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**Wibsey Primary School**

**Design Technology Curriculum Document**

This is pupil’s entitlement in Design Technology at Wibsey Primary School:

**By the end of Year 6 our pupils will:**

* Have secure specific technical knowledge which they use to:
* Strengthen, stiffen and reinforce more complex structures that they make.
* Incorporate a variety of mechanical systems, such as switches, bulbs, buzzers and motors, in their products.
* Prepare and cook a variety of dishes using a range of cooking techniques safely and hygienically
* Understand the design making process and have an in depth understanding of each stage:
* When designing use research to inform their design criteria;
* Pupils choose and use appropriate methods to present their design ideas;
* When making their product pupils purposefully select from and use a wider range of tools and equipment to cut, shape, join and finish their product. They handle these materials and components confidently;
* Pupils evaluate their completed product against their own design criteria and consider the views of others to improve their work.
* Pupils investigate and analyse a range of existing products.
* Apply their understanding of computing to program, monitor and control products.
* Understand and use the principles of a healthy and varied diet when planning the preparation of a dish.
* Understand terms, such as *user,* *fitness for purpose, aesthetic appeal, design, evaluate, product.*

**Pupils at Wibsey will be taught:**

|  |  |  |  |  |  |  |  |
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|  | **EYFS***Nursery* Reception | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
|  | **Structures** | **Structures****Mechanisms** | **Mechanisms** **Textiles** | **Structures****Mechanisms** | **Textiles****Electrical Systems** | **Mechanisms****Textiles** | **Structures****Electrical Systems** |
| **Technical and everyday knowledge and understanding** | **Structures** | *To know the names of different materials – cardboard, fabric, wood, metal**The names of basic tools eg scissors, hammer*Reception To know that structures can be built in different ways with different materialsTo know the names of different tools and their uses | * To know what a free-standing structure is and how it can be made stronger, stiffer and more stable
 |  | * To know what a shell structure is, the importance of a strong, stiff structure
* To know what cutting and scoring are, when to use them and which tools to use
* To know what a net is and how nets are used to create a 3D structure
 |  |  | * To know what a frame structure is, how they are created and what gives them strength
* To know which materials, due to their properties, are best suited to stiffen and reinforce
* To know which shapes and materials are the strongest and will support the most weight
* To know how to create frame structures from different materials and test their strength
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| **Mechanisms** |  | * To know that sliders and levers are mechanisms that provide movement and how to operate them
 | * To know what wheels, axels and axel holders are and how they can be joined to form a simple mechanism
* To explore and know how wheels and axles (including fixed and free moving) are used in products
* To investigate and experience wheels and axels and know the impact of changing the size of wheels, length and position of axles
 | * To know how a lever works
* To know how linkages create movement and how the direction can be changed
* To know the difference between a fixed and loose pivot and inputs and outputs
 |  | * To know what pulleys and gears are and how they work
* To know how different gear sizes and pulleys can be used to speed up and slow down
 |  |
| **Textiles** |  |  | * To know how different textiles are used in different ways
* To know what a template is and why designers use them
 |  | * To know that 2D templates / patterns are used to make 3D items and why designers use them
* To know the names of different types of fabrics and their uses
* To know how to stiffen, strengthen and reinforce existing fabrics
 | * To know how multiple fabric shapes can be used to make a 3D textile product
* To know the difference between decorative and functional techniques
* To know how CAD can be used to design a product
 |  |
| **Electrical Systems**  |  |  |  |  | * To know what an electrical circuit (series circuit) is and how it works
* To know the function of a range of simple electrical components and how they work eg switch
* To know how simple electrical circuits and components can be used to create functional products
 |  | * To know how simple switches can be self- made and incorporate these into a circuit
* To know how to test components in more complex circuits
 |
| **The Design Making Process:****Skills of** **Designing** | **Pupils in** *Nursery* **will be taught:*** *To talk about what they are making*
* *To look at pre-existing products and use them to help them create their own*

**Pupils in** Reception **will be taught:*** To use the language of designing and making - make, join, build
* To say what they are making and name the tools and materials they will use
* How to make a simple drawing of what they are going to make
 | **Pupils in Y1 will be taught:** * To suggest ideas and explain what they are going to do by drawing on their own experience and preferences / choice
* To identify the purpose / function of their product
* To select appropriate materials from a limited range (card, paper, tissue) based on their properties
* How to use a simple, design criteria, which identifies purpose and function, to inform their design
* How to use simple labelled models and drawings to communicate their design ideas
 | **Pupils in Y2 will be taught:** * What a design criteria is and how to use it to help develop ideas
* To identify what their product is, who will use it and how it will work
* To use their own experience and knowledge of existing products to generate ideas
* To communicate ideas by drawing diagrams, making models and using ICT
* To consider their product when choosing tools, fabrics, equipment and techniques from a wider range and explain their choice
 | **Pupils in Y3 will be taught:*** To use their understanding of the purpose of their product and user to design a product that will appeal
* To select tools and materials that are suitable to the task

from a wider range of tools, unfamiliar materials and methods and explain those choices* To plan and record the order of their work
* How to use clearly labelled drawings to record their design ideas and explain how particular parts of their product work
* To identify the 2D and 3D shapes that will create their product
 | **Pupils in Y4 will be taught:*** To describe the purpose of their product and indicate the design features that will appeal to the user and meet their needs
* Develop own design criteria and use these to inform their own design ideas
* To use knowledge of tools and equipment to select which to use and explain their choice
* To use knowledge of techniques and the functional and aesthetic qualities of materials to make appropriate choices according to their properties and plan how to use them
* To plan the order of work and steps involved before starting
* How to make annotated plans (including circuit drawings) with labels which explain how parts of their product work
* What a protoype is and how to use them to model their ideas
* To consider the availability of resources when making design decisions
* How to use CAD to develop and communicate ideas
 | **Pupils in Y5 will be taught:*** Use internet for own research to generate ideas and innovate for a purpose
* To design a product considering the main component shapes required and create, cut and use an appropriate paper template
* To identify the purpose of their product and indicate the design features of their products that will appeal to intended users on a proforma
* How to use a protype to model and test ideas
* How to use an accurate exploded diagram to communicate their ideas
* How to use an accurate cross- sectional diagram to communicate ideas
* To produce step by step plans to guide making – selecting materials, tools and techniques, such as strengthening and stiffening, appropriate to the task
 | **Pupils in Y6 will be taught:*** How to research the needs of the user and then use this information to inform their design criteria
* To use their understanding of the qualities of materials when choosing appropriate tools to cut and shape
* To use nets to produce a 3D card prototype to model their ideas
* To apply knowledge of strengthening techniques and select appropriate materials that will reinforce and strengthen their product
* To consider resources, costs and time when making design choices
* To indicate the design features that will appeal to the user
* Select the most appropriate method (exploded / cross-sectional diagram) to accurately communicate design ideas and explain this
* To formulate step by step plans which include a list of resources and tools
* To identify the steps to a control program
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| **The Design Making Process:****Skills of** **Making**Cutting ShapingJoining Finishing |  | **Pupils in** Nursery**will be taught:*** *The names of simple tools*
* *How to use materials to make something*

Cutting* *How to use scissors safely*

**Pupils in** Reception **will be taught:*** The names of common materials

Cutting* How to use provided tools to cut materials safely
* To use scissors safely to make straight and curved edges

Joining* Different ways to join two components together - tape and glue
 | **Pupils in Y1 will be taught:** * With support, to measure, mark-out, cut and shape materials (including paper and tape)

Cutting* To use scissors safely to cut and shape card and paper

Joining* How to apply glue and tape and use a stapler to join and combine materials and components, and when to use them
 | **Pupils in Y2 will be taught:** * To select appropriate materials, including fabric, for their product
* To use a ruler to measure and mark-out with some accuracy independently

Cutting* To cut materials and components accurately (including fabric and scissors)

Shaping* To shape materials and components including fabric

Joining* A range of techniques to join and combine materials (assemble), such as gluing, using hinges or combining materials to strengthen

Finishing* How to use finishing techniques to appeal to the user
* That changes can be made whilst making the product
 | **Pupils in Y3 will be taught:*** To think about their ideas as they make a product and be willing to change things

Cutting* How to use a craft knife safely to cut and shape with some precision

Shaping* How to measure and mark out materials and components accurately, using a ruler to the nearest cm

Joining* To join and combine materials accurately including using a glue gun

Finishing* To change and adapt things as they are making their product if thing do not go to plan
 | **Pupils in Y4 will be taught:** * To follow their plan to create the final product, thinking about their ideas, evaluating and refining work and techniques as making progresses
* To select tools and equipment suitable for the task and explain their choice in relation to the skills and techniques they will be using
 | **Pupils in Y5 will be taught:** * To accurately measure and mark out using a ruler
* To skilfully use different tools and equipment safely, including the use of snippers
* To make modifications during the making process
 | **Pupils in Y6 will be taught:** * How to make modifications / refinements to their product through the making process, testing and through using prototypes
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| **Specific to Structures** |  | * How to make a simple structure using card, tape and glue
* How structures can be made stronger, stiffer and more stable by assembling in different ways (making the base wider, heavier, by using a buttress and brick bonding)
 |  | * How to apply different techniques to construct and strengthen structures - corrugating, laminating and ribbing
* How to use 2D nets to create 3D shell structures and how to cut and shape (using scissors and a ruler for cutting and scoring) with some accuracy
* To use CAD in creating nets
 |  |  | Cutting* How to use a range of tools safely including a junior hacksaw to cut wood accurately and safely and a glue gun to join materials safely
* To independently measure and mark to the nearest mm and cut with precision to ensure dimensions are correct

Shaping* How to use a small scale prototype to identify which shapes are the strongest to use
* How to use pattern pieces to aid shaping and identify the strongest shapes

Joining* How to assemble components safely (including the use of a glue gun) and accurately to make a stable frame
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|  |  **Specific to Mechanisms** |  | * How to create simple mechanisms using levers (with and without slots) and sliders
 | Joining* Simple methods to fix wheels, axels and axel holders to a product which allow the wheels to move
 | * How to create levers (using split pins, card and craft knives) and linkages that move in different ways

Joining* How to assemble a lever and linkage system to a product
 |  | * How to create working pulleys and gears

Finishing* How to use layers and spaces to hide the working of mechanical parts for an aesthetically pleasing result
 |  |
|  | **Specific to Textiles** |  |  | Shaping* How to create and use a pattern when working with textiles

Joining* How to join two pieces of fabric using different joining techniques - gluing, stapling, pinning and stitching using running stitch
* To thread with some accuracy and use a needle safely

Finishing* To decorate the product to make it appealing
 |  | Cutting and shaping* To make and test a paper template with accuracy in keeping with the annotated plan
* To measure, mark and cut out fabric using their paper template to the nearest cm

Joining* How to measure, cut, pin and securely join two pieces of fabric together using running and blanket stitch accurately
* How to combine multiple different fabrics to create a 3D product
* How to incorporate a simple fastening
* How to use different applique finishes to finish a product
 | * How to use CAD to manipulate images to develop a product by decorating pattern pieces
* Different embellishment techniques such as eyelets, embroidery, buttons and how to use them to enhance a product

Joining* Pin, sew and stitch materials together to create a 3d product
* Know how and when to use particular stitch types– blanket stitches for joining fabrics and running stitches for embellishment
 |  |
| **Specific to Electrical Systems** |  |  |  |  | * How to construct a series circuit which includes a self-made switch and appropriate components
* How to make a prototype to test their working electrical circuit
 |  | * To use computer aided technology to represent
* How to test components in more complex circuits and make modifications
 |
| **The Design Making Process:****Skills of** **Evaluation** | **Pupils in** *Nursery* **will be taught:*** *To talk about what they have made*

**Pupils in** Reception **will be taught:*** To say what they like / do not like about what they have made
 | **Pupils in Y1 will be taught:** * To talk about their design and the changes they made
* To question if their finished product meets the design criteria
* To test a product to see if it works as planned
* That all products can be improved and to suggest a way to improve their product
* To discuss what they like / dislike about their product
 | **Pupils in Y2 will be taught:** * To make simple judgements about their finished products against the design criteria and explain their judgement
* To suggest ways to improve their finished product, giving reasons for their suggestions
 | **Pupils in Y3 will be taught:** * To evaluate their final product by testing it against their original design ideas and design criteria and suggesting improvements
* Evaluate the success of their product and explain why it is successful or unsuccessful by referring to the original design ideas from the proforma
* To explain why certain methods and materials have been chosen
* To canvas the views of others to aid improvements
 | **Pupils in Y4 will be taught:** * To evaluate their product by referencing to their design criteria and annotated plan
* To listen to the views of others and use feedback to evaluate how well products meet user needs and wants
* To suggest ways in which they would construct their final product differently
 | **Pupils in Y5 will be taught:** * To consider the views of others to improve their product
* To explain which characteristics of their design / construction made it the most effective and what made it ineffective
* To critically evaluate the functionality and aesthetic quality of the finished product
* To assess how innovative their product is
 | **Pupils in Y6 will be taught:** * To consider the views of the user to improve their work
* Identify strengths of their product linking this to their final design and the design process and explain the improvements they could make
* To record evaluations using labelled drawings
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| **Inspiration from design**  | **Pupils in** *Nursery* **will be taught:*** To name familiar products

**Pupils in** Reception **will be taught:*** To identify what they like and dislike about familiar products
* To dismantle everyday objects in order to learn how they work
 | **Pupils in Year 1 will be taught:*** To explore products and discuss what they like and dislike about them
* To identify free standing structures and their similarities and differences
* To identify simple levers and sliders in real world products eg seesaw, wheelbarrow
 | **Pupils in Year 2 will be taught:*** To research to inform their own design
* To suggest improvements to existing designs
* Identify how fabric is used in different ways
 | **Pupils in Year 3 will be taught:*** To identify different shell structures eg buildings and boxes
* To identify different 3D textile items that are made up of more than 1 piece
* How levers and linkages are used
 | **Pupils in Year 4 will be taught** * To identify products which use an electrical system
* To disassemble products to understand how things work
* To identify how textiles are used to create 3D products and how they are decorated
 | **Pupils in Year 5 will be taught:*** To research how pulleys and gears are used
* To identify how different textile products are embellished
 | **Pupils in Year 6 will be taught:*** To combine elements of designs from a range of designers throughout history giving reasons for choices
* To evaluate designs of products to suggest improvements to the user
* To identify frame structures in the world and explain why they are used
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| **Vocabulary** | Materials, tools, scissors, tape, glue, cardboard, fabric, wood, metal | Structure, stability, buttressPush, pull, slider, lever, fulcrum, pivotUser, product | Wheel, axel, axel holder, chassis, free-moving, fixedTextile, fabric, template / pattern, sew, stitch, seam  | Face, edge, net, scoring, vertex, cuboid, CAD (Computer Aided Design)Mechanism, pivot, fixed, loose, lever | Applique, pattern, template, seam allowance, aestheticsCircuit, conductor. Insulator, switch, output, input, wire | Drive belt, gear, driver, follower, mesh, motor spindleApplique, embroidery, pattern, seam allowance, tacking | Compression, strut, tension, tie, triangulation, cross sectional, woodOpen / closed switch, input, output, computer control input |
| **Core learning experiences** | Use a range of construction kits across provisionUse a range of materials and components including junk modelling, textiles, crates and food ingredients | Identifying free standing structures in the environment, including the Reception playgroundUse a range of construction kits Tasting different fruits | Investigating by using bikes and trikes in EYFS  | Disassembling boxes to create nets | Explore a number of electrical games |  |  |
| **Concepts** | Strong / sturdy | Stability | Function | Nutrition | Aesthetic  | Testing  | Testing |
| **Greater Depth Statements** | **Structures** | Can children develop their own ideas through selecting and using materials and working on processes that interest them?Can they talk about the plans they have made to carry out activities and what they might change if they were to repeat them? | Children can create a structure using different materials and explain why they are using them. |  | Children can select the most appropriate materials, tools and techniques to use. |  |  | Can they choose appropriate tools and techniques that will appeal to their target audience?Children can demonstrate their product is strong and fit for purpose. |
| **Mechanisms** |  | Children can explain why they have chosen moving parts.Children can describe how their product works independently.  | Children can explain what materials they have used and how their product moves independently. | Children can use and identify a range of different components. |  | Children can refine their product after testing it. |  |
| **Textiles** |  |  | Children can explain why they chose to use certain fabrics. |  | Children can consider which materials are fit for purpose and join them together neatly and accurately. | Children can use a range of different joining techniquesChildren explore and experiment with different types of fabrics and select the best fabric for purpose.  |  |
| **Electrical Systems** |  |  |  |  | Can use a simple circuit and add different components to it to reflect the needs of the target audience |  | Children can incorporate a switch into their circuit. Children can refine their circuit after testing it. |
| **End points****Designing** | **By the end of** *Nursery,* **pupils will:*** *Generate ideas by copying examples made by others*

**By the end of** Reception **pupils will:*** Communicate their ideas about a product verbally and by a drawing
* Name a number of simple tools
 | **By the end of Y1, pupils will:*** Develop their own ideas and create a simple design for a product (that follows a design criteria)
* Make a labelled sketch to communicate a product design
* Describe what they want to make, who it is for and how it will work

  | **By the end of Y2, pupils will:*** Generate ideas and design a product for a particular purpose, explain how it will work and the choices they have made
* Communicate and model their ideas (by including pictures, models, words, diagrams and ICT), and explain how they will make it
 | **By the end of Y3 pupils will:*** Design a functional and appealing product which meets the design criteria but also takes their research into account and the purpose, method and suitability for the user
* Use annotated sketches to communicate the purpose of the product and how it will work
* Plan a sequence of work showing order, equipment and tools
 | **By the end of Y4, pupils will:*** Design a product that is both functional and aesthetically appealing and which takes into account the brief and research of existing products
* Explain their resource design decisions
* Present an accurate annotated plan, explaining the purpose and function of their design and how it meets user’s needs
* Model their ideas using a prototype
 | **By the end of Y5, pupils will:*** Model and refine ideas by using prototypes to show design ideas
* Present an exploded diagram or cross-sectional plan to present ideas and explain how parts of the product will work. Give reasons for their choice
* Successfully plan a sequence of work to produce a product using a proforma to include purpose. Audience and method
 | **By the end of Y6, pupils will:*** Plan a step-by-step sequence of work to produce a product using their own design proforma, which includes purpose, audience, method and equipment, and their research into the wants and requirements of the user
* Generate, develop, model and communicate design ideas through annotated plans, cross sectional diagrams and exploded diagrams which refer to function, purpose and user
* Make, and give reasons for design decisions, considering costs, resources and time
 |
| **End Points****Making**Cutting ShapingJoining Finishing | **By the end of** *Nursery* **pupils will:*** *Identify and name a number of simple tools*

* *Can talk about what they are making*

**By the end of** Reception **pupils will:*** Name and select the tools and materials that they will use
* Show an

 understanding  of how to join  two materials | **By the end of Year 1 pupils will:*** Identify and use a range of simple tools and equipment to measure, cut, shape and join materials to make a product

Mechanisms * Create simple levers and slides to demonstrate how they work

Structures* Create a free- standing structure to meet a brief
 | **By the end of Year 2 pupils will:*** Safely measure, mark, cut, shape and join materials using a range of tools
* Create a simple product relating closely to the brief that was given and refining the design as the work progresses

Mechanisms* Assemble wheels and axels to make a mechanism that moves

Textiles* Join fabrics in a variety of ways, including stitching
 | **By the end of Year 3 pupils will:*** Safely measure, mark and cut, assemble and join with some accuracy
* Select and use appropriate tools competently and safely, including the use of craft rulers and knives

Mechanisms* Create a product that includes a moving lever and a pivot

Structures* Create a simple 3D shell structure from a 2D net, scoring and folding precisely
* Use knowledge of the properties of materials and methods to create a 3d stiff shell structure
 | **By the end of Year 4 pupils will:*** Choose and use appropriate techniques which require more accuracy to cut, shape, join and finish work
* Select and use methods, appropriate tools and stitches to join materials, using them accurately and effectively to create their final product that is both functional and aesthetic
* Make and test a prototype

Textiles* Create a simple 3D product from a 2D product
* Make and use a paper template to fully implement the design
 | **By the end of Year 5 pupils will:*** Measure accurately / with precision/ using a ruler so that joins, holes and openings are in the correct place
* Cut materials safely including using snippers

