West Tyne Church Schools Federation Design Technology Long Term Plan						
Reception	Year 1/2	Year 1/2	Year 3/4	Year 3/4	Year 5/6	Year 5/6
	Shade and Shelter	Remarkable Recipes	Cook Well, Eatwell	Fresh Food, Good Food	Moving Mechanisms	Food for Life
	Brief Overview and Link to our drivers					
	Taxi!	Beech Hut	Push & Pull	Water & Waves	Eat the Seasons	Electrical Circuits
	Brief Overview and Link to our drivers					
	Chop, Slice & Mash	Making it Move	Greenhouse	Tomb Builders	Allotment—Making structures	Make Do & Mend
	Brief Overview and Link to our drivers					

# Year 5/6 Cycle A





#### Moving Mechanisms

- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Investigate and analyse a range of existing products.
- 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.
- Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.

## Eat The Seasons

- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- Understand and apply the principles of a healthy and varied diet.

## Allotment, Making Structures

- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- 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.
- Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.

# Year 5/6 Cycle B



### Food for Life

- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Investigate and analyse a range of existing products.
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.

## Electrical Circuits and Components

- Apply their understanding of computing to program, monitor and control their products.
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.
- Investigate and analyse a range of existing products.
- 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.

## Make Do and Mend

- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Investigate and analyse a range of existing products.
- 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.

# Year 3/4 Cycle A





### Cook Well, Eatwell

- Create sketchbooks to record their observations and use them to review and revisit ideas.
- Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (for example, pencil, charcoal, paint, clay).
- Learn about great artists, architects and designers in history.

## Push and Pull

- Create sketchbooks to record their observations and use them to review and revisit ideas.
- Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (for example, pencil, charcoal, paint, clay).

### Greenhouse

- Create sketchbooks to record their observations and use them to review and revisit ideas.
- Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (for example, pencil, charcoal, paint, clay).

# Year 3/4 Cycle B





#### Fresh Food, Good Food

- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- Understand and apply the principles of a healthy and varied diet.
- Understand how key events and individuals in design and technology have helped shape the world.
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

### Water and Waves

- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.
- Investigate and analyse a range of existing products.
- 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.
- Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.

### Tomb Builder

- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.
- Investigate and analyse a range of existing products.

# Year 1/2 Cycle A





### Shade and Shelter

- Build structures, exploring how they can be made stronger, stiffer and more stable.
- Design purposeful, functional, appealing products for themselves and other users based on design criteria.
- Evaluate their ideas and products against design criteria.
- Explore and evaluate a range of existing products.
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.

#### Taxi

- Build structures, exploring how they can be made stronger, stiffer and more stable.
- Design purposeful, functional, appealing products for themselves and other users based on design criteria.
- Evaluate their ideas and products against design criteria.
- Explore and evaluate a range of existing products.
- Explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products.

### Chop, Slice, Mash!

- Design purposeful, functional, appealing products for themselves and other users based on design criteria.
- Evaluate their ideas and products against design criteria.
- Explore and evaluate a range of existing products.
- Generate, develop, model and communicate ideas through talking, drawing, templates, mock-ups and, 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).

# Year 1/2 Cycle B





#### **Remarkable Recipes**

- Design purposeful, functional, appealing products for themselves and other users based on design criteria.
- Evaluate their ideas and products against design criteria.
- Explore and evaluate a range of existing products.
- 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).

### Beech Hut

- Build structures, exploring how they can be made stronger, stiffer and more stable.
- Design purposeful, functional, appealing products for themselves and other users based on design criteria.
- Evaluate their ideas and products against 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).

## Making it Move (Bright Lights, Big City)

- Build structures, exploring how they can be made stronger, stiffer and more stable.
- Design purposeful, functional, appealing products for themselves and other users based on design criteria.
- Evaluate their ideas and products against design criteria.
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication