



Barnburgh Primary Academy

Progression Document
Design Technology



Barnburgh Primary Academy Vision

Learning To Shine Together

Academy Core Values

Perseverance Courage Independence Respect Ambition

Key Drivers



Ambition
Risk takers,
Goal setters,
Believe in
better,
Courageous



Support
Encouraging,
Sympathetic,
Helpful,
Nurturing and
kind



Persistence
Determined,
Stickability,
Patience,
Stamina



Inspire
Motivate,
Persuade,
Encourage and
Influence



Resilience
Strength of
character,
Adapability,
Bounceback-
ability



Effort
Strive,
Endeavour,
Stretch,
Exertion



PURPOSE OF STUDY

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

AIMS

The national curriculum for design and technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

EARLY LEARNING GOALS THAT LINK MOST CLOSELY TO THE DESIGN TECHNOLOGY NATIONAL CURRICULUM

KEY STAGE 1 SUBJECT CONTENT

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].

When designing and making, pupils should be taught to:

Design

- 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

- 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

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

Technical knowledge

- 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.

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:

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



KEY STAGE 2 SUBJECT CONTENT

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].

When designing and making, pupils should be taught to:

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
- 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
- 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

- 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

- 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

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 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 AND TECHNOLOGY

"Technology makes possibilities. Design makes solutions."

John Maeda

INTENT

At Barnburgh, we believe that Design and Technology prepares children to deal with tomorrow's rapidly changing world. It encourages children to become independent, creative problem solvers and thinkers - as individuals and as part of a team. It enables them to identify needs and opportunities and to respond to them by developing a range of ideas and by making products and systems. Through the study of Design and Technology, they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industry.

Our Core Values provide the platform on which we have built our curriculum offer at Barnburgh Primary Academy. Our Design and Technology curriculum is underpinned by our Core Values in the following ways;

COURAGE

- To know that mistakes are part of Design & Technology and to understand learning from mistakes are part of the process to reaching a high-quality outcome.
- To have the courage to explore and innovate using D&T.

PERSEVERANCE

- To develop the ability to stick with something, to continue working, re design and to re-evaluate, and most importantly - to never give up.
- To understand the perseverance and dedication that is needed to work successfully in D&T and to see a project turn from a design into a real-life model.

AMBITION

- To do their best work and then to push themselves beyond what they consider to be their best.
- To develop a desire to achieve something and to make a design come to life.

RESPECT

- To respect the ambition and work of their peers.
- To respect equipment used in D&T lessons.

INDEPENDENCE

- To develop confident learners, who understand that Design and Technology is a process that requires constant attention to detail.
- To develop resilient designers who have the confidence to think and overcome issues independently.

BEYOND THE SUBJECT

We want our art curriculum to help children to;

- Think creatively in all aspects of their life
- See the world from different perspectives
- Increase their empathy
- Observe and look closer at the world around them
- See design connections in the world



IMPLEMENTATION

Our Design and Technology curriculum has been designed to cover all of the skills set out in the National Curriculum. The National Curriculum states that ‘Design and technology is an inspiring, rigorous and practical subject.’ Through a variety of creative activities, we teach the knowledge, understanding and skills needed to engage in an iterative process of designing and making. The children work in a range of relevant contexts (for example home, school, leisure, culture, enterprise, industry and the wider environment).

When designing and making, the children are taught to:

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
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional 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
- 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

- 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

- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- Understand and use mechanical systems in their products
- Understand and use electrical systems in their products
- Apply their understanding of computing to program, monitor and control their products

Key skills and key knowledge for Design and Technology have been mapped across Barnburgh Primary, to ensure progression between year groups. This also ensures that there is a context for the children’s work in Design and Technology; that they learn about real life structures and the purpose of specific examples, as well as developing their skills throughout the programme of study.

Food and Nutrition at KS2

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 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
- To understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.



IMPACT

Our children will have a clear enjoyment and confidence for Design and Technology, that they will hopefully then apply to other areas of the curriculum. The children will ultimately know more, remember more and understand more about Design and Technology, demonstrating this knowledge when using tools or skills in other areas of the curriculum and in opportunities out of school. The large majority of children will achieve age related expectations in Design and Technology. As designers, children will develop skills and attributes they can use beyond school and into adulthood. The children will be able to showcase their knowledge through work and projects. Monitoring of the D&T curriculum takes place once a term, allowing school leaders to ensure that every child has the opportunity to develop their skills and understanding.

Long Term Plan 2023-2024

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
YEAR 1			Nutrition and healthy eating – Making coleslaw 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 use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from. Textiles – Fabric collage 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	Construction – Constructing bridges 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 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.		
CROSS CURRICULAR LINKS						
ENRICHMENT						

YEAR 2			Construction- Constructing a plant pot box 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 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.	Nutrition and healthy eating – making a salad 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 use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from. Textiles – Creating hand puppets 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		
	CROSS CURRICULAR LINKS					
	ENRICHMENT					

YEAR 3 CROSS CURRICULAR LINKS ENRICHMENT	Nutrition and healthy eating - Scones generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided de 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 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 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. Textiles – Egyptian Collar generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided de 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 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 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 how key events and individuals in design and technology have helped shape the world	Construction- Electric toys generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided de 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 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				

YEAR 4	Construction – Night light <i>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided de 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</i> <i>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</i> <i>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</i> <i>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</i> <i>investigate and analyse a range of existing products</i> <i>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</i> <i>understand how key events and individuals in design and technology have helped shape the world</i> <i>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</i> <i>understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</i> <i>understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</i> <i>apply their understanding of computing to program, monitor and control their products</i>	Nutrition and healthy eating- Bread <i>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided de 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</i> <i>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</i> <i>select from and use a wider range of tools and equipment to perform practical tasks</i> <i>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</i> <i>understand and apply the principles of a healthy and varied diet</i> <i>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</i> <i>understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</i>				
	CROSS CURRICULAR LINKS					
	ENRICHMENT					

						
YEAR 5					Nutrition and healthy eating – Soup <i>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided de 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</i> <i>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces</i> <i>select from and use a wider range of tools and equipment to perform practical tasks</i> <i>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</i> <i>understand and apply the principles of a healthy and varied diet</i> <i>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</i> <i>understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</i>	Construction – Ancient Greek pottery generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided de 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 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
CROSS CURRICULAR LINKS						
ENRICHMENT						

YEAR 6					Construction – Anderson Shelter generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided de 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 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	Nutrition and healthy eating – Three course meal generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided de use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at individuals or groups 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 tools and equipment to perform practical tasks 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 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.
CROSS CURRICULAR LINKS						
ENRICHMENT						

DESIGN							
STAGE	EYFS	KS1 Design and Technology National Curriculum <i>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</i>		KS2 Design and Technology National Curriculum <i>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided de 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</i>		KS2 Design and Technology National Curriculum <i>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided de 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</i>	
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE	Children will know:	Children will know: - That their own ideas can be used to design a product - That they will need to follow a process to create a product - That their product is designed for a reason - That their product will work in a specific way - That they can use pictures and words to plan what a product will look like/ operate - That a design criteria are the really important goals that must be achieve in order for a project to be successful. - That they can follow a design criteria as a guide to help construct a product - That they can use similar existing products to assist their design	Children will know: - That their own ideas can be used to design a product - That their product will need to be fit for purpose - That their product will work in a specific way - That their design is suitable for a specific user - That that they can use picture, words and diagrams to design a product - That they should follow a design criteria when completing a project/ product - That an existing product is something that is already made and you can purchase - That their knowledge of existing products will help them produce their own ideas - That different tools are available to create a product	Children will know: - That their design will need to meets a range of requirements - That there is a specific purpose of their product - That they will need to follow a specific design criteria - How to create a product - That a plan is used to show the other, equipment and tools they will use - That they can accurately label a sketch - That a prototype is a first version of a product - That a prototype can be made using original ideas to ensure suitability - That a product will work if the design criteria is followed correctly - That they can use computers to show different designs	Children will know: - That research can be used to design individual ideas - That their design is fit for purpose - That they can use an annotated sketch to design a product - That improvements can be made to a product - That the correct vocabulary should be used to explain a product design to others - That certain resources are available to complete a design - That they can make prototypes of a product - That they can use computers to show a series of different designs	Children will know: - That the internet can be used for research and design ideas - That the user's views need to be considered when designing - That they need to consider the needs/wants of the user when designing and ensure the product is fit for purpose - That they will need to develop their own design criteria to complete the design of a product - That a logical, realistic plan is necessary - That their product will clearly work and how this will happen - That they can use pattern pieces to refine and design ideas - That computer-aided design is a process that allows us to digitally create 2D drawings or 3D models	Children will know: - That market research is the process of gathering and analyzing information about a product in order to gain insight into customers, competitors, and the market itself - That a specification is a set of design criteria created before a process begins - That a logical plan is a plan that includes the correct steps - That an exploded diagram is a diagram or picture that shows the relation ship or order of assembly of various parts. - That pattern pieces can be used to model and refine different design ideas - That computer-aided design is a process that allows us to digitally create 2D drawings or 3D models
	SKILLS		Children will be able to: - Explain what ideas are - Describe they want to do - Explain what their product is for - Use pictures and words to plan - Follow a simple design criteria - Look at similar existing products	Children will be able to: - Have their own ideas for a product and plan what to do next - Explain what they want to do and describe how they will do it - Explain the purpose of the product - Explain how their product will work - Explain how the product is suitable for the user - Create a design using pictures, words and diagrams - Design products for the individual and others following a design criteria - Choose the best tools and materials, and give reasons for their choices - Use their knowledge of existing products to produce individual ideas	Children will be able to: - Create a design that meets a range of requirements - Explain the purpose of their product - Follow a given design criteria - Create a product - Create a plan with shows the other, equipment and tools they will use - Accurately label a sketch - Make design decisions - Explain what a prototype is - Design a prototype - Explain how the product will work - Use computers to show designs (with support)	Children will be able to: - Use research to design their own ideas - Show their design meets a range of requirements and is fit for purpose - Have at least one idea about how to create a product and suggest improvements for their design - Produce a plan and explain it to others - Say how realistic their plan is - Make an annotated sketch of their design - Make and explain their design decisions considering the resources they have available - Explain how their product will work - Design a prototype - Begin to use computers to show their design	Children will be able to: - Use the internet for research and design ideas - Take a user's views into account when designing - Begin to consider the needs/wants of the user when designing and ensure their product is fit for purpose - Create their own design criteria - Have a range of ideas - Produce a logical, realistic plan and explain it to others - Use planning and annotated sketches - Make design decisions considering time and resources - Clearly explain how parts of a product will work - Model and refine design ideas by making prototypes and using pattern pieces (with support) - Use computer-aided designs
VOCABULARY							
		Ideas Product Design criteria Existing	Purpose Suitable User Diagram Tools	Requirements Equipment Sketch Prototype	Research Annotated sketch Realistic	Questionnaire Fit for purpose Logical Computer-aided design Pattern pieces	Market research Individual needs Features Specification Exploded design Pattern pieces

MAKE							
		KS1 Design and Technology National Curriculum <i>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</i>	KS2 Design and Technology National Curriculum <i>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</i>	KS2 Design and Technology National Curriculum <i>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</i>			
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE		Children will know: - That an intention is why the customer will buy the product - That specific tools and equipment can be use to cut, join and finish - That the measuring, marking out and cutting process is needed (with support) - That certain materials are available - That specific finishing techniques will make a product look good - That a safe environment is important	Children will know: - That they are making a product and how it fits the purpose - That there are different ways to join materials together. Such as; gluing, sewing and screwing. - That measuring, mrking out and cutting needs to be accurate, with support - That certain tools do certain jobs - That different materials have different characteristics. Such as metal is tough, felt is soft and cardboard is stiff - That using finishing techniques make a product look good - That a safe environment is important	Children will know: - That tools and equipment should be used accurately - That certain materials are appropriate for their product - That a plan can be created to make their product - That they can work through a plan whilst making a product - That some materials will be better than others, depending on their product - That measuring, marking out and cutting needs to be accurate - That they can assemble, join and combine materials - That they can use a range of finishing techniques	Children will know: - That tools and equipment use required techniques when making products - That the features of materials make them fit for purpose - That a plan can be created to make their product - That good quality means of a high standard - That they can measure, mark out and cut when creating a product, with some accuracy - That they can assemble, join and combine materials and components, with some accuracy - That they can use a range of finishing techniques	Children will know: - That the process of using selected tools and equipment needs to be precise - That they will need to produce a suitable list of tools, equipment or materials needed to make a product - That materials have certain functions - That they can create a detailed step-by-step plan to follow - That a product will need to appeal to an audience - That they can measure, mark out and cut accurately when making a product - That they can assemble, join and combine different materials and components accurately - That some techniques involve a small number of steps	Children will know: - That the process of using selected tools and equipment needs to be precise and accurate - That constraints means limitations por restrictions. - That materials have different functionalities and aesthetics - That they can adapt a step-by-step plan when making a product - That a product would need to appeal to an audience - That they can make changes to improve the quality of a product, if needed - That they can measure, mark out and cut accurately when making a product - That they can assemble, join and combine different materials and components accurately - That some techniques involve any number of steps
SKILLS		Children will be able to: - Explain what they are making and why - Select tools and equipment to measure - Select tools and equipment to join - Select tools and equipment to finish - Measure, mark out and cut with support - Choose suitable materials and explain why they have chosen them - Use finishing techniques to make a product look good - Work in a safe manner	Children will be able to: - Explain what they are making and why it fits the purpose - Join materials in different ways - To measure, mark out and cut with support - Describe the tools I am using and why - Choose suitable materials and explain why I have chosen them, depending on their characteristics - Use finishing techniques to make a product look good - Work in a safe manner	Children will be able to: - Select suitable tools and equipment and explain why they have chosen them - Begin to use suitable tools and equipment accurately - Select suitable materials that are fit for purpose - Work through a plan in order - Consider how good a product will be - Begin to measure, mark out, cut and shape materials with some accuracy - Begin to assemble, join and combine materials with some accuracy - Begin to apply a range of finishing techniques with some accuracy	Children will be able to: - Select suitable tools and equipment and explain their choices in relation to the required techniques - Select appropriate materials that are fit for purpose and explain their choices - Work through a plan in order - Identify if their product is good quality - Explain why their product is good quality - Measure, mark out, cut and shape materials with some accuracy - Assemble, join and combine materials with some accuracy - Begin to apply a range of finishing techniques with some accuracy	Children will be able to: - Use selected tools and equipment with a good level of precision - Produce a suitable list of tools, equipment or materials needed - Identify materials have certain functions - Create a detailed step by step plan - Follow a detailed step by step plan - Identify their intended audience and how their product could appeal to them - Measure, mark out and cut accurately - Assemble, join and combine materials and components accurately - Use some techniques that involve a small number of steps	Children will be able to: - Use selected tools and equipment precisely - Produce a suitable list of tools, equipment and material needed, considering constraints - Select appropriate materials that are fit for purpose, explaining their choices and considering the functionality and aesthetics - Create, follow and adapt a detailed step-by-step plan - Explain how their product will appeal to an audience and make changes to improve the quality - Measure, mark out and cut accurately - Assemble, join and combine materials and components accurately - Use some techniques that involve any number of steps
VOCABULARY							
		Tools Equipment Cut Join Finish Measure Mark out Materials Techniques Product Safe manner	Tools Equipment Cut Join Finish Measure Mark out Materials Techniques Product Safe manner Purpose Characteristics	Appropriate Plan Accuracy Assemble Combine	Appropriate Plan Accuracy Assemble Combine Features Quality Components	Precision Suitable Functions Detailed Step-by-step plan Audience Appeal	Precision Suitable Functions Detailed Step-by-step plan Audience Constraints

EVALUATE							
		KS1 Design and Technology National Curriculum <i>explore and evaluate a range of existing products</i> <i>evaluate their ideas and products against design criteria</i>		KS2 Design and Technology National Curriculum <i>investigate and analyse a range of existing products</i> <i>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</i> <i>understand how key events and individuals in design and technology have helped shape the world</i>		KS2 Design and Technology National Curriculum <i>investigate and analyse a range of existing products</i> <i>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</i> <i>understand how key events and individuals in design and technology have helped shape the world</i>	
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE		Children will know: • That their work links to what they were asked to do • That existing products are available, to consider their uses, materials, how they work and where they might be used • That they can identify what is good and what is not good about an existing product • That certain changes could make a product better	Children will know: • That they can use a design criteria to assess what went well • That existing products are available and it is important to considering their uses, materials, how they work and where they might be used • That a personal opinion is a belief or judgment that is not proof or certain • That they can evaluate how good existing products are	Children will know: • That they can use a design criteria to assess what went well • That evaluating existing products helps us to consider how well they have been made, what materials were used, how they have been made, if they work and if they are fit for purpose • That products are designed by certain people, in certain locations • That some inventors, designers, engineers and manufacturers created group-breaking products. Such as; iPhone (Apple).	Children will know: • That they can evaluate their product against the design criteria • There they can use a range of ideas to change a design • That they can begin to evaluate existing products, considering how well they have been made, what materials were used, how they have been made, if they work and if they are fit for purpose • That products are designed by certain people, in certain locations • That reused means to use again • That recycled means something that can be turned into a reusable material. • That materials can be reused and recycled. Including; plastic, glass and paper. • Such as; lightbulb (Thomas Edison), iPhone (Apple) and the phone (Alexander Graham Bell).	Children will know: • That they can evaluate the quality of their product against a design criteria • That specification means a detailed description of the design and materials used to make a product. • That appearance means what something looks like and why this is important • That there is a process to test a final product • That they can evaluate existing products, considering how well they have been made, what materials were used, how they have been made, if they work and if they are fit for purpose • That different products can cost varied prices to make, depending on its materials • That innovative products are new products that are created and released • That sustainable means that it can be maintained • That some inventors, designers, engineers and manufacturers created group-breaking products. Such as; lightbulb (Thomas Edison), computers (Charles Babbage), iPhone (Apple) and the phone (Alexander Graham Bell).	Children will know: • That they can evaluate the quality of their product against a design criteria • That they can evaluate their own ideas and their finished product against specification, stating if it is fit for purpose • That there is a process to test a final product • That they can evaluate existing products thoroughly and how • That different products can cost varied prices to make, depending on its materials • That innovative products are new products that are created and released • That sustainable means that it can be maintained • That a range of materials that are sustainable. Including plastic, wood and steel. • That the impact of some products can go beyond their intended purpose – Mobile phones. • About some inventors, designers, engineers and manufacturers of group-breaking products. Such as; lightbulb (Thomas Edison), computers (Charles Babbage), iPhone (Apple) and the phone (Alexander Graham Bell).
		Children will be able to: • Talk about their work, linking it to what they were asked to do • Talk about existing products, considering their uses, materials, how they work and where they might be used • Identify what is good and what isn't good about an existing product • Talk about things that other people have made • Begin to talk about what could make a product better	Children will be able to: • Describe what went well, thinking about the design criteria • Talk about existing products are available, considering their uses, materials, how they work and where they might be used • Give their own personal opinion about a product • Evaluate how good existing products are • Talk about what they would do differently if they were to do it again and why	Children will be able to: • Refer to the design criteria when designing and making • Use the design criteria to evaluate their finished product • Identify what they would change to make their design better • Evaluate existing products, considering how well they have been made, what materials were used, how they have been made, if they work and if they are fit for purpose • Begin to understand by whom, when and where products were designed • Talk about some inventors, designers, engineers and manufacturers of group-breaking products.	Children will be able to: • Refer to the design criteria when designing and making • Use the design criteria to evaluate their finished product • Identify how they could improve their overall design • Evaluate existing products, considering how well they have been made, what materials were used, how they have been made, if they work and if they are fit for purpose • Research whether products can be reused or recycled • Begin to understand by whom, when and where products were designed • Talk about some inventors, designers, engineers and manufacturers of group-breaking products.	Children will be able to: • Evaluate the quality of their design while they are designing and making • Evaluate ideas and their finished product against the specification, considering purpose and appearance • Test and evaluate their final design • Evaluate existing products, considering how well they have been made, what materials were used, how they have been made, if they work and if they are fit for purpose • Research how sustainable materials are • Talk about some inventors, designers, engineers and manufacturers of group-breaking products.	Children will be able to: • Evaluate the quality of their design while they are designing and making • Keep checking their design is the best it can be • Evaluate ideas and their finished product against the specification, considering purpose and appearance • Test and evaluate their final product: explaining what would improve it and the effect different resources may have had • Evaluate existing products thoroughly, considering how well they have been made, what materials were used, how they have been made, if they work and if they are fit for purpose • Evaluate how much products cost to make and how innovative they are • Research and discuss how sustainable materials are • Consider the impact of products beyond their intended purpose • Talk about some inventors, designers, engineers and manufacturers of group
VOCABULARY							