Mechanisms* Use working pulleys and gears to create a product

Textiles* Neatly stitch different fabrics (using blanket and running stitch) and shapes to create a product that is functional and aesthetic, and reasonably neat
 | **By the end of Year 6 pupils will:*** Identify and use appropriate techniques, tools and skills to cut, join and finish materials with regards to the product’s function and aesthetic appeal
* Apply technical knowledge and skills to problem solve, refine and rework their product during the making process, thereby improving its functional properties and aesthetic qualities
* Use specific equipment and materials accurately and safely to create their product

Structures* Design and make a frame structure suitable for the brief and specification given

Electrical Systems* Design and make a product that includes control technology and produce a programmed sequence of steps
 |
| **End Points****Evaluation** **Existing Products****Their Own Product** | **By the end of** *Nursery* **pupils will:*** *Talk about something they have made*

**By the end of** Reception **pupils will:*** Talk about familiar products, saying what they like or dislike about them
* Describe a product they have made and say what they like about it
 | **By the end of Year 1 pupils will:*** Describe a product they have made, stating if it works as planned and suggesting a way to make it better
* State if their product works as planned and suggest a way to make it better
 | **By the end of Year 2 pupils will:*** Evaluate existing products
* Evaluate and improve their finished product; explaining why it is good and how it could be improved further, giving reasons for their changes using appropriate terminology
* Can evaluate the effectiveness of their design
 | **By the end of Year 3 pupils will:*** Investigate and analyse existing products considering a wide range of factors
* Test and review their product and suggest improvements, giving reasons for their improvements
 | **By the end of Year 4 pupils will:*** Evaluate the effectiveness of existing products and their own product by referring to the specification and how well it meets the user’s needs
* Evaluate the execution of their final product and identify why they may have deviated from the plan
 | **By the end of Year 5 pupils will:*** Fully evaluate their product by both referring to the specification and considering the views of others, identify areas of strength and suggest improvements; giving reasons for their choices
 | **By the end of Year 6 pupils will:*** Review their finished product, identifying strengths and improvements linking this to their design criteria, plan and user feedback

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| **Cooking and Nutrition: Technical and everyday knowledge and understanding** | *The names of a variety of foods*To explore familiar food products and **to** develop a food vocabulary using taste, smell, feel and texture  | * How to safely handle a limited range of cutting tools
* Basic food handling, hygienic practices and personal hygiene
* The principles of a varied diet
* To identify different foods: vegetables, fruit and food comes from animals and plants
 | * How to prepare simple dishes safely and hygienically
* Everyone should eat 5 portions of fruit and vegetables a day
* The 5 food groups on the Eatwell plate
 | * The names of the major food groups and that a healthy diet is made up of a balance of different foods
* How to combine foods when following a simple recipe using different utensils - spatula, knife, wooden spoon
* How to handle, prepare and store food safely and hygienically
* To select appropriate utensils from a wider range and use them safely to chop and combine ingredients
 | * The importance of accurate measuring and weighing when cooking
* How to use the oven correctly and safely with adult supervision
* The difference between fresh and processed foods
 | * The different abbreviations used for measures in a recipe eg mls, grams, spoons, tsp, tbsp
* How to follow a recipe and adapt it where needed to change appearance, taste and texture
* How to select appropriate utensils for a job
 | * The different foods that are grown in different parts of the world
* About seasonality and organic foods
* How to store foods safely
* How to change a recipe to feed more or fewer than it is written for
 |
| **Skills**  | **Pupils in *Nursery* will be taught:*** *The names of a variety of foods*

**Pupils in Reception will be taught:*** To describe food using an increasing taste vocabulary using taste, smell, texture and feel.
 | **Pupils in Y1 will be taught:*** That food comes from plants and animals.
* To identify fruits and vegetables
* To taste foods and describe their appearance, smell and taste using correct vocabulary
* How to use a knife safely to chop and chunk
* How to follow basic food and personal hygiene practices when preparing food
 | **Pupils in Y2 will be taught:*** To sort a range of foods into the 5 food groups on the Eatwell plate
* To use their knowledge of the 5 main food groups to identify a healthy / unhealthy meal and give reasons
* Identify which foods are grown, farmed or caught
* How to follow safety and hygienic procedures when preparing simple dishes
* How to use a knife safely and accurately to slice food
* The difference between the bridge and the claw grip and how to slice food safely using either technique
 | **Pupils in Y3 will be taught:*** To use their knowledge to identify what ingredients in a given meal contribute to a balanced diet
* The names and uses of a variety of utensils: spatula, wooden spoon, knife, mixing bowl, frying pan
* To chop ingredients using a knife accurately and safely
* To select and use appropriate utensils to combine ingredients including stirring using a wooden spoon
* To fry ingredients safely
* To follow instructions in a recipe to produce a dish safely and hygienically
* Why certain methods and materials have been chosen to prepare a particular dish
* Evaluate dish using taste
 | **Pupils in Y4 will be taught:*** To sort foods into fresh and processed and explain their reasoning
* How to evaluate a number of recipes based on their ingredients and select a healthy one to make
* To gather the equipment needed before they start baking / cooking
* How to weigh and measure the ingredients accurately to the nearest gram, including the use of digital scales
* To select appropriate tools to combine ingredients
* How to use the oven correctly and safely (with adult supervision)
* To evaluate their finished product, considering taste, texture and appearance
 | **Pupils in Y5 will be taught:*** How to read a recipe and identify how the appearance, taste and texture could be adapted
* The different abbreviations used for measures in a recipe eg mls, grams, spoons, tsp, tbsp, the equipment used for each one and how to weigh and measure them accurately
* How to choose the utensils and equipment needed to make the dish and use them safely
 | **Pupils in Y6 will be taught:*** To sort foods according to where they are grown
* To sort foods according to seasonality
* That micro-organisms can grow on food and make it go off if it is not stored correctly
* How to store food safely and why this is important
* How to scale up / down quantities as needed when following a recipe
* How to rewrite a recipe that they have scaled up / down and follow it to make a product
* How to write a recipe, explaining the key steps and ingredients
* Follow a recipe independently whilst working to a given timescale
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| **Cooking and Nutrition End Points** | **By the end of** *Nursery* **pupils will:*** *Identify a variety of foods*

**By the end of** Reception **pupils will:**Describe a range of food products using the correct vocabulary | **By the end of Year 1 pupils will:*** Sort foods into those derived from animals and plants
* Demonstrate how to use a knife safely to chunk and utensils to peel safely (with adult support)
 | **By the end of Year 2 pupils will:*** Demonstrate how to use utensils to cut, peel, grate and slice safely and hygienically
* Identify if a meal is healthy or unhealthy and explain why
 | **By the end of Year 3 pupils will:*** Sort foods into the 5 main food groups and use this knowledge to

explain why a meal a balanced* Demonstrate how to follow a simple recipe
* Demonstrate how to use a range of tools, including a variety of knives to competently cut, chop and combine foods safely and hygienically
* Test and evaluate finished dishes
 | **By the end of Year 4 pupils will:**Demonstrate how to:* Follow a recipe, assemble and cook ingredients safely (including controlling the temperature of the oven) to produce a product which tastes and looks good
* Prepare ingredients by using appropriate utensils safely and hygienically
* Measure ingredients accurately to the nearest gram
 | **By the end of Year 5 pupils will:**Successfully follow a recipe independently and adapt it to change the appearance, texture and taste | **By the end of Year 6 pupils will:*** Explain that the food we eat comes from across the world and that seasons may affect the type of food available
* Prepare a variety of dishes safely and hygienically, demonstrating a range of baking and cooking techniques and using, where appropriate, a heat source
* Explain the importance of the correct storage and handling of ingredients
* Calculate ratios of ingredients to scale up /down from a recipe and measure accurately
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| **Greater Depth Statements**  | Cooking and Nutrition | Can they talk about the task they are completing?  | Children can explain what they are making. Children can explain what tools they are using and why.  | Children can generate different ideas from existing products**.** | Children can explain how they would change their design to make it better.  | They can explain how to improve their product but also explain how the changes will affect the original design.  | Can they assess how well their product works in relation to the design criteria and the intended purpose and suggest improvements | Children can identify all needs of their target audience and are able to make changes when necessary to make sure the purpose of their product is clear.  |