

St Joseph's Catholic Primary School Design Technology Coverage and Long Term Plan

Year	Autumn	Spring	Summer
1	Eat More Fruit and Vegetables (Instructions) (Statistics)	Each class will make a pancake to celebrate 'Shrove Tuesday' and complete work based upon this.	Moving Pictures (Instructions) (Measure)
2		Perfect Pizzas (Instructions) (Measuring)	Let's Go Fly a Kite (Instructions/ Diary Entry) (Measure - Length)
3	Sandwich Snacks (Instructions) (Measure - weight)	Pancakes	Wacky Windmills (Instructions/ Diary Entry) (Measure - Length)
4	Alarms (Instructions) (Time)		Seasonal Foods (Instructions) (Distance travelled)
5		Fairground (Instructions) (Measuring - Length)	Biscuits (Instructions) (Weight/ Volume)
6		Harvest Soup (Instructions) (Measure - Weight)	Cushions (Persuasive Advert) (Profit Margin)

Red text – English Links

Blue Text – Maths Links

Key Stage 1 Design Technology Coverage

Year 1 Design Technology Coverage:

Unit	National Curriculum Objective
Eat More Fruit and Vegetables	<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.• 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 their ideas and products against design criteria.• use the basic principles of a healthy and varied diet to prepare dishes.• understand where food comes from.
Moving Pictures	<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.• 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.• explore and evaluate a range of existing products.• evaluate their ideas and products against design criteria.• explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.•

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Year 2 Design Technology Coverage:

Let's Go Fly a Kite

- 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.
- explore and evaluate a range of existing products.
- build structures, exploring how they can be made stronger, stiffer and more stable.

Perfect Pizzas

- 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.
- explore and evaluate a range of existing products.
- evaluate their ideas and products against design criteria.
- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

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Blue Text – Maths Links

Key Stage 2 Design Technology Coverage

Year 3 Design Technology Coverage:

Sandwich Snacks

- 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.
- 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.
- 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 variety of predominantly savoury dishes using a range of cooking techniques.

Wacky Windmills

- 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.
- 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.
- 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.
- apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

Red text – English Links

Blue Text – Maths Links

Year 4 Design Technology Coverage:

Alarms	<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.• select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.• 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 use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].
Seasonal Food	<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.

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Blue Text – Maths Links

Year 5 Design Technology Coverage:

Healthy Wraps	<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.• 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.• 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.• prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
Fairground	<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.• 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.• 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 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].

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Year 6 Design Technology Coverage:

Cushions	<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.• 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.• 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.
Harvest Soup	<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.• select from and use a wider range of 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.• 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

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