OBS D.T. PROGRESSION

KEY SKILLS:

Developing, planning and communicating ideas

Working with tools, equipment and components to make quality products (including food)

Evaluating processes and products

EARLY LEARNING GOALS

Pupils should be taught to:

Creating with Materials.

- 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.

At Old Basford School we use Development Matters, Birth to Five Matters and the Early Learning Goals as guidance to support the carefully planned curriculum we have designed and created especially for the children in our school community. These documents provide an overview of how children learn and develop and they guide our team to make informed decisions based on what each individual child needs to learn and be able to do next.

Expressive Arts and Design (Summary of Statutory Educational Programme)

The development of children's artistic and cultural awareness supports their imagination and creativity. It is important that children have regular opportunities to engage with the arts, enabling them to explore and play with a wide range of media and materials. The quality and variety of what children see, hear and participate in is crucial for developing their understanding, self-expression, vocabulary and ability to communicate through the arts. The frequency, repetition and depth of their experiences are fundamental to their progress in interpreting and appreciating what they hear, respond to and observe.

Continuous Provision

In continuous provision, children will: explore different medias including modelling, fixings and joining to create designs and structures. They will use a design and evaluation process to plan out their work and make considerations for adaptations and changes to improve their work. They will explore a range of resources to support their exploration of building structures and models and develop a range of skills required for design technology.

Focused Learning

Expressive Arts & Design						
Art / DT / Music	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery Skills **N1**			To begin to explore different materials and make simple models.			
N2	To make simple representations using construction kits. To create closed shapes and enclosures to represent building and objects.	To make simple representations using construction kits.	To learn about different textures and materials and make choices of what to use. To use a range of tools for a specific purpose.	To make more complex representations using construction kits. To develop own ideas and choose materials to express them.	To join different materials together to make a model.	
Reception Skills		To use simple tools and techniques competently and appropriately. To construct with a purpose in mind.		To plan, carry out, evaluate and change where necessary. To constructs with a purpose in mind, using a variety of resources.	To use what they have learnt about media and materials in an original way and be able to explain their choices. To be able to select appropriate resources and adapts work where necessary.	To safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
Nursery Knowledge N1			To understand that different materials can be explored and used to make simple models.			
N2	To know that enclosures and models can be made with simple construction kits.	To understand that basic models and representations can be made using construction kits.	To understand different textures and materials and how they can be used.	To understand that models can be added to make more complex representations.	To know a range of joins to fix models together.	

		To understand that blocks and bricks can form enclosed spaces for small world play.		To understand the purpose of specific tools.			
Reception Knowledge			To know the names and uses of simple tools and techniques. To know the outcome desired and construct with a purpose in mind.	To know they can safely construct with a purpose and evaluate their designs.	To understand how to plan, carry out, evaluate and change work where necessary. To plan to construct with a purpose in mind, using a variety of resources.	To know they can safely construct with a purpose and evaluate their designs. To understand that they can select appropriate resources to adapt work where necessary.	Knows how to select tools and use techniques needed to shape, assemble and join materials they are using.
Key Vocabulary	**Tier 1: D: DT**	**D:** cut, stick, fix	**D:** cut, stick, fix	**D:** cut, stick, fix	**D:** cut, stick, fix	**D:** cut, stick, fix	**D:** cut, stick, fix
	Tier 2: D: DT	**D:** glue, plan, create	**D:** glue, plan, create	**D:** glue, plan, create	**D:** glue, plan, change, decorate, create	**D:** glue, plan, change, decorate, create	**D:** glue, plan, change, decorate, create
	Tier 3: D: DT	**D:** design, solve	**D:** design, solve	**D:** design, solve	**D:** design, adapt, embellish, functional, invent, solve	**D:** design, adapt, embellish, functional, invent, solve	**D:** design, adapt, embellish, functional, invent, solve
ELGs		**Creating with Materials.** *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.			**Being Imaginative and Expressive** *Invent, adapt and recount narratives and stories with peers and their teacher. *Sing a range of well-known nursery rhymes and songs; Perform songs, rhymes, poems and stories with others, and – when appropriate – try to move in time with music.		

OBS Achievement Aspirations- 'Create & Experiment'

N1: To experiment with pattern to create a piece of art.
Milestone 1: To talk about patterns in the environment with adult support.
Milestone 2: To experiment with creating patterns within the continuous provision.

N2: To create a sculpture out of materials of their choice.
Milestone 1: To understand what sculpture is through examples in books or online.
Milestone 2: To explore different areas of the provision where sculptures can be made.

F2: To use pattern to make a frame for a piece of art.
Milestone 1: To experiment with a variety of media and talk about what they have made.
Milestone 2: To experiment with resources to create their own patterns.
Milestone 3: To experiment with repeating patterns around different shapes.

YEAR 1					
AUT 1: SUPER ME	**AUT 2: THE NIGHT ADVENTURE**	**SPR 1: TOY STORY**	**SPR 2: KNIGHTS OF BASFORD**	**SUM 1: GROW YOUR OWN**	**SUMMER 2: AROUND THE WORLD**
*design purposeful, functional, appealing products for themselves and other users based on design criteria * explore and evaluate a range of existing products **(superhero outfit)**	use the basic principles of a healthy and varied diet to prepare dishes **(Bonfire night food)**	**Design (moving toy and packaging)** *design purposeful, functional, appealing products for themselves and other users based on design criteria **Make**	**Design (CASTLE include drawbridge)** *design purposeful, functional, appealing products for themselves and other users based on design criteria **Make** *select from and use a range of tools and equipment to perform practical tasks [for	**Design (moving picture)** *design purposeful, functional, appealing products for themselves and other users based on design criteria **Make**	***Design*** *design purposeful, functional, appealing products for themselves and other users based on design criteria ***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** *evaluate their ideas and products against design criteria **Technical knowledge** * explore and use mechanisms [for example, levers, sliders, **wheels and axles**], in their products	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** *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	*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** *evaluate their ideas and products against design criteria **Technical knowledge** *explore and use mechanisms [for example, levers, **sliders,** wheels and axles], in their products	*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*** *evaluate their ideas and products against design criteria ***Technical knowledge*** *build structures, exploring how they can be made stronger, stiffer and more stable **(Da Vinci parachute- egg drop+ protective box)** *understand where food comes from. **(pizza)**
Draw on their own experience to help generate ideas Identify a target group for what they intend to design and make Develop their design ideas applying findings from their earlier research. Make their design using appropriate techniques With help measure, mark out , cut and shape a range of materials Use tools such as scissors and hole punches safely Assemble , join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape Use simple finishing techniques to improve the appearance of their product	Select and use appropriate fruit and vegetables, processes and tools Use basic food handling hygiene practices and personal hygiene	Draw on their own experience to help generate ideas Suggest ideas and explain what they are going to do Identify a target group for what they intend to design and make Develop their design ideas applying findings from their earlier research. Make their design using appropriate techniques With help measure, mark out , cut and shape a range of materials Use tools such as scissors and hole punches safely Assemble , join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape Use simple finishing techniques to improve the appearance of their product Evaluate their product by discussing how well it works in relation to the purpose	Draw on their own experience to help generate ideas Suggest ideas and explain what they are going to do Develop their design ideas applying findings from their earlier research. Make their design using appropriate techniques With help measure, mark out , cut and shape a range of materials Use tools such as scissors and hole punches safely Assemble , join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape Use simple finishing techniques to improve the appearance of their product Evaluate their product by discussing how well it works in relation to the purpose	Model their ideas in card and paper With help measure, mark out , cut and shape a range of materials Use tools such as scissors and hole punches safely Assemble , join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape Use simple finishing techniques to improve the appearance of their product Evaluate their product by asking questions about what they have made and how they have gone about it.	Draw on their own experience to help generate ideas Develop their design ideas applying findings from their earlier research. Make their design using appropriate techniques With help measure, mark out , cut and shape a range of materials Use tools such as scissors and hole punches safely Assemble , join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape Use simple finishing techniques to improve the appearance of their product Evaluate their product by discussing how well it works in relation to the purpose Evaluate their products as they are developed, identifying strengths and possible changes they might make Evaluate their product by asking questions about what they have

		Evaluate their products as they are developed, identifying strengths and possible changes they might make Evaluate their product by asking questions about what they have made and how they have gone about it.			made and how they have gone about it. PIZZA -Select and use appropriate fruit and vegetables, processes and tools Use basic food handling hygiene practices and personal hygiene
YEAR 2					
AUT 1: INTO THE WOODS	**AUT 2: BLAST OFF!**	**SPR 1: ON SAFARI**	**SPR 2: MARVELLOUS MEDICINE**	**SUM 1: LIGHTHOUSE KEEPER**	**SUMMER 2: FUN OUTDOORS**
Design (Gruffalo lever picture) *design purposeful, functional, appealing products for themselves and other users based on design criteria **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** *evaluate their ideas and products against design criteria **Technical knowledge** *explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	***Design* (SPACE BUGGY)** *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 wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics ***Evaluate*** *evaluate their ideas and products against design criteria ***Technical knowledge*** *explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	**Cooking & nutrition** * Understand where food comes from		***Design* (ZIP WIRE)** *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 wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics ***Evaluate*** *evaluate their ideas and products against design criteria ***Technical knowledge*** *explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. **Cooking and nutrition (picnic)** *use the basic principles of a healthy and varied diet to prepare dishes	**Design (TENT)** *design purposeful, functional, appealing products for themselves and other users based on design criteria **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** *evaluate their ideas and products against design criteria **Technical knowledge** *build structures, exploring how they can be made stronger, stiffer and more stable
*Identify a purpose for what they intend to design and make *Identify simple design criteria *Make simple drawings and label parts *Begin to select tools and materials; use vocab' to name and describe them *Measure, cut and score with some accuracy *Use hand tools safely and appropriately *Assemble, join and combine materials in order to make a product *Talk about their ideas, saying what they like and dislike about them	*Generate ideas by drawing on their own and other people's experiences *Develop their design ideas through discussion, observation , drawing and modelling *Identify a purpose for what they intend to design and make *Identify simple design criteria *Make simple drawings and label parts *Begin to select tools and materials; use vocab' to name and describe them *Measure, cut and score with some accuracy *Use hand tools safely and appropriately *Assemble, join and combine materials *Choose and use appropriate finishing techniques *Talk about their ideas, saying what they like and dislike about them	Follow safe procedures for food safety and hygiene		*Generate ideas by drawing on their own and other people's experiences *Develop their design ideas through discussion, observation , drawing and modelling *Identify a purpose for what they intend to design and make *Identify simple design criteria *Make simple drawings and label parts *Begin to select tools and materials; use vocab' to name and describe them *Assemble, join and combine materials *Choose and use appropriate finishing techniques *Evaluate against their design criteria *Evaluate their products as they are developed, identifying strengths and possible changes they might make *Talk about their ideas, saying what they like and dislike about them	*Generate ideas by drawing on their own and other people's experiences *Develop their design ideas through discussion, observation , drawing and modelling *Identify a purpose for what they intend to design and make *Identify simple design criteria *Make simple drawings and label parts *Begin to select tools and materials; use vocab' to name and describe them *Measure, cut and score with some accuracy *Use hand tools safely and appropriately *Assemble, join and combine materials *Choose and use appropriate finishing techniques *Evaluate against their design criteria

				Follow safe procedures for food safety and hygiene	*Evaluate their products as they are developed, identifying strengths and possible changes they might make
YEAR 3					
AUT 1: STONE AGE TO IRON AGE	**AUT 2: EXTREME EARTH**	**SPR 1: SUPER SCIENCE**	**SPR 2: WHAT MAKES BRITIAN GREAT**	**SUM 1: IT'S A WONDERFUL LIFE**	**SUMMER 2: ANCIENT EGYPT**
Design *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** *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 **(DWELLING)**		**Design (magnetic game/ shadow puppets-parent workshop/ design for disabled person using magnetism/ light/ forces knowledge)** *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 ***Technical knowledge*** *understand and use mechanical systems in their products (for example, gears, pulleys, cams, **levers** and linkages]	*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. **(Family picnic- food tasting)**		**Design (Canopic jars)** *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** *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
*Plan the order of their work before starting *Explore, develop and communicate design proposals by modelling ideas *Make drawings with labels when designing *Select tools and techniques for making their product *Measure, mark out, cut, score and assemble components with more accuracy *Work safely and accurately with a range of simple tools *Think about their ideas as they make progress and be willing to change		*Generate ideas for an item, considering its purpose and the user/s *Identify a purpose and establish criteria for a successful product *Plan the order of their work before starting *Explore, develop and communicate design proposals by modelling ideas Make drawings with labels when designing *Select tools and techniques for making their product *Measure, mark out, cut, score and assemble components with more accuracy *Work safely and accurately with a range of simple tools	Demonstrate hygienic food preparation and storage Evaluate against their design criteria e.g. *express likes and dislikes/ how to improve*		*Generate ideas for an item, considering its purpose and the user/s *Identify a purpose and establish criteria for a successful product *Plan the order of their work before starting *Make drawings with labels when designing *Select tools and techniques for making their product *Measure, mark out, cut, score and assemble components with more accuracy *Work safely and accurately with a range of simple tools

things if it helps them improve their work *Use finishing techniques strengthen and improve the appearance of their product using a range of equipment *Evaluate against their design criteria e.g. *how well it meets its intended purpose*		*Think about their ideas as they make progress and be willing to change things if it helps them improve their work *Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT (littleinventors.org) *Evaluate against their design criteria e.g. *how well it meets its intended purpose*			*Think about their ideas as they make progress and be willing to change things if it helps them improve their work *Use finishing techniques strengthen and improve the appearance of their product using a range of equipment *Evaluate against their design criteria e.g. *how well it meets its intended purpose*
YEAR 4					
AUT 1: FLASHES AND BANGS	**AUT 2: RAMPAGING ROMANS**	**SPR 1: TEETH TO THE TOILET**	**SPR 2: INVADERS & SETTLERS**	**SUM 1: RUMBLE IN THE JUNGLE**	**SUM 2: VIVA ESPAGNA**
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 ***Make*** select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately ***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 ***Technical knowledge*** understand and use electrical systems in their products [for example, **series circuits incorporating switches, bulbs, buzzers and motors**] **Iron man with light up eyes**	***Evaluate*** *understand how key events and individuals in design and technology have helped shape the world (**ROMAN ARCHITECTURE**) ***Technical knowledge*** *apply their understanding of how to strengthen, stiffen and reinforce more complex structures (**COLUMN AND PILLARS FROM PAPER**) **Cooking and nutrition** *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. **(pizzas? Roman food)**	*understand and apply the principles of a healthy and varied diet *understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. *prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques **(Healthy Stir Fry)**	**LONGBOATS** ***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, ***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 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	**3D Diorama** ***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, ***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 ***Evaluate*** *evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	*prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques *understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. **(Tomato bread/ Spanish Tortilla)**
*Generate ideas, considering the purposes for which they are designing *Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail *Select appropriate tools and techniques for making their product *Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques	*Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail *Evaluate products and identify criteria that can be used for their own designs *Select appropriate tools and techniques for making their product *Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques	*Select appropriate tools and techniques for making their product *Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques	*Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail *Evaluate products and identify criteria that can be used for their own designs *Select appropriate tools and techniques for making their product *Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques	*Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail *Evaluate products and identify criteria that can be used for their own designs *Select appropriate tools and techniques for making their product *Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques	*Select appropriate tools and techniques for making their product *Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques

*Join and combine materials and components accurately in temporary and permanent ways *Evaluate their work both during and at the end of the assignment *Evaluate their products carrying out appropriate tests	*Join and combine materials and components accurately in temporary and permanent ways *Evaluate their work both during and at the end of the assignment *Evaluate their products carrying out appropriate tests		*Join and combine materials and components accurately in temporary and permanent ways *Evaluate their work both during and at the end of the assignment *Evaluate their products carrying out appropriate tests	*Join and combine materials and components accurately in temporary and permanent ways *Evaluate their work both during and at the end of the assignment *Evaluate their products carrying out appropriate tests	
YEAR 5					
AUT 1: BASFORD& BULWELL BYGONES	**AUT 2: SPACE**	**SPR 1: SAVE OUR PLANET!**	**SPR 2: ANCIENT GREECE**	**SUM 1: CURIOUS ABOUT CLIMATE**	**SUMMER 2: CIRCLE OF LIFE**
*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 *select from and use a wider range of tools and equipment to perform practical tasks * evaluate their ideas and products against their own design criteria and consider the views of others to improve their work * understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages] **FAIRGROUND RIDE**		*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 *select from and use a wider range of tools and equipment to perform practical tasks * evaluate their ideas and products against their own design criteria and consider the views of others to improve their work *understand and use **mechanical systems** in their products (for example, gears, pulleys, cams, levers and linkages] (**WIND POWERED VEHICLES**)	*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 *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. **(HEALTHY PITTAS)**	*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 * evaluate their ideas and products against their own design criteria and consider the views of others to improve their work **(OCEAN CLEANING INVENTION)**	
Generate ideas by brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes and suggesting alternative methods of making if the first attempts fail Select appropriate materials, tools and techniques Measure and mark out accurately Use skills in using different tools and equipment safely and accurately		Generate ideas by brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes and suggesting alternative methods of making if the first attempts fail Select appropriate materials, tools and techniques Measure and mark out accurately Use skills in using different tools and equipment safely and accurately Cut and join with accuracy to ensure a good quality finish to the product	Weigh and measure accurately (time, dry ingredients, liquids) Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens Evaluate their work personally and seek evaluation from others	Generate ideas by brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes and suggesting alternative methods of making if the first attempts fail Use results of investigations, information sources, including ICT (lilltelinventors.org) when developing design ideas Select appropriate materials, tools and techniques	

Cut and join with accuracy to ensure a good quality finish to the product Evaluate a product against the original design specification Evaluate their work personally and seek evaluation from others		Evaluate a product against the original design specification Evaluate their work personally and seek evaluation from others			
YEAR 6					
AUTUMN 1: CASTAWAY	**AUT 2: BEATS & BREATH**	**SPRING 1 : WORLD WAR 2**	**SUMMER 1: MAYAN MYSTERIES**	**SPRING 1: SURVIVAL OF THE FITTEST**	**SUMMER 2: TASTE OF THE CARIBBEAN**
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 *accurately select from and use a wider range of materials and components, 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 electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] **(ELECTRIC POWERED BOAT)**	*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** *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 *accurately select from and use a wider range of materials and components, 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 electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] **(KEEP OUT BOX- PROTECTING ARTEFACT)**		*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.

*Communicate their ideas through detailed labelled drawings *Develop a design specification *Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways *Plan the order of their work, choosing appropriate materials, tools and techniques Select appropriate tools, materials, components and techniques *Assemble components make working models *Use tools safely and accurately *Construct products using permanent joining techniques *Make modifications as they go along *Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests *Record their evaluations using drawings with labels *Evaluate against their original criteria and suggest ways that their product could be improved	*Select appropriate tools, materials, components and techniques *Weigh and measure accurately (time, dry ingredients, liquids) *Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens		*Communicate their ideas through detailed labelled drawings *Develop a design specification *Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways *Plan the order of their work, choosing appropriate materials, tools and techniques Select appropriate tools, materials, components and techniques *Assemble components make working models *Use tools safely and accurately *Construct products using permanent joining techniques *Make modifications as they go along *Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests *Record their evaluations using drawings with labels *Evaluate against their original criteria and suggest ways that their product could be improved		*Select appropriate tools, materials, components and techniques *Weigh and measure accurately (time, dry ingredients, liquids) *Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens