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| **Long Term Individual Subject Curriculum Plan 2020-21** |
| **Design and Technology** |
|  | Autumn | Spring | Summer |
| Y6 | **Great British Dishes** | **Fashion and Textiles** | **Building Bridges** |
| Knowledge | * Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.
* Understand that seasons may affect the food available.
* Understand how food is processed into ingredients that can be eaten or used in cooking.
* When planning explain and justify their choices of ingredients and methods.
* Understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.
* Know different food and drink contain different substances – nutrients, water and fibre – that are needed for health.
* Understand the importance of evaluating a product against the original design specification and by carrying out tests.
* Recognise the significance of evaluating their work both during and at the end of the assignment
 | * And generate innovative ideas through research including surveys, interviews and questionnaires and discussion with peers
* How to develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost.
* How to produce a 3-D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics.
* How fabrics can be strengthened, stiffened and reinforced where appropriate.
* Know and use technical vocabulary relevant to the project.
* How to critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests.
 | * that materials have both functional properties and aesthetic qualities
* that materials can be combined and mixed to create more useful characteristics
* Understand how to strengthen, stiffen and reinforce 3-D frameworks.
* Know and use technical vocabulary relevant to the project.
* How to develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost.
* How to critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests.
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| Skills | * Generate ideas through brainstorming and identify a purpose for their product
* Generate innovative ideas, drawing on research
* Make design decisions, taking account of constraints such as time, resources and cost
* 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
* Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.
* 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 a product against the original design specification
* Evaluate it personally and seek evaluation from others
 | * Use research using surveys, interviews, questionnaires and web-based resources. to develop a design specification for a range of functional products.
* Develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost.
* Generate and develop innovative ideas and share and clarify these through discussion.
* Communicate ideas through annotated sketches, pictorial representations of electrical circuits or circuit diagrams.
* Formulate a step-by-step plan to guide making, listing tools, equipment, materials and components.
* Competently select from and use appropriate tools to accurately measure, mark, cut and assemble materials, and securely connect electrical components to produce reliable, functional products.
* Use finishing and decorative techniques suitable for the product they are designing and making.
* Continually evaluate and modify the working features of the product to match the initial design specification.
* Critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests.
* Test the product to demonstrate its effectiveness for the intended user and purpose.
 | * how to use learning from science to help design and make products that work
* how to use learning from mathematics to help design and make products that work
* Use research using e.g surveys, interviews, questionnaires and web-based resources. to develop a design specification for a range of functional products.
* Develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost.
* Assemble components to make working models.
* Generate and develop innovative ideas and share and clarify these through discussion.
* Formulate a step-by-step plan to guide making, listing tools, equipment, materials and components.
* Competently select from and use appropriate tools to accurately measure, mark, cut and assemble materials, to produce reliable, functional products.
* Use finishing and decorative techniques suitable for the product they are designing and making.
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| Vocabulary | ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble, cuisine  | seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings, | frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent |
| Y5 | **Autumn - Bread** | **Spring – Moving Toys** | **Summer – Alarms** |
| Knowledge | * Understand that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.
* Begin to understand that seasons may affect the food available.
* Understand how food is processed into ingredients that can be eaten or used in cooking.
* When planning explain and justify their choices of ingredients and methods.
* Understand why it is important to think about their ideas as they make progress and be willing to change things if this helps them to improve their work.
* Start to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.
* Begin to understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.
* Understand the importance of evaluating a product against the original design specification and by carrying out tests.
* Recognise the significance of evaluating their work both during and at the end of the assignment.
 | * the importance of generating ideas through research
* that materials have both functional properties and aesthetic qualities
* that materials can be combined and mixed to create more useful characteristics
* Understand how to strengthen, stiffen materials
* Know and use technical vocabulary relevant to the project.
* How to develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost.
* Understand the need for careful selection of materials and tools relating to their design
* Understand how mechanical systems such as cams or pulleys or gears create movement.
* How to critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests.
 | * the importance of generating ideas through research
* that materials have both functional properties and aesthetic qualities
* Understand and use electrical systems in their products linked to science coverage.
* Apply their understanding of computing to program, monitor and control their products.
* Know and use technical vocabulary relevant to the project.
* How to develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost.
* Understand the need for careful selection of materials and tools relating to their design.
* How to critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests.
 |
| Skills | * Generate ideas through brainstorming and identify a purpose for their product
* Generate innovative ideas, drawing on research
* Make design decisions, taking account of constraints such as time, resources and cost
* 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
* Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.
* 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 a product against the original design specification
* Evaluate it personally and seek evaluation from others
 | * Generate innovative ideas through research including surveys, interviews and questionnaires and discussion with peers to develop a design brief and criteria for a design specification.
* Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.
* Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views. and, where appropriate, computer-aided design
* Write a step-by-step plan, including a list of resources required.
* Select from and use, a range of appropriate utensils, tools and equipment accurately to measure and combine appropriate materials and resources.
* Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement.
* Know and use technical vocabulary relevant to the project.

• Investigate and analyse products linked to their final product. * Compare the final product to the original design specification and record the evaluations.
* Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.
* Consider the views of others to improve their work
 | * Generate innovative ideas through research including surveys, interviews and questionnaires and discussion with peers to develop a design brief and criteria for a design specification.
* Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.
* Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views. and, where appropriate, computer-aided design
* Write a step-by-step plan, including a list of resources required.
* Select from and use, a range of appropriate utensils, tools and equipment accurately to measure and combine appropriate ingredients, materials and resources.
* Use electrical systems in their products linked to science coverage.
* Apply their understanding of computing to program, monitor and control their products.
* Use technical vocabulary relevant to the project.
* Investigate and analyse products