	Existing products Uses Materials Identify	Existing products Uses Materials Identify Design criteria Personal opinion Evaluate	Evaluate Whom Inventors Designers Engineers Manufactures	Reuse Recycled Inventors Designers Engineers Manufactures	Specification Final product Innovative Sustainable Inventors Designers Engineers Manufactures	Specification Thoroughly Innovative Sustainable Inventors Designers Engineers Manufactures
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TECHNICAL KNOWLEDGE							
		KS1 Design and Technology National Curriculum <i>build structures, exploring how they can be made stronger, stiffer and more stable</i> <i>explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</i>	KS2 Design and Technology National Curriculum <i>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</i> <i>understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</i> <i>understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</i> <i>apply their understanding of computing to program, monitor and control their products</i>	KS2 Design and Technology National Curriculum <i>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</i> <i>understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</i> <i>understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</i> <i>apply their understanding of computing to program, monitor and control their products</i>			
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE		Children will know: - That they can measure and join materials with support - That specific vocabulary is used to describe materials - That there are different ways to make materials stronger, by adding filler materials - That they should choose suitable materials, such as wood and steel and plastic. - That a wheel is a circular object that revolves on an axle. - What an axle is a rod passing through the center of a wheel or wheels.	Children will know: - That we can measure and join materials together - That characteristics are features or qualities of an object - That materials have different characteristics - That there are different ways to join materials - That we can roll different materials - That we can fold different materials - That there are different ways to make materials stronger, by adding filler materials - That a lever is a bar for applying force - That a slider is a knob or lever that is moved	Children will know: - That an appropriate material is something that is acceptable for a specific job or roll or situation - That materials can be cut - That they can make a hole in a material or object - That materials can be joined - That there are techniques to make strong structures - That tools and techniques are appropriate for different product - That it is okay to try new or different ideas - That simple levers and linkages can be used to create movement - That a circuit is a circular line, route or movement that starts and finishes at the same place - That the components in a circuit are, such as; wire, bulb, cell and switch - That a computer can be used to control a product – Mircobit programme	Children will know: - That it is important to measure carefully to avoid mistakes - That it is okay to carry on working on a product even if the original didn't work - That materials can be used to make a strong, stiff structures - That certain tools and techniques are appropriate - That alterations are changes to a product - That it is okay to try new or different ideas - That simple levers and linkages can be used to create movement - That pneumatics are things operated by air or gas under pressure - That pneumatics can be used to create movement - That the components in a circuit are, such as; wire, bulb, cell and switch - That a computer can be used to control a product – Microbit programme	Children will know: - That it is important to consider the intended use of a product and appearance when selecting materials - That their product needs to meet the design criteria - That measure accurately is important to ensure precision - That it is okay to try new or different ideas - That refine means the removing of unwanted elements. - That a cam is rotating piece of equipment, that is used for closing and opening valves. - That a pully is a wheel that carries a flexible rope to transmit energy or motion. - That a gear is a rotating circular mechanic part (with teeth cut in it) that is used to change the direction of forces. - That a switch is a device used to interrupt the flow of electrons in a circuit. - That they can program a computer to change the environment and control a product	Children will know: - That it is important select materials carefully, considering the intended use of the product, the aesthetics and functionality. - That their product will need to meets the design criteria - That they can refine different products - That hydraulics are mechanical objects that function through the use of liquid pressure, such as water pressure. - That it is okay to try new or different ideas - That a cam is rotating piece of equipment, that is used for closing and opening valves. It converts rotational motion into linear motion. - That a pully is a wheel that carries a flexible rope to transmit energy or motion. Often used to lift objects. - That a gear is a rotating circular mechanic part (with teeth cut in it) that is used to change the direction of forces with other gears. - That alternative circuits can look different - That they can program a computer to change the environment and control a product
SKILLS		Children will be able to: - Measure and join materials with some support - Describe differences in materials - Suggest ways to make materials stronger - Choose suitable materials - Begin to use wheels and axles	Children will be able to: - Measure and join materials - Describe some different characteristics of materials - Join materials in different wants - Use joining, rolling or folding to make a product stronger - Use their own ideas to make a product stronger - Begin to understand how to use levers and sliders	Children will be able to: - Choose and use appropriate materials - Cut and make holes accurately - Join materials - Begin to make strong structures - Select tools and techniques that are appropriate - Identify how to make a product better after checking it - Being to try new and different ideas - Use simple levers and linkages to create movement - Name to components in a simple circuit - Create a simple circuit - Identify how to program a computer to control a product with support	Children will be able to: - Measure carefully to avoid mistakes - Continue working on product even if the original didn't work - Make a strong, stiff structure - Select most appropriate tools that are appropriate - Explain alterations to their product after checking it - Use levers and linkages to create movement - Use pneumatics to create movement - Use a number of components in a circuit - Program a computer to control a product with support	Children will be able to: - Select materials carefully, considering intended use of the product and appearance - Explain how their product meets the design criteria - Measure accurately enough to ensure precision - Ensure their product is strong and fit for purpose - Refine their product after testing - Grow in confidence about trying new or different ideas - Explain what cams, pulleys and gears are - Begin to use cams, pulleys or gears to create movement - Incorporate a switch into a circuit - Confidently use a number of components in a circuit - Begin to be able to program a computer to monitor changes in environment and control product	Children will be able to: - Select materials carefully, considering the intended use of the product, the aesthetics and functionality. - Identify how their product meets the design criteria - Refine a product after testing, considering aesthetics, functionality and purpose - Explain what hydraulics are - That it is okay to try new or different ideas - Use cams, pulleys or gears to create movement - Use different types of circuits - Think of ways in which adding a circuit would improve a product - How to program a computer to change the environment and control a product



VOCABULARY						
		Measure Join Differences Materials Stronger Suitable Wheels Axles	Measure Join Materials Characteristics Rolling Folding Stronger Levels Sliders	Appropriate Structure Techniques Levers Linkages Components Circuit Wire Bulb	Original Alterations Levers Linkages pneumatics Circuit Wire Bulb Buzzer	Precision Refine Cam Pulley Gear Circuit Wire Bulb Buzzer Switch
						Aesthetics Functionality Hydraulics Cam Pulley Gear Circuit Wire Bulb Buzzer Switch

NUTRITION AND HEALTHY EATING							
		KS1 Design and Technology National Curriculum <i>use the basic principles of a healthy and varied diet to prepare dishes</i> <i>understand where food comes from.</i>	KS2 Design and Technology National Curriculum <i>understand and apply the principles of a healthy and varied diet</i> <i>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</i> <i>understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</i>		KS2 Design and Technology National Curriculum <i>understand and apply the principles of a healthy and varied diet</i> <i>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</i> <i>understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</i>		
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE		Children will know: - What a texture - That hands need to be washed thoroughly - That surfaces need to be cleaned thoroughly - That there are different ways to decorate food - That some food comes from (animal or plant) - That there are different food groups - That certain food and vegetables are healthy because they provide nutrients - That there is a process to cut food safely, with support - That there is a process to peel food safely, with support - That there is a process to grate food safely, with support - That ingredients are needed to make a simple coleslaw. These include; cabbage, carrots, onion, vinegar, coriander, chives, mustard and mayonnaise.	Children will know: - That hygiene is conditions put in place to provide cleanliness. - That wiping sides, washing equipment and washing hands makes a kitchen hygienic - That different ingredients have different properties - That a varied diet is important - That different food comes from a series of places (animals, underground etc) - That food can be farmed - That food can be home grown - That food can be caught - That the eat well plate highlights what a balanced diet looks like - That the five food groups are, protein, dairy, carbohydrates, fruit and vegetables and oils - That 'five a day' means five pieces of fruit or vegetables consumed a day - That it is important to cut food safely and to do so with increasing confidence - That it is important to peel food safely and to do so with increasing confidence - That it is important to grate food safely and to do so with increasing confidence - That ingredients are needed to make a simple salad. These include; olive oil, vinegar, beetroot, cabbage and chopped pepper.	Children will know: - That food is grown, reared and caught in the UK, Europe and the wider world - That there are steps to follow when prepare savoury dishes, with support - That savoury dishes need to be cooked safely and hygienically including, where appropriate, the use of a heat source, with support - That a range of techniques such as mixing, spreading, kneading and baking can be used, with support - That a healthy diet is made up from a variety and balance of different food and drink ('The Eat well plate') with support - That to be active and healthy, food and drink are needed to provide energy for the body, with support - That a recipe will need to be followed to prepare a dish - That several ingredients are needed to make scones. Including; butter, self-raising flour, baking powder, caster sugar, egg and milk	Children will know: - That food is grown, reared and caught in the UK, Europe and the wider world - That there are steps to follow when prepare savoury dishes - That savoury dishes need to be cooked safely and hygienically including, where appropriate, the use of a heat source. - That a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking - That a healthy diet is made up from a variety and balance of different food and drink ('The Eat well plate') - That to be active and healthy, food and drink are needed to provide energy for the body - That a recipe can be adapted - That the ingredients needed to make bread are flour, salt, yeast and water	Children will know: - The basic principles of a healthy and varied diet to prepare dishes - That different foods comes from a variety of places - That seasons may affect the food available - That food can be processed into ingredients that can then be eaten or used in cooking - That different food and drink contain nutrients, water and fibre - That certain equipment will be needed to create a dish, with support - That specific ingredients will be needed to make soup, with support - That a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking may be needed to construct a dish - That a step-by-step method will need to be followed to write a recipe - That the ingredients needed to make soup are; onion, tomatoes, carrot, celery, olive oil, tomato puree, sugar and bay leaves.	Children will know: - That specific equipment will need to be used - That certain ingredients will need to be used - That it is important to make their product look attractive - That there is a process to grow plants to use in cooking - Where food comes from. - That different food and drink contain different substances - That a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking may be needed to construct a dish - That a recipe is needs to include the correct quantities - That it is possible to adapt a recipe - That it is important to work to a timescale - What ingredients are needed to make a three-course meal
	SKILLS	Children will be able to: - Describe textures - Wash their hands thoroughly - Clean surfaces thoroughly - Think of interesting ways to decorate food - Identify different food groups - Explain why food and vegetables are healthy - Cut food safely, with support - Peel food safely, with support - Grate food safely, with support - Make a simple coleslaw	Children will be able to: - Explain what hygiene is - Explain makes a kitchen hygienic - Identify the properties of ingredients - Explain the importance of a varied diet - Identify where food comes from (animal, underground etc) - Explain how food is farmed - Explain how food is home grown - Explain how food is caught - Describe the eat well plate - Identify the five food groups and give examples - Explain what 'five a day' means - Cut food safely, with increasing confidence - Peel food safely, with increasing confidence - Grate food safely, with increasing confidence - Make a salad	Children will be able to: - Explain that food is grown, reared and caught in the UK, Europe and the wider world, with support - Prepare savoury dishes safely and hygienically, with support - Cook savoury dishes safely and hygienically including, where appropriate, the use of a heat source, with support - Use a range of techniques such as mixing, spreading, kneading and baking, with support - Explain that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate', with support - Explain that to be active and healthy, food and drink are needed to provide energy for the body, with support - Follow instructions within a recipe - Make scones	Children will be able to: - Explain that food is grown, reared and caught in the UK, Europe and the wider world - Prepare savoury dishes safely and hygienically - Cook savoury dishes safely and hygienically including, where appropriate, the use of a heat source. - Use a range of techniqueswith increasing confidence - Explain that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate' - Explain that to be active and healthy, food and drink are needed to provide energy for the body - Adapt a recipe - Make bread	Children will be able to: - Explain the basic principles of a healthy and varied diet to prepare dishes - Identify where most food comes from - Explain that seasons may affect the food available - Explain how food is processed into ingredients that can be eaten or used in cooking - Explain that different food and drink contain nutrients, water and fibre – that are needed for health - Select equipment and ingredients - Use a range of techniques, confidently - Follow a step-by-step method carefully to write recipe - Make soup	Children will be able to: - Explain the basic principles of a healthy and varied diet to prepare dishes - Identify where most food comes from - Explain that seasons may affect the food available - Explain how food is processed into ingredients that can be eaten or used in cooking - Select equipment and ingredients - Use a range of techniques confidently - Make their product look attractive - Follow a recipe, including using the correct quantities of each ingredient - Adapt a recipe based on research - Work to a given timescale - Make a three course meal



