



Stanton-in-Peak Church of England Primary School

Design Technology Progression and Long Term Plan

“Then the LORD said to Moses, ... and I have filled him with the Spirit of God, with wisdom, with understanding, with knowledge and with all kinds of skills— to make artistic designs for work in gold, silver and bronze, to cut and set stones, to work in wood, and to engage in all kinds of crafts.” (Exodus 31:1-5)

“Life in all its fullness.” John 10:10

Intent:

A Stanton-in-Peak C of E Primary School we have designed a Design Technology curriculum which inspires our pupils to use creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. We intend for all children to acquire appropriate subject knowledge, skills and understanding as set out in the National Curriculum.

Implementation:

Design and Technology is a crucial part of school life and learning and it is for this reason that as a school we are dedicated to the teaching and delivery of a high-quality Design and Technology curriculum.

This is implemented through:

- Well planned and resourced projects providing children with a hands-on and enriching experience
- A well thought out, whole school, yearly overview of the DT curriculum which allows for progression across year groups in all areas of DT (textiles, mechanisms, structures, food and electrical systems)
- A range of skills being taught ensuring that children are aware of health and safety issues related to the tasks undertaken
- Teachers being given ownership and flexibility to plan for Design and Technology; often teaching DT as a block of lessons to allow the time needed for the children to be critical, inventive and reflective on their work.
- Each project from Reception to Year 6 addressing the principles of designing, making, and evaluating and incorporating relevant technical knowledge and understanding in relevant contexts.

There are two elements to the teaching and learning of Design Technology at Rowsley C of E Primary School:

- 1) The knowledge of how to research, design and create a product as well as evaluating the final outcome.
- 2) The skills needed to create products including basic sewing, woodwork, food prep etc- we feel that the teaching of these basic skills is essential not only for the children experiences but also to ensure that our pupils develop an interest in skills that can be used in employment or recreation.

Impact:

- Children will have clear enjoyment and confidence in design and technology that they will then apply to other areas of the curriculum.
- Children will ultimately know more, remember more and understand more about Design 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 Technology.
- As designers children will develop skills and attributes they can use beyond school and into adulthood

Art & DT Plan

Cycle	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Infants						
Cycle 1	DT: Slides & levers	Art: Print Tone	DT: Food	Art: Collage Colour & Texture	DT: Product Design (Jewellery)	Art: Artist - Picasso
Cycle 2	DT: Wheels & Pulleys	Art: Sculpture Observtion &Shape	DT: Textiles	Art: Drawing Tone & line	DT: Woodwork	Art: Colour- painting ,pastels, mixed
Year 3/4						
Cycle 1	Art: Artists (Local water colour artist) Colour	DT: Woodwork	DT: Mechanisms	DT: Food	Art: Colour- painting ,pastels, mixed	DT: Structures
Cycle 2	Art: Sculpture Observation&Shape	Art: Collage Colour & Texture	DT: Textiles (cross stitch)	Art: Printing Shape & Line	Art: Drawing Tone	DT: Product Design
Years 5/6						
Cycle 1	Art: Collage Texture, Shape, colour	DT: Product Design	DT: Structures	Art: Drawing (Architecture) Perspective	Art: Print & -Digital Photography Shape & tone	DT: Woodwork
Cycle 2	DT: Axels/gears/pulleys	Art: Drawing (faces) Texture, Shape and Tone	Art: Pastels& Painting Edvard Much- Colour, shape, observation	Art: Sculpture Observtion &Shape	DT: Food	DT: Textiles

Design

Reception	Year 1/2	Year 3/4	Year 5/6
<ul style="list-style-type: none"> • Begin to use the language of designing and making, e.g. join, build and shape. - Learning about planning and adapting initial ideas to make them better. 	<ul style="list-style-type: none"> • Work confidently within a range of contexts e.g. imaginary, local community, industry and wider environment. • Use knowledge of existing products to help come up with ideas. • Say whether their products are for themselves or other users. • Develop and communicate ideas by talking and drawing and using ICT where appropriate. • Say how their products will work and how they're suitable for intended users. • Use simple design criteria to help develop their ideas. • Model ideas by exploring materials, components, constructions kits and by making templates and mockups. 	<ul style="list-style-type: none"> • Work confidently in a range of contexts, e.g. home, school, leisure, culture, industry and wider environment. • Describe the purpose of their products. • Indicate design features of their products that will appeal to intended users. • Gather information about the needs and wants of individuals or groups. • Develop their own design criteria and use this to inform their ideas. • Share and clarify ideas confidently, through discussion. • Model ideas using prototypes and pattern pieces. • Use annotated sketches, some cross-sectional drawings and computer-aided design packages, to develop and communicate ideas. • Generate realistic ideas, focusing on the needs of the user. • Make design decisions that take account of the availability of resources. 	<ul style="list-style-type: none"> • Work confidently in a wide range of contexts, e.g. home, school, leisure, culture, industry, enterprise and wider environment. • Describe in detail, the purpose of their products. • Indicate design features of their products that will appeal to intended users. • Gather information about the needs and wants of particular individuals and groups. • Develop their own design criteria and use this to inform their ideas. • Carry out research e.g. surveys, interviews, questionnaires and web-based resources, to identify users' needs, wants and preferences. • Develop detailed design specifications to guide their thinking and planning. • Share and clarify ideas confidently, through discussion. • Model ideas using prototypes and pattern pieces. • Use annotated sketches, cross sectional drawings, exploded diagrams and computer-aided design packages, to develop and communicate ideas. • Generate realistic ideas, focusing on the needs of the user. • Make design decisions that take account of the availability of resources.

Making

Reception	Year 1/2	Year 3/4	Year 5/6
<ul style="list-style-type: none"> To learn to construct with a purpose in mind. -Selects tools and techniques needed to shape, assemble and join materials. 	<ul style="list-style-type: none"> Plans by suggesting what to do next. Selects from a range of tools, materials and components according to their characteristics. Explains their choices. Follows procedures for safety and hygiene. Uses a range of materials, components, construction kits, textiles, food ingredients and mechanical products. Measures, marks out, cuts and shapes a range of materials and components. Assembles, joins and combines materials and components. Begins to use finishing techniques, including those from art and design sessions. 	<ul style="list-style-type: none"> Select tools, equipment and some materials and components suitable to the task and explain their choices. Order the main stages of making. Follow procedures for safety and hygiene. Use a wide range of materials and components e.g. textiles, mechanical, construction kits, electrical and food ingredients. Measures, marks out, cuts and shapes materials and components with some accuracy. Assembles, joins and combines many materials with some accuracy. Applies some finishing techniques. 	<ul style="list-style-type: none"> Confidently select tools, equipment, materials and components suitable to the task. Explain their choices, giving evidence. Produce appropriate lists of tools, equipment and materials that they will need. Order the stages of the making process, in logical steps. Formulate step-by-step plans as guide to making. Follow procedures for safety and hygiene. Use an extensive range of materials and components e.g. textiles, mechanical, construction kits, electrical and food ingredients. Measures, marks out, cuts and shapes materials and components with accuracy. Accurately assembles, joins and combines materials. Accurately apply a range of finishing techniques, including those from art and design. Use techniques that involve a number of steps. Use resourcefulness, resilience and innovation, when tackling practical problems. Explains next steps in learning, drawing from prior experience.

Evaluating

Reception	Year 1/2	Year 3/4	Year 5/6
<ul style="list-style-type: none"> • Begin to talk about changes made during the making process, e.g. making a decision to use a different joining method. 	<ul style="list-style-type: none"> • Talk about their design ideas and what they are making. • Make simple judgements about their products and ideas against design criteria. • Talk and write about how to make their products better. • Explore what products are, what they are made from, who they are for, how they are used and where they might be used. • Talk about likes and dislikes of existing products. Give reasons. 	<ul style="list-style-type: none"> • Identify the strengths and areas for development in their ideas and products. • Consider the views of others, including intended users, to improve their work. • Refer to their design criteria as they design and make. • Use their design criteria to evaluate and improve their completed products. • Investigate and analyse: how well products have been designed and made; why materials have been chosen; what methods of construction were used; how well the products worked; whether they achieved their purpose and the needs/wants of the users. • Investigate and analyse: who designed the products; where products were designed and made; when products were designed and made; whether products can be recycled or re-used. • Recognise several inventors, designers, chefs, manufacturers and engineers, who have been influential in the design and technology industries. 	<ul style="list-style-type: none"> • Confidently identify the strengths and areas for development in their ideas and products. • Consider the views of others, including intended users, to improve their work. • Refer to their design criteria as they design and make. • Use their design criteria to evaluate and improve their completed products. • Critically evaluate the quality of the design, manufacture and fitness for purpose of their products. • Evaluate their ideas and products against their original design specification. • Investigate and analyse: how well products have been designed and made; why materials have been chosen; what methods of construction were used; how well the products worked; whether they achieved their purpose and the needs/wants of the users. • Investigate and analyse: who designed the products; where products were designed and made; when products were designed and made; whether products can be recycled or re-used. • Investigate and analyse: how much products cost to make; how innovative products are; how sustainable the materials in products are; what impact products have beyond their intended purpose. • Recognise several inventors, designers, chefs, manufacturers and engineers, who have been influential in the design and technology industries.

Technical Knowledge

Reception	Year 1/2	Year 3/4	Year 5/6
<ul style="list-style-type: none"> To learn how to use a range of tools, e.g. scissors, hole punch, stapler, woodworking tools, rolling pins, pastry cutters. -Learn how everyday objects work by dismantling things. 	<ul style="list-style-type: none"> Pupils understand the working characteristics of materials and components. They know about the movement of simple mechanisms such as levers, sliders, wheels and axles. Recognise that food ingredients should be combined according to their sensory characteristics. Understand how freestanding structures can be made stronger, stiffer and more stable. Recognise that 3D textiles products can be assembled from two identical fabric shapes. Use the correct technical vocabulary for projects. 	<ul style="list-style-type: none"> Pupils use learning from science, mathematics and other subjects to help design and make products that work. They understand that materials have functional and aesthetic qualities. Apply this thinking successfully to their own products. Recognise that materials can be combined and mixed to create more useful characteristics. Know that mechanical and electrical systems have an input, process and output. Know how mechanical systems such as levers and linkages create movement. Know that simple electrical circuits and components can be used to create functional products. Program a computer to control their products. Make strong, stiff shell structures for a purpose. Know that a single fabric shape can be used to make a 3D textile product. Recognise a range of fresh, pre-cooked and processed foods. 	<ul style="list-style-type: none"> Recognise that materials can be combined and mixed to create more useful characteristics. Know that mechanical and electrical systems have an input, process and output. Know how mechanical systems such as levers and linkages create movement. Know that simple electrical circuits and components can be used to create functional products. Program computer systems and devices to control their products. Make strong, stiff shell structures for a purpose. Know that a single fabric shape can be used to make a 3D textile product. Recognise a wide range of fresh, pre-cooked and processed foods. Know that mechanical systems e.g. cams, pulleys or gears create movement. Explore more complex electrical circuits and components. Program computers and devices to monitor changes in the environment and control their products. Reinforce and strengthen a 3D framework. Know that 3D textile products can be made from a combination of fabric shapes. Recreate and adapt existing and new recipes by adding or substituting a range of ingredients.

Cooking - Knowledge

Reception	Year 1/2	Year 3/4	Year 5/6
<p>That children should wash their hands before touching food.</p> <p>The names of basic cooking utensils i.e. spoon, whisk, bowl, scales.</p> <p>That food can be grown.</p> <p><u>Key Vocab:</u> Washing, spoon, whisk, bowl, scales, mix, pour</p> <p><u>Assessment:</u> Do chn understand basic hygiene around keeping healthy? Can chn name basic cooking utensils? Do pupils understand that food can be grown?</p>	<p>Know that food comes from plants or animals.</p> <p>Food is farmed, grown elsewhere (e.g home), imported or caught. Look at the types of food grown in India and other parts of the world.</p> <p>Name and sort foods into the five groups in 'The Eatwell Plate.'</p> <p>Begin to recognise that everyone should eat at least five portions of fruit and vegetables every day.</p> <p><u>Key Vocab:</u> Protein, carbohydrate, fats, dairy, starch, sugar, fruit, vegetables, imported, exported.</p> <p><u>Assessment:</u> Where does food come from? How can food be grown? How many portions of fruit and veg should you eat a day? Can you name some different</p>	<p>Prior Knowledge: Pupils know that food comes from plants or animals and is grown or is farmed and that it comes from all over the world. Understand that you need different types of food to be healthy.</p> <p>Know that food is farmed, reared, grown elsewhere (e.g home), imported or caught locally, regionally and internationally. Look at the types of food grown in India and other parts of the world.</p> <p>Recognise that a healthy diet is made up of a variety and balance of different foods and drinks, as depicted on 'The Eatwell Plate.'</p> <p>Know that to be active and healthy, food is needed to provide energy for the body.</p> <p><u>Key Vocab:</u> Protein, carbohydrate, fats, dairy, starch, sugar, fruit, vegetables, imported, exported, local, regional, international.</p> <p><u>Assessment:</u> What types of food could we find in these countries? (have a map). Create a healthy dinner on an Eatwell plate) Why do we need a healthy diet?</p>	<p>Prior Knowledge: Pupils know that food grows or is farmed and that it comes from all over the world. Children can talk about foods from other countries. Understand that you need different types of food to be healthy and say why.</p> <p>Know that food is farmed, reared, grown elsewhere (e.g. home, allotments), exported, imported or caught. This can be on a local, regional and international scale. Look at the types of food grown in Mexico (or other country) and other parts of the world i.e. India (or other country)- look at the effects of large scale deforestation for food production. Look at air-miles to transport food from India to the UK.</p> <p>Understand fairtrade.</p> <p>Begin to know that seasons and weather affect food availability.</p> <p>Know that a healthy diet is made up of a variety and balance of different foods and drinks, as depicted on 'The Eatwell Plate.' Compare a traditional Indian plate with that of a UK dinner.</p> <p>Know that to be active and healthy, food is needed to provide energy for the body.</p>

	food groups (carbohydrates, protein, fats etc)		<p>Know that different foods contain substances that are needed for health e.g. water, fibre, vitamins, minerals and nutrients.</p> <p>Understand that healthy diets must incorporate the correct amounts of food types and substances.</p> <p><u>Key Vocab:</u> Protein, carbohydrate, fats, dairy, starch, sugar, fruit, vegetables, imported, exported, local, regional, international, fibre, vitamins, nutrients, seasonality.</p> <p><u>Assessment:</u> What are air miles and how do they affect our planet? What can we do to reduce the air miles of our food? What is the role of fiber in our diet? Which food could you get vitamin C from? Name one other way to keep healthy other than the food we eat?</p>
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Textiles - Sewing Skills

Reception	Year 1/2	Year 3/4	Year 5/6
<ul style="list-style-type: none"> To describe textiles by the way they feel. To join fabrics using glue. To use stitches to add a pattern to a piece of fabric <p><u>Vocabulary:</u> Cut, join, make a pattern, needle, thread</p> <p><u>Assessment:</u> Can children use appropriate language to describe how textiles feel i.e. smooth, rough, silky? Can chn select appropriate ways to join fabric i.e. stitching or gluing?</p>	<ul style="list-style-type: none"> To make a product out of textiles. Measure mark out and cut fabric. To sew in a running stitch. To make sure work is neat and tidy. <p><u>Vocabulary:</u> Pattern, join, mark out, decorate, running stitch, needle, fabric, template</p> <p><u>Assessment:</u> Can children use a running stitch to secure fabric together? Can children measure, mark out and cut fabric? Is the children's work is neat and tidy?</p>	<p>Prior Knowledge: Pupils know what a running stitch is.</p> <ul style="list-style-type: none"> Select appropriate textiles for a product. Use sharp scissors accurately to cut textiles. To know the texture and properties of materials and choose appropriately. To applique fabrics using basic sewing skills. To improve designs as you work <p><u>Vocab:</u> finishing technique, function, prototype, Aesthetics, cross stitch.</p> <p><u>Assessment:</u> Can pupil applique fabrics using cross stitch sewing skills? Can pupils improve designs as you work? Can pupils thread a needle? Can pupils say whether they achieved their purpose and the needs/wants of the users?</p>	<p>Prior Knowledge: Pupils know a running stitch, cross stitch and how to thread a needle.</p> <ul style="list-style-type: none"> To combine materials to improve design for strength or visual appeal. To join materials to make products with permanent or temporary fastenings. To develop a range of stitches including backward stitch, lazy daisy stitch and French knot To describe the qualities of materials and to say why it is the most suitable choice. create a design for a purpose <p><u>Vocab:</u> Specification, tacking, clasp, design criteria, hem, Applique, annotate, evaluate, innovation, functional, recycled, backward stitch, french knot stitch, lazy daisey stitch</p> <p><u>Assessment:</u> Can the children use the stitches taught (lazy daisy, French knot, backward, running stitch)? Have children combined materials to improve design for strength or visual appeal? Can children join materials to make products with permanent or temporary fastenings? Can children describe the qualities of materials and to say why it is the most suitable choice?</p>

Mechanisms - Skills

Reception	Year 1/2	Year 3/4	Year 5/6
<ul style="list-style-type: none"> To build a model using basic toys – Stickle bricks, Lego, Mobilo To make a solid wall (interlapping bricks) To make a vehicle with moving wheels. To make models with moving parts i.e. split pins. <p><u>Vocabulary:</u> Push, pull, roll, wheel, join, stick, glue, box, axel, fix</p> <p><u>Assessment:</u> Chn can construct a basic toy with some degree of accuracy i.e. a car. Chn can mak a solid wall-interlapping bricks Chn can make a vehicle with moving wheels.</p>	<ul style="list-style-type: none"> Explain that wheels move because they are attached to an axle. Recognise that wheels and axles are used in everyday life, not just in cars. Identify and explain vehicle design flaws using the correct vocabulary. Design a vehicle that includes functioning wheels, axles and axle holders. Make a moving vehicle with working wheels and axles. Explain what must be changed if there are any operational issues <p><u>Vocabulary:</u> Wheel, axel, fixed, free, design, make, cutting, joining , vice, dowel, body, cab, shaping, Mechanism, pull/push, down, straight,</p> <p><u>Assessment:</u> Chn can make a structure with moving components - wheels. Chn can follow simple instructions Can name more than just cars which use wheels and axels.</p>	<ul style="list-style-type: none"> To understand how mechanical systems such as levers and linkages create movement. Draw accurate diagrams with correct labels, arrows and explanations. Create a prototype Select appropriate equipment. <p><u>Vocabulary:</u> Loose pivot, fixed pivot, system, input, process, output, linear, rotary, . Loose/fixed pivot.</p> <p><u>Assessment:</u> Chn can explain the difference between a lever and a linkage. Chn can identify levers and linkages. Chn can follow instructions to make a lever and linkage mechanism.</p>	<ul style="list-style-type: none"> To Understand how simple mechanisms work (axels & gears) To add a mechanical element to a model following instructions - KNEX To use computer software to control a model made out of toys. To design their own model which will interact with computer software. To explore mechanical elements such as pneumatics and hydraulics <p><u>Vocabulary:</u> Reinforce, triangulation, stability, temporary, permanent, pulley, gear, driver, follower, rotation, motor, belt, spindle, circuit, switch, ratio</p> <p><u>Assessment:</u> Chn can use a computer software to move a model Chn understand how pneumatics and hydraulics work</p>

Structures - Skills

Reception	Year 1/2	Year 3/4	Year 5/6
<ul style="list-style-type: none"> Choose the resources needed for the activity. Handle simple hand tools and equipment effectively. Safely use and explore a variety of materials. Make stable structures from card, tape and glue. Follow instructions to cut and assemble the supporting structure of a windmill, lighthouse or Make a structure according to given design criteria. Create joints and structures from paper or card and tape or glue. Select appropriate materials to make my outcome based on the given task. Use junk modelling materials to create outcomes. <p><u>Vocabulary:</u> Cut, join, fix, scissors, glue, strong, material</p> <p><u>Assessment:</u> Chn can assemble basic structures using junk modelling Children can choose different ways to fix their model.</p>	<p><u>Freestanding Structures:</u></p> <ul style="list-style-type: none"> Generate and communicate ideas using sketching and modelling. Learn about different types of structures found in the natural world and in everyday objects. Make a structure according to given design criteria. Create joints and structures from paper or card and tape or glue. <p><u>Vocabulary:</u> Structure, base, underneath, thicker, thinner, corner, point, straight, curved, rectangle, cube, cuboid, cylinder</p> <p><u>Assessment:</u> Chn can begin to think about a design before they make it. Children can use materials appropriately thinking about adding strength to a structure.</p>	<p><u>Shell Structure</u></p> <ul style="list-style-type: none"> Create a range of different shaped frame structures. Make a variety of free standing frame structures of different shapes and sizes. Select appropriate materials to build a strong structure. Reinforce corners to strengthen a structure. Learn to create different textural effects with materials. Use a hot glue gun safely to create their structure. <p><u>Vocabulary:</u> Assemble, prism, vertex, breadth, capacity, scoring, adhesives, reduce, reuse, recycle, corrugating, ribbing, laminating</p> <p><u>Assessment:</u> Chn can reinforce a structure to make it stronger. Chn can think about the properties needed to make a structure and select an appropriate material.</p>	<p><u>Frame Structures:</u></p> <ul style="list-style-type: none"> Make a range of different shaped beam bridges. Use triangles to create truss bridges that span a given distance and support a load. Build a wooden bridge structure independently measuring and marking wood accurately. Select appropriate tools and equipment for particular tasks. Identify where a structure needs reinforcement and use card corners for support. Improve a design plan based on peer evaluation. Test and adapt a design to improve it as it is developed. Identify what makes a successful structure. <p><u>Vocabulary:</u> Reinforce, triangulation, truss, arch, beam, strength, strong, load</p> <p><u>Assessment:</u> Chn understand and can name different types of bridge. Chn understand how to make a structure stronger by using trusses. Chn can evaluate their work and make then stronger</p>

Woodwork - Skills

Reception	Year 1/2	Year 3/4	Year 5/6
<ul style="list-style-type: none"> To handle tools safely. To join materials using a variety of resources. To use pieces of sandpaper and wood, a hammer and pegs. <p><u>Vocabulary:</u> Cut, join, fix, weak, strong, material, straight, curve</p> <p><u>Assessment:</u> Chn can understand the need for safety and supervision around tools i.e. hammers. Understand that materials can be joined together using glue and nails.</p>	<ul style="list-style-type: none"> To measure out and mark out materials needed for a structure. To finish off work so it looks neat and tidy. To Assemble, joins and combines materials and components- hammer & nails <p><u>Vocabulary:</u> Cut, fold, join, fix, weak, strong, Structure, base, underneath, thicker, thinner, corner, point, straight, curved,</p> <p><u>Assessment:</u> Chn can understand the need for safety and supervision around tools i.e. hammers. Understand that materials can be joined together using glue and nails. Understand that materials can be joined together to have aesthetic properties for a product. Plan a simple design</p> <p>Task: Nail Art</p>	<ul style="list-style-type: none"> To join materials using permanent and temporary fixings. To combine a number of components in my product. To use a vice (permanently attached to the workbench) to hold the wood in place. To saw under high levels of supervision. <p><u>Vocabulary:</u> Shell Structures: Shell, structure, net, marking out, material, joining, three dimensional, stiff, Assemble, prism, vertex, capacity, adhesives,</p> <p><u>Assessment:</u> Chn can understand the need for safety and supervision around tools i.e. hammers. Understand that materials can be joined together using glue and nails. Understand that materials can be joined together to have aesthetic properties for a product. Be able to measure and cut accurately. Understand that products can be created for a purpose.</p> <p>Task: Make a wooden lamp</p>	<ul style="list-style-type: none"> To choose and use different techniques to join materials together i.e. glue, nails, screws etc for a particular purpose To use a saw independently with a vice. Continue year 3/4 activities thinking of additional elements: Refinement, decorative combinations and respect for tools and materials. <p><u>Vocabulary:</u> Shell Structures: Shell, structure, net, marking out, material, joining, three dimensional, stiff, Assemble, prism, vertex, capacity, adhesives,</p> <p><u>Assessment:</u> Chn can understand the need for safety and supervision around tools i.e. hammers. Understand that materials can be joined together using glue, screws, nails and dowls. Understand that materials can be joined together to have aesthetic properties for a product. Be able to measure and cut accurately. Understand that products can be created for a purpose.</p> <p>Task: Make a wooden robot</p>

Product Design - Skills

Reception	Year 1/2	Year 3/4	Year 5/6
<p>Begin to use the language of designing and making, e.g. join, build and shape. - Learning about planning and adapting initial ideas to make them better.</p>	<ul style="list-style-type: none"> • Explore what products are, what they are made from, who they are for, how they are used and where they might be used. • Talk about likes and dislikes of existing products. Give reasons. • Design a product based on own ideas and what they have learnt about a product. • Develop and communicate ideas by talking and drawing and using ICT where appropriate. • Say how their products will work and how they're suitable for intended users. • Evaluate the product-what can they do better/what would they change? 	<ul style="list-style-type: none"> • Describe the purpose of their products. • Indicate design features of their products that will appeal to intended users. • Gather information about the needs and wants of individuals or groups. • Develop their own design criteria and use this to inform their ideas. • Share and clarify ideas confidently, through discussion. • Model ideas using prototypes and pattern pieces. • Use annotated sketches, some cross-sectional drawings and computer-aided design packages, to develop and communicate ideas. • Generate realistic ideas, focusing on the needs of the user. • Make design decisions that take account of the availability of resources. 	<ul style="list-style-type: none"> • Describe in detail, the purpose of their products. • Indicate design features of their products that will appeal to intended users. • Gather information about the needs and wants of particular individuals and groups. • Develop their own design criteria and use this to inform their ideas. • Carry out research e.g. surveys, interviews, questionnaires and web-based resources, to identify users' needs, wants and preferences. • Critically evaluate the quality of the design, manufacture and fitness for purpose of their products. • Evaluate their ideas and products against their original design specification. • Investigate and analyse: how well products have been designed and made; why materials have been chosen; what methods of construction were used; how well the products worked; whether they achieved their purpose and the

