Waltham Leas Primary Academy Subject: DT Leader: Lauren Whittleton

Statements in black: Guidance of skills and knowledge to cover within each unit of work. Statements in Blue: Taken directly from the National Curriculum.
The intent of our DT Curriculum at Waltham Leas Primary Academy: *Design and technology is an inspiring, rigorous and practical subject. Our aim is to teach all children a progressive curriculum in Design and Technology which will equip them with the knowledge, understanding and practical skills necessary to participate successfully in an increasingly technological world.* *Design and technology is a subject taught through the key main areas of design, make and evaluation. Through practical work and innovative approaches to design and evaluation, all children can feel they* ***belong*** *in the DT classroom environment.* *Throughout their time at Waltham Leas, children are taught a progression of skills in food preparation, textiles, electrical components and programming. Pupils are explicitly taught new skills year on year, which* ***empower*** *children to go on to create their own designs based on their design criteria, taking into account their own and others' needs. Children are given the experience of working in a range of relevant contexts and, where possible, this is linked to their local area of Waltham.* *All pupils at Waltham Leas have the opportunity to use creativity and imagination to design and make products that solve real life and relevant problems, enabling all children to* ***grow*** *in ability and confidence so they can leave primary school with the knowledge and skills they need to succeed in design and technology in key stage 3 and beyond.*

Year Foundation Stage

During the Early Years Foundation Stage, children explore and use a variety of media and materials through a combination of child initiated and adult led activities. Children have opportunities to support their child initiated play through the continuous provision which gives children access to a variety of DT resources.

Indoors - Construction kits, junk modelling, lego, duplo, straws and connectors, wooden blocks, bricks, cutting and joining resources, media and embellishments.
Outdoors - wood, tyres, fabric, crates, outdoors construction kits, balance planks, den construction and water runs.

Children have opportunities to; explore textures, use different media and materials. Construct with a purpose, develop skills using simple tools, select appropriate resources for a product and adapt their work where necessary.

Assessment: Children in EYFS are assessed using Tapestry assessment tracker to record children's knowledge and skills.

Children at the expected level of development will:

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;

- Share their creations, explaining the process they have used;

- Make use of props and materials when role playing characters in narratives and stories.

EYFS Planning ideas:

What makes me marvellous?

This challenge gives children the opportunity to create portraits using paper plates and collage materials.

How did Rama and Sita find their way home? Story of Rama and Sita, how people celebrate, look at the globe/atlas to see where in the world people celebrate. Clay diva lamps. Rangoli Patterns using rice, lentils, beans.

What time is Maisy's Birthday? Why and how do people celebrate birthdays? Calendars- Weaving (fine motor), Using tools to make jam sandwiches for the party.

Do you wanna build a snowman? Making snowmen from moldable foam- use small collage resources for eyes and buttons

What makes us grow? What keeps us strong and healthy, sort foods into healthy and unhealthy, design and make a fruit salad/kebab.

Further ideas for provision:

Rangoli Patterns using rice, lentils, beans
Decorating diva lamps
Calendars - Weaving (fine motor)
Making snowmen from moldable foam- use small collage resources for eyes and buttons
Designing and making a fruit kebab.
Construction to make emergency vehicles

Year 1 Over the course of the year children in Year 1 will develop the following knowledge and skills:		
Autumn Topic: Moving Pictures Traditional Tales	Spring Topic: Fabric Bunting	Summer Topic: Bring on Breakfast

Prior Learning:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria; Handa's Surprise fruit kebab making, Can you make a boat that will float? (Foundation Stage).
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology; Junk Model Vehicles, Handa's Surprise fruit kebab making, Can you make a boat that will float? (Foundation Stage).

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]; Junk model vehicles, continuous provision craft areas (Foundation Stage)
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics, Junk Model Vehicles, Can you make a boat that will float?, continuous provision craft areas (Foundation Stage).

Evaluate

- Share their creations, explaining processes they have used; Rangoli Patterns, Handa's surprise fruit kebab making, Junk Model Vehicles, Can you make a boat that will float?, continuous provision craft areas, painting, play doh, construction areas, crates, tyres, outdoor bricks (Foundation Stage).

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable; Junk Model Vehicles, Can you make a boat that will float, Continuous Provision construction areas (Foundation Stage).

Cooking and Nutrition

- use the basic principles of a healthy and varied diet to prepare dishes and understand where food comes from. (Ready, Steady, Cook - foundation stage)
- Understand where food comes from (Which food comes from the farm? - Foundation Stage)

Future learning:

Design

- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology; Fabric Faces (y2)
- Design purposeful, functional, appealing products for themselves and other users based on design criteria; Designing future products based on analysis of current products on the market; Pirate Paddy's Packed Lunch Problems (y2)

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]; Fabric Faces (y2)
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Fabric Faces (y2)

Evaluate

- explore and evaluate a range of existing products; Pirate Paddy's Packed Lunch Problems (y2)
- evaluate their ideas and products against design criteria. Fabric Faces(y2)

Technical Knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable; Pirate Paddy's Packed Lunch Problems(y2)
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products;

Cooking and nutrition

- use the basic principles of a healthy and varied diet to prepare dishes; Party Time (y2)
- understand where food comes from; Party Time (y2)

Pupils will:	Pupils will:	Pupils will:
• **Explore an existing product.** • **Draw a simple design.**	• **Judge existing products on a simple scale.** • **Use a graphics program to create a simple**	• **Develop their knowledge of basic healthy eating messages.**

- **Make a picture which has at least one moving mechanism.**
- **Start to understand what design criteria is used for.**
- **Evaluate what they did well on their product.**

Design

Pupils should be taught to

- 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.

Make

Pupils should be taught to

- 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

Pupils should be taught to

- explore and evaluate a range of existing products;
- evaluate their ideas and products against design criteria.

Technical knowledge

Pupils should be taught to

- 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.

Vocab: structure, wall, tower, weak, strong, base, top, underneath, side, edge, surface, cut, tie, glue, fold, join, fix.

design.

- **Work with support to cut out a fabric shape.**
- **Start to demonstrate how to create a basic stitch.**
- **Decorate a piece of fabric.**

Design

Pupils should be taught to

- 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.

Make

Pupils should be taught to

- 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

Pupils should be taught to

- explore and evaluate a range of existing products;
- evaluate their ideas and products against design criteria.

Technical knowledge

Pupils should be taught to

- 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.

Vocab: structure, wall, tower, weak, strong, base, top, underneath, side, edge, surface, cut, tie, glue, fold, join, fix.

- **Carry out tasting to help them plan a breakfast dish.**
- **Develop the skills to safely use a range of basic cooking equipment (e.g. knife, chopping board, spoon, fork, bowl).**
- **Plan, make and evaluate their breakfast dish.**

Design

Pupils should be taught to

- 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.

Make

Pupils should be taught to

- select from and use a range of tools and equipment to perform practical tasks

Evaluate

Pupils should be taught to

- explore and evaluate a range of existing products;
- evaluate their ideas and products against design criteria.

Cooking and nutrition.

Pupils should be taught to

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

Vocab: Wash, chop, knife, chopping board, fruit and vegetable names, healthy eating, squeezing, choosing, ingredients.

National Curriculum Coverage:

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an

National Curriculum coverage: Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].	**National Curriculum coverage**: As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.	iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

Year 2		
Autumn Topic: Fabric Faces	Spring Topic: Pirate Pete's Packed Lunch Problems	Summer Topic: Party Time

Prior Learning;

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria; Moving Pictures Traditional Tales (y1)
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology; Moving Pictures Traditional Tales (y1), Fabric Bunting (y1)

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]; Fabric Bunting (y1)
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics; Fabric Bunting (y1)

Evaluate

- explore and evaluate a range of existing products; Moving Pictures Traditional Tales and Fabric Bunting (y1)
- evaluate their ideas and products against design criteria; Moving Pictures Traditional Tales (y1)

Technical Knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable; Continuous Provision (EYFS)
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products; Moving Pictures Traditional Tales.

Cooking and Nutrition;

- use the basic principles of a healthy and varied diet to prepare dishes; Bring on Breakfast (y1)
- understand where food comes from; Bring on Breakfast (y1)

Future Learning;

Design;

- design purposeful, functional, appealing products for themselves and other users based on design criteria; Let's Go Fly a Kite (y3), Battery Operated Lights (y3).
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology; Let's Go Fly a Kite (y3), Battery Operated Lights (y3).

Make;

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]; Let's Go Fly a Kite (y3), Battery Operated Lights (y3)
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics; Let's Go Fly a Kite (y3), Battery Operated Lights (y3)

Evaluate;

- explore and evaluate a range of existing products; Let's Go Fly a Kite (y3), The Great Bread Bake Off (y3)
- evaluate their ideas and products against design criteria; Let's Go Fly a Kite (y3), The Great bread Bake Off (y3)

Technical knowledge;

- build structures, exploring how they can be made stronger, stiffer and more stable; Let's Go Fly a Kite (y3)
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products; Battery Operated Lights (y3)

Cooking and Nutrition;

- use the basic principles of a healthy and varied diet to prepare dishes; Get Baking (y3)
- understand where food comes from; Get Baking (y3)

Pupils will:

- **Create a template.**
- **Create a simple design to explain what they intend to do.**
- **Create a fabric face with support by joining pieces of fabric together and add features**
- **using appropriate materials and techniques.**

Design

Pupils should be taught to

Pupils will:

- **recognise the positives about an existing product and any problems;**
- **draw a simple design;**
- **with support, build a structure for their lunch box;**
- **test their own product.**

Design

Pupils should be taught to

Pupils will:

- **develop knowledge about healthy eating and where food comes from**
- **pupils will be aware that others may have different dietary needs so dishes may need to be modified.**
- **Pupils will learn how to get ready to cook and prepare ingredients safely and hygienically.**
- **Pupils will plan, make and evaluate their party dish.**

• 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. **Make** Pupils should be taught to • 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** Pupils should be taught to • explore and evaluate a range of existing products; • evaluate their ideas and products against design criteria. **Technical knowledge** Pupils should be taught to • 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. **Vocab: wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism names of tools, equipment and materials used.** **National Curriculum coverage:** Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding	• 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. **Make** Pupils should be taught to • 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** Pupils should be taught to • explore and evaluate a range of existing products; • evaluate their ideas and products against design criteria. **Technical knowledge** Pupils should be taught to • 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. **Vocab: structure, wall, tower, weak, strong, base, top, underneath, side, edge, surface, cut, tie, glue, fold, join, fix.** **National Curriculum coverage:** Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of	**Design** Pupils should be taught to • 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. **Make** Pupils should be taught to • select from and use a range of tools and equipment to perform practical tasks; • select from and use a wide range of materials and components, including ingredients, according to their characteristics. **Evaluate** Pupils should be taught to • explore and evaluate a range of existing products; • evaluate their ideas and products against design criteria. **Cooking and nutrition.** Pupils should be taught to • use the basic principles of a healthy and varied diet to prepare dishes • understand where food comes from. **Vocab: Wash, chop, knife, chopping board, fruit and vegetable names, healthy eating, squeezing, choosing, ingredients.** **National Curriculum coverage:** As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of

and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].	designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].	human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Year 3

Over the course of the year children in Year 3 will develop the following knowledge and skills:

Autumn: Let's Go Fly a Kite	Spring Topic: Get Baking	Summer Topic: Juggling Balls

Prior Learning:

Design

- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.d Drawing, labelling and mock ups for moving pictures and split pin animals (Y2)
- Design purposeful, functional, appealing products for themselves and other users based on design criteria; Designing future products based on analysis of current products on the market (Split Pin Animals, y2)

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing];Making moving pictures (y2)
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.Split Pin Animals, Party Time (y2)

Evaluate

- explore and evaluate a range of existing products; Split Pin Animals (y2)
- evaluate their ideas and products against design criteria. Split Pin Animals (y2)

Technical Knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable; Moving Pictures (y2)
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products; Moving Pictures (y2)

Cooking and nutrition

- use the basic principles of a healthy and varied diet to prepare dishes; Healthy Snacks (y2)
- understand where food comes from; Party Time (y2)

Future Learning

Design

- 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; Mechanical Posters (y4)
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design; Mechanical Systems (y4), Juggling Balls (y4)

Make

- select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately; Mechanical Systems (y4), Juggling Balls (y4).
- to 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; Mechanical Systems (y4), Juggling Balls (y4).

Evaluate

- investigate and analyse a range of existing products; Mechanical Posters (y4), Juggling Balls (y4)
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work; Mechanical Systems (y4), Juggling Balls (y4).
- Pupils should be taught to understand how key events and individuals in design and technology have helped shape the world.

Technical Knowledge

- 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); Mechanical Posters (y4)

Cooking and nutrition

- understand and apply the principles of a healthy and varied diet; Lovely Lunch (y4).