VOCABULARY							
		Texture Wash Clean Surfaces Food Animal Plant Vegetables Cut Peel Grate	Hygiene Ingredients Importance Varied diet Home grown Caught Famed Eat well plate Five a day	Grown Reared Caught UK/Europe/Wider World Savoury dishes Heat source Kneading Baking Active Energy Recipe	Grown Reared Caught UK/Europe/Wider World Savoury dishes Heat source Kneading Baking Active Energy Adapt	Principles Seasons Processed Nutrients Water Fibre Techniques	Principles Seasons Processed Nutrients Water Fibre Techniques Timescale

CONSTRUCTION							
		KS1 Design and Technology National Curriculum		KS2 Design and Technology National Curriculum		KS2 Design and Technology National Curriculum	
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE		•	•	•	•	•	Children will know: • That an Anderson shelter was one of the many forms of protection that people used against air raids during World War II. • That Anderson shelters were constructed in people's gardens and were buried in the ground halfway and covered over with a thick layer of earth. • That sturdy means strongly and solidly built • That waterproof means not letting water through
SKILLS				•	•	•	Children will be able to: • Make an Anderson shelter that fits their design brief • Use a range of materials: XXXXX to make an Anderson shelter • Make an Anderson shelter that is sturdy • Make an Anderson shelter that is waterproof
VOCABULARY							
							Anderson shelter Air raids Construct Sturdy waterproof

TEXTILES							
		KS1 Design and Technology National Curriculum		KS2 Design and Technology National Curriculum		KS2 Design and Technology National Curriculum	
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
KNOWLEDGE		•	•	•	•	•	Children will know: • That a pencil case is a small container for pencils, pens, and other writing equipment. • That the running stitch is hand sewing's version of the straight stitch in machine sewing. It's a simple up and down stitch that you form by moving the needle in and out of the fabric to form regularly sized and even stitches • That back stitch is where the stitch goes backwards on the top side of the fabric and doubles forward on the bottom, coming out farther in front, then repeats. • The backstitch is a very tight and secure stitch, and also looks very neat. • That overcast stitch allows thread to wrap around the edge of the fabric to prevent unraveling • That cross stitch creates a zig-zag series of X's on the underside of a piece of fabric. • That a zip is used to fasten something together
SKILLS				•	•	•	Children will be able to: • Make a pencil case that fits their design brief • Use a range of materials: XXXXX to make a pencil case • Use a range of stitches • Attach a zip to secure and close their pencil case
VOCABULARY							
							Pencil case Running stitch Back stitch Overcast stitch Cross stitch zip

DESIGN TECHNOLOGY							
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
CROSS CURRICULAR LINKS							
ENRICHMENT:							
ASPIRE		Children will present their Design & Technology learning at the ASPIRE event. They will be able to talk about their learning process. Prompt questions for parents to include: Fabric collage Coleslaw Bridges	Children will present their Design & Technology learning at the ASPIRE event. They will be able to talk about their learning process. Prompt questions for parents to include: Hand puppets Salad Plant pot boxes	Children will present their Design & Technology learning at the ASPIRE event. They will be able to talk about their learning process. Prompt questions for parents to include: Egyptian collar Scones Electric toys	Children will present their Design & Technology learning at the ASPIRE event. They will be able to talk about their learning process. Prompt questions for parents to include: Christmas stocking Bread Night light	Children will present their Design & Technology learning at the ASPIRE event. They will be able to talk about their learning process. Prompt questions for parents to include: Ancient Greek headdress Tomato Soup Ancient Greek pottery	Children will present their Design & Technology learning at the ASPIRE event. They will be able to talk about their learning process. Prompt questions for parents to include: Pencil case Three course meal Anderson shelter