotated sketches, , prototypes, pattern pieces and computer-aided design • 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 a wider range of materials and components (textiles) • 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 <p>Task: To design and make a Viking flag</p>
Summer 1	
Summer 2	



Year 3/4 Cycle B

Autumn 1	<p>Theme Title: Blue Abyss</p> <ul style="list-style-type: none"> • Design, make and evaluate pages for a picture book with moving parts (based upon River by Mark Martin) against a given design brief. • Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams and computer-aided design • Select from and use tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately • Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • Apply their understanding of how to strengthen, stiffen and reinforce the car structures • Understand and use mechanical systems in their products [for example, levers and linkages] to make signals (link to maths-measures) <p>Task: To create a moving book based on 'The River'</p>	
Autumn 2		
Spring 1		
Spring 2	<p>Theme Title: Stay Safe</p> <ul style="list-style-type: none"> • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces • select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • 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] <p>Task: To construct a light box for a safety sign</p>	
Summer 1	<p>Theme Title: Dynamic Discoveries</p> <ul style="list-style-type: none"> • design, make and evaluate a crane with a magnet against a given design brief. • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces • select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities • 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 	

- 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]


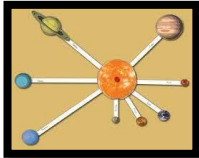

Task: To construct a working model crane



Summer 2

Year 5/6 Cycle A	
Autumn 1	<p>Theme Title: All the Fun of the Fair</p> <ul style="list-style-type: none"> • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and • computer-aided design • 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 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 • 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>Task: Make a Victorian theme park ride using experience of trip to theme park and research, incorporating pulleys, cams and circuits</p>
Autumn 2	
Spring 1	<p>Theme Title: Gods and Mortals</p> <ul style="list-style-type: none"> • Understanding the importance of Ancient Greek masks in entertainment, culture and design, make and evaluate own mask against design brief. • 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. • Pattern Pieces and CAD for design of Ancient Greek tunic to accompany mask. <p>Task: Make a mask for Ancient Greek mask.</p>
Spring 2	
Summer 1	<p>Theme Title: Civilization and Society</p> <ul style="list-style-type: none"> • Create a 'Welcome to Botley' gallery for the school office area entrance inspired by the school grounds. • Planning for purpose, stitching and making wooden frame for canvas • Design, plan and decorate a fabric piece, changing and modifying threads and fabrics as needed. Select fabrics and threads to enhance the purpose of the work Recognise different forms of textiles and express opinions on them, identifying artists who have worked in a similar way to their own work. • Apply knowledge of different techniques to present a mood, feeling or concept embroider with various stiches to add detail e.g. running stitch, cross stitch, French knot as well as blanket stitch to attach fabrics. <p>Task: Make a frame and attach a stitched piece of art work.</p>
Summer 2	

Year 5/6 Cycle B

Autumn 1	<p>Theme Title: Fit in Five</p> <ul style="list-style-type: none"> • Understand and apply the principles of a healthy and varied diet • Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. • Design, make and evaluate a nutritionally balanced dish against a given brief. 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. select from and use a wider range of materials and components, including ingredients, according to their functional properties and aesthetic qualities <p>Task: To research, design, make and evaluate a healthy seasonal hot meal (variety of burgers and home made rolls)</p>	
Autumn 2		
Spring 1	<p>Theme Title: Tomorrow's world and Beyond</p> <p>Objectives from National Curriculum:</p> <ul style="list-style-type: none"> • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and • computer-aided design • 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 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 • 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>Task: Make an orbiting solar system</p>	 
Spring 2		
Summer 1	<p>Theme Title: Civilization and Society</p> <ul style="list-style-type: none"> • Create a 'Welcome to Botley' gallery for the school office area entrance inspired by the school grounds. • Planning for purpose, stitching and making wooden frame for canvas • Design, plan and decorate a fabric piece, changing and modifying threads and fabrics as needed. Select fabrics and threads to enhance the purpose of the work Recognise different forms of textiles and express opinions on them, identifying artists who have worked in a similar way to their own work. 	

	<ul style="list-style-type: none">• Apply knowledge of different techniques to present a mood, feeling or concept embroider with various stiches to add detail e.g. running stitch, cross stitch, French knot as well as blanket stitch to attach fabrics. <p>Task: Make a frame and attach a stitched piece of art work.</p>
Summer 2	