		• Pupils should be taught to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques; Lovely Lunch (y4) • understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed; Lovely Lunch (y4)
Pupils will; • **Explain how Homan Walsh used a kite to help build the Niagara Falls Bridge.** • **Use research into the shape and parts of kites to develop simple design criteria.** • **Build simple frame structures.** **Design** Pupils should be taught to • 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. **Make** Pupils should be taught to • select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately. • to 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** Pupils should be taught to • 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.	**Pupils will;** • **Investigate bread including how it is made and the varieties found around the world.** • **Pupils will learn about the role of bread, and meals which include bread, in a healthy, varied diet.** • **Pupils will practise bread making skills while working safely and hygienically.** • **Pupils will plan, make and evaluate their own bread dish.** **Design** Pupils should be taught to • 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. **Make** Pupils should be taught to • select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately. • to 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** Pupils should be taught to • 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.	**Pupils will;** • **Investigate a range of existing products.** • **Develop a design based around a design criteria.** • **Use appropriate techniques to decorate fabric.** • **With support create a hem using a running stitch and join fabrics using an overcast stitch.** **Design** Pupils should be taught to • 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. **Make** Pupils should be taught to • select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately. • to 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** Pupils should be taught to • 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.

• Pupils should be taught to understand how key events and individuals in design and technology have helped shape the world. **Technical Knowledge** Pupils should be taught to • 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). **National Curriculum Coverage:** Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].	• Pupils should be taught to understand how key events and individuals in design and technology have helped shape the world. **Cooking and Nutrition** Pupils should be taught to • understand and apply the principles of a healthy and varied diet. • Pupils should be taught to 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. **National Curriculum coverage:** As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.	• Pupils should be taught to understand how key events and individuals in design and technology have helped shape the world. **Technical Knowledge** Pupils should be taught to • 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). **National Curriculum Coverage:** Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

Year 4		
Autumn Topic: Lovely Lunch	Spring Topic: Mechanical Posters	Summer Topic: Battery Operated Lights

Prior learning:

Design;

- 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; Let's Go Fly a Kite (y3), Battery Operated Lights (y3)
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design; Let's Go Fly a Kite (y3), Battery Operated Lights (y3)

Make;

- select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately; Let's Go Fly a Kite (y3), Battery Operated Lights (y3)
- to 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; Let's Go Fly a Kite (y3), Battery Operated Lights (y3)

Evaluate;

- investigate and analyse a range of existing products; Let's Go Fly a Kite (y3), The Great Bread Bake Off (y3)
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work; Let's Go Fly a Kite (y3), Get Baking
- Pupils should be taught to understand how key events and individuals in design and technology have helped shape the world; Let's Go Fly a Kite (y3), The Great Bread Bake Off (y3)

Technical knowledge;

- build structures, exploring how they can be made stronger, stiffer and more stable; Let's Go Fly a Kite (y3)
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products; Battery Operated Lights (y3)

Cooking and Nutrition

- understand and apply the principles of a healthy and varied diet; Get Baking (y3)
- Pupils should be taught to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques; Bring on Breakfast (y1), Party Time(y2) Get Baking (y3).
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed; Which Foods Come from the Farm? (EYFS), Bring on Breakfast (y1), Get Baking (y3).

Future learning:

Design

- 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; Automata Animals (y5)
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Make

- select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately; Automata Animals (y5), Marbulous Structures (y5)
- to 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; Marbulous Structures (y5).

Evaluate

- investigate and analyse a range of existing products; Marbulous Structures (y5)
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work; Automata Animals (y5), Marbulous Structures (y5)
- Pupils should be taught to understand how key events and individuals in design and technology have helped shape the world.

Technical Knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures; Marbulous Structures (y5)
- understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages); Automata Animals (y5).
- 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; Programming Adventures (y6).

Cooking and Nutrition

- understand and apply the principles of a healthy and varied diet; Serve a Salad (y5)
- Pupils should be taught to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques; Serve a Salad(y5).
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed; Serve a Salad (y5).

Pupils will; ● **develop and apply their knowledge and understanding of ingredients and healthy eating.** ● **Pupils will learn and practise food preparation and cooking skills.** ● **Pupils will design and create dishes for an intended user based on research.** ● **Pupils will make and evaluate their dish.** **Design** Pupils should be taught to; ● 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. **Make** Pupils should be taught to ● select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting), accurately. ● to select from and use a wider range of materials and components, including ingredients, according to their functional properties and aesthetic qualities. **Evaluate** Pupils should be taught to ● investigate and analyse a range of existing products.	**Pupils will;** ● **Explore mechanical systems.** ● **Draw a simple annotated design.** ● **Start to generate ideas for design criteria.** ● **Make a prototype and finished poster which has at least one lever/ linkage mechanism.** ● **Evaluate what they did well on their product and things they could improve.** **Design** Pupils should be taught to; ● 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. **Make** Pupils should be taught to ● select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately. ● to 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** Pupils should be taught to ● investigate and analyse a range of existing products.	**Pupils will;** ● **Explain how technology has helped shape the world we live in.** ● **Explore and make a series and parallel circuit and follow instructions to make a switch.** ● **Draw a simple annotated design.** ● **Write their own simple design criteria.** ● **Make a product which contains a working circuit to light a bulb.** ● **Use a series of given questions to evaluate their product.** **Design** Pupils should be taught to; ● 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. **Make** Pupils should be taught to ● select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately. ● to 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. • Pupils should be taught to understand how key events and individuals in design and technology have helped shape the world. **Cooking and Nutrition** Pupils should be taught to • understand and apply the principles of a healthy and varied diet. • Pupils should be taught to 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. **National Curriculum Coverage:** As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.	• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. • Pupils should be taught to understand how key events and individuals in design and technology have helped shape the world. **Technical Knowledge** Pupils should be taught to • 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. **National Curriculum Coverage:** Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].	**Evaluate** Pupils should be taught to • 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. • Pupils should be taught to understand how key events and individuals in design and technology have helped shape the world. **Technical Knowledge** Pupils should be taught to • 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. **National Curriculum Coverage:** Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

Year 5		
Autumn Topic: Serve a Salad	Spring Topic: Automata Animals	Summer Topic: Marbulous Structures

Prior learning:

Design
- 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; Mechanical Posters (y4)
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design; Mechanical Systems (y4), Juggling Balls (y4)

Make
- select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately; Mechanical Systems (y4), Juggling Balls (y4).
- to 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; Mechanical Systems (y4), Juggling Balls (y4).

Evaluate
- investigate and analyse a range of existing products; Mechanical Posters (y4), Juggling Balls (y4)
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work; Mechanical Systems (y4), Juggling Balls (y4).
- Pupils should be taught to understand how key events and individuals in design and technology have helped shape the world.

Technical Knowledge
- 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); Mechanical Posters (y4)

Cooking and nutrition
- understand and apply the principles of a healthy and varied diet; Lovely Lunch (y4).
- Pupils should be taught to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques; Lovely Lunch (y4)
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed; Lovely Lunch (y4)

Future learning:

Design
- 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; Programming Adventures (y6), Felt Phone Cases (y6).
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design; Programming Adventures (y6), Felt Phone Cases (y6).

Make
- select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately; Felt Phone Cases (y6).
- 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; Programming Adventures (y6), Felt Phone Cases (y6).

Evaluate
- investigate and analyse a range of existing products; Felt Phone Cases (y6).
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work, Programming Adventures (y6), Felt Phone Cases (y6).
- understand how key events and individuals in design and technology have helped shape the world.

Technical Knowledge
- 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); Programming Adventures (y6).
- apply their understanding of computing to program, monitor and control their products; Programming Adventures (y6).

Cooking and Nutrition
- understand and apply the principles of a healthy and varied diet; Grab and Go (y6).
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques; Grab and Go (y6)
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed; Grab and Go (y6)

Pupils will; ● **use acquired healthy eating knowledge to design and make a salad which contributes to a healthy, varied diet.** ● **Pupils will explore a variety of salads and salad ingredients associated with different countries around the world.** ● **Pupils will develop and practise their food skills by preparing ingredients safely and hygienically.** ● **Pupils will design and make a salad for their intended user based on their experiences and research.** ● **Pupils will make and evaluate their salad.** **Design** Pupils should be taught to ● 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. **Make** Pupils should be taught to ● 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** Pupils should be taught to	**Pupils will;** ● **Generate, as a group, one viable idea after discussion with the teacher.** ● **Cut materials accurately and safely by selecting appropriate tools.** ● **Assemble a simple cam mechanism as part of the design.** ● **Use tools with some accuracy and finish their automata animal in a design that they have prepared with some assistance.** ● **Use design criteria to evaluate what they did well on their product.** **Design** Pupils should be taught to ● 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. **Make** Pupils should be taught to ● 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** Pupils should be taught to ● investigate and analyse a range of existing products.	**Pupils will;** ● **Explore existing free standing structures and explain what gives them strength, reinforcement and stability.** ● **Select tools and equipment to join card together.** ● **Design and build a simple marble run.** ● **Improve their work.** **Design** Pupils should be taught to ● 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. **Make** Pupils should be taught to ● 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** Pupils should be taught to ● 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. **Technical Knowledge**

• 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. **Cooking and Nutrition** Pupils should be taught to • 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. **National Curriculum Coverage:** As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.	• 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. **Technical Knowledge** Pupils should be taught to • 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. **National Curriculum Coverage:** Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].	Pupils should be taught to • 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. **National Curriculum Coverage:** Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

Year 6		
Autumn Topic: Felt Phone Case	Spring Topic: Programming Adventures	Summer Topic: Grab and Go

Prior learning:

Design

- 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; Automata Animals (y5)
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Make

- select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately; Automata Animals (y5), Marbulous Structures (y5)
- to 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; Marbulous Structures (y5).

Evaluate

- investigate and analyse a range of existing products; Marbulous Structures (y5)
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work; Automata Animals (y5), Marbulous Structures (y5)
- Pupils should be taught to understand how key events and individuals in design and technology have helped shape the world.

Technical Knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures; Marbulous Structures (y5)
- understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages); Automata Animals (y5).
- 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; Programming Adventures (y6).

Future Learning (KS3):

Design

- Use research and exploration, such as the study of different cultures, to identify and understand user needs
- Identify and solve their own design problems and understand how to reformulate problems given to them
- Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations
- Use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses
- Develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools

Make

- Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture
- Select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties

Evaluate

- Analyse the work of past and present professionals and others to develop and broaden their understanding
- Investigate new and emerging technologies
- Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups
- Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists

Technical knowledge

- Understand and use the properties of materials and the performance of structural

Cooking and Nutrition ● understand and apply the principles of a healthy and varied diet; Serve a Salad (y5) ● Pupils should be taught to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques; Serve a Salad (y5). ● understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed; Serve a Salad (y5).		elements to achieve functioning solutions ● Understand how more advanced mechanical systems used in their products enable changes in movement and force ● Understand how more advanced electrical and electronic systems can be powered and used in their products [for example, circuits with heat, light, sound and movement as inputs and outputs] ● Apply computing and use electronics to embed intelligence in products that respond to inputs [for example, sensors], and control outputs [for example, actuators], using programmable components [for example, microcontrollers]. **Cooking and Nutrition** ● understand and apply the principles of nutrition and health ● Cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet ● Become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes] Understand the source, seasonality and characteristics of a broad range of ingredients.
Pupils will; ● **develop their own design criteria.** ● **Use backstich** ● **create simple patterns.** **Design** Pupils should be taught to ● 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. **Make** Pupils should be taught to	**Pupils will;** ● **understand how a floor robot moves;** ● **program it accurately to move along a given route;** ● **explore and select from a range of different materials to create obstacle squares.** **Design** Pupils should be taught to ● 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. **Make**	**Pupils will;** ● **learn about nutrients and their role in a healthy, varied diet.** ● **Pupils will read and interpret nutrition information labels.** ● **Pupils will investigate products and undertake research to generate ideas for their own healthier product.** ● **Pupils will discuss the purpose and features of advertisements.** ● **Pupils will design and make a product safely and hygienically for an intended purpose, based on design criteria.** ● **Pupils will evaluate their product.** **Design** Pupils should be taught to

- 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
Pupils should be taught to
- 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.

Technical Knowledge
Pupils should be taught to
- 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.

National Curriculum Coverage:
Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They

Pupils should be taught to
- 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
Pupils should be taught to
- 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.

Technical Knowledge
Pupils should be taught to
- 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

National Curriculum Coverage:
Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an

- 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.

Make
Pupils should be taught to
- 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
Pupils should be taught to
- 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.

Cooking and Nutrition
Pupils should be taught to
- 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.

should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].	iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].	• understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. **National Curriculum Coverage:** As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

SEND Adaptations for Design Technology (DT)

"The Design and Technology curriculum will enable children to understand the made world. This understanding will support their ability to design, make and evaluate. Children will learn that good design helps people and thoughtful design helps include people who have different needs, for example, people with disability."

Cognition and Learning	Communication and Interaction	Social, Emotional and Mental Health	Sensory and/or Physical
• Test practical tasks before a lesson to ensure the teaching of specific skills and techniques is clear for children. Sharing any difficulties that you had may support the children's understanding/skill development. • Use of word banks to support understanding and learning of vocabulary. These could be displayed in class in a personalised version for adults to point to during whole class teaching or independent learning. Keep referring back to the vocabulary.	• Build in plenty of discussion time to ensure that children feel safe to voice their thoughts and ideas about designers, products or their own pieces of work. • Access to tools they may be using and shown how these work before the lesson. • Create a calm and simple working classroom with clear routines, expectations and organised, labelled workspaces. • Consider carefully where children are seated to maximise	• Ensure that the learning environment is calm and not too stimulating, that resources are clearly labelled and organised for independent use, therefore not encouraging frustration. • Ensure that instructions are clear and tasks are broken down to be achievable. • Children can be given a role within a group which does not involve them being highly active or speaking out to not heighten arousal.	• Consider the practical layout of the room during DT and where the child will be to reduce feeling overwhelmed but equally be accessible to all equipment and a space which is workable for the child. • Consider if any of the DT skills being used need adapting to support fine motor skill development e.g. larger needles, scissors, tools, cooking utensils.

• Start each lesson with a recap of the vocabulary previously learnt. • Pre-learning and over learning to support understanding including topic related vocabulary tick sheets so children can tick off when they feel confident in using the word. • Break the content down into small steps and allow time to step by step build up conceptual understanding. • Maximise opportunities to model, demonstrate and imitate to encourage active participation in a scaffolded manner. Keep referring to the vocabulary throughout. • Ensure that parents are aware of the vocabulary of the DT curriculum and can support with the learning of terminology at home through research. Where this does not take place, allow the child time with an adult before the learning begins to research the DT vocabulary. • Knowledge organisers are sent home and referred to in class if applicable. • Sticky knowledge quizzes in mixed ability groups to be completed to recap important knowledge regularly.	their focus and attention and minimise background noise/distraction. • Plan movement breaks and classroom jobs to allow children to move within a lesson. • DT does not always run according to a set routine so children can be prepared for the structure of a lesson by breaking it down for them into manageable chunks and explaining this in advance of the learning. Now and Next boards could be useful for this. • Visual words/cues/phrases. • Repetition and reinforcement. • Scaffolding skills for DT through careful and targeted questioning. • Giving a processing prompt that a question will be coming, give the question before moving onto a few other children, before coming back for the answer. • Simple, step by step instructions verbally and then in a prompt sheet if needed. • Use of appropriate modelling to support understanding.	• Providing fidgets to allow children to concentrate and listen despite not necessarily looking like they are listening. • Providing a safe space for children within the lesson if needed – this can be accessed through an adult directed or child-initiated time out card. • Use of positive language to encourage good choice and higher self-esteem. • Teaching with empathy and understanding of the child's needs. • Allow movement breaks within the classroom for example giving out equipment or books etc. • Allow sensory/brain breaks as a break from learning. • Think about cognitive overload and the child's ability to cope with this. • Facilitating the use of different areas to do learning if the Art Room is too overwhelming during DT.	• Start with a larger version of the medium and gradually reduce as the child's skills increase. • Specialist equipment i.e. scissors and pencils to support fine motor skills. • Think about whether visual or auditory stimuli needs to be altered for the child. • Consider where children with a hearing, sensory or other impairment are sitting in relation to the whiteboard or resources. • Use of an iPad to support children with a visual impairment where screen sharing can occur. • Some children may prefer group learning but for some children this may be too much and practising/performing individually may be easier. • Adult or IT support may be needed. • Through pre-exposure, prior to the DT lesson, children can gain in confidence and become the 'expert' before the lesson even begins. • Consider sensory needs concerning food. Possible gloves or tasting food beforehand. • Visual aids to help children identify key concepts.

Examples of DT adapted activities :

· Y3- Bread making, children were given time to knead the bread, sequence the ingredients, choose their own ingredients but having adult support reading out.

· Y3- Bread making- designed own bread with support from adult, had widget images to choose ingredients and then cut them out and

stuck in books.

- Y3- Bread making- practical kneading and rolling bread using cutlery to practice cutting skills.