		<ul style="list-style-type: none">• Refer to their design criteria as they design and make.• Use their design criteria to evaluate and improve their completed products.• Investigate and analyse: how well products have been designed and made; why materials have been chosen; what methods of construction were used; how well the products worked; whether they achieved their purpose and the needs/wants of the users.• Investigate and analyse: who designed the products; where products were designed and made; when products were designed and made; whether products can be recycled or re- used.	<p>needs/wants of the users.</p> <ul style="list-style-type: none">• Investigate and analyse: who designed the products; where products were designed and made; when products were designed and made; whether products can be recycled or re-used.• Investigate and analyse: how much products cost to make; how innovative products are; how sustainable the materials in products are; what impact products have beyond their intended purpose.• Recognise several inventors, designers, chefs, manufacturers and engineers, who have been influential in the design and technology industries.
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Cooking – Skills

Reception	Year ½	Year 3/4	Year 5/6
<p>Weighing - pouring or spooning ingredients into scales. Using measuring spoons Washing fruit and vegetables Cutting soft ingredients using a strong plastic knife Breadding and flouring Mixing – spoon or hands Tearing and squashing - tearing herbs and lettuce or squashing fruit Sieving Rolling, shaping and cutting dough Spreading</p> <p><u>Vocabulary:</u> Mix, stir, chop, peel, cut, wash, knead, ingredients, weigh, measure, bake, pouring, mixing, sieving</p> <p><u>Assessment:</u> Do chn understand basic hygiene around keeping healthy? Can chn name basic cooking utensils? Do pupils understand that food can be grown?</p>	<p>Cutting using a small knife Cutting with scissors - snip herbs Grating Measuring Rubbing in - rubbing in flour and butter with fingertips is called for in many recipes Using a peeler Peel oranges or hard-boiled eggs</p> <p><u>Vocabulary:</u> Preparing Fruit & Vegetables: Fruit, vegetables, soft, juicy, crunchy, sticky, smooth, sharp, crisp, sour hard, flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthydiet, choosing, ingredients, planning, tasting, arranging</p> <p><u>Assessment:</u> Where does food come from? How can food be grown? How many portions of fruit and veg should you eat a day? Can you name some different food groups (carbohydrates, protein, fats etc)</p>	<p>Following a simple recipe Finding ingredients in the cupboards and fridge Slice, grate, mix, spread, knead and bake. Using heat on a hob and microwave Making bread Beating, folding, kneading - show children how to beat cake mixture with a wooden spoon or fold in egg whites without knocking out too much air Greasing and lining a cake tin or tray</p> <p><u>Vocabulary:</u> Healthy & Varied Diet: Texture, taste, appearance, preference, greasy, moist, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested</p> <p><u>Assessment:</u> What types of food could we find in these countries? (have a map). Create a healthy dinner on an Eatwell plate) Why do we need a healthy diet?</p>	<p>Planning and preparing a family meal Following a simple recipe with several elements (making a Mexican stew, making a side i.e. sweetcorn salsa, making a tomato salsa or bread to go with the main dish) Using a blender (blend salsa or guacamole) Using heat on a hob, oven and microwave Opening cans</p> <p><u>Vocabulary:</u> Celebrating Culture & Seasonality: Ingredients, knead, blend, beat, combine, spice, herbs, carbohydrate, sugar, fat, protein, vitamins, nutrients, gluten, allergy, intolerance, savoury, seasonality, pour,</p> <p><u>Assessment:</u> What are air miles and how do they affect our planet? What can we do to reduce the air miles of our food? What is the role of fiber in our diet? Which food could you get vitamin C from? Name one other way to keep healthy other than the food we eat?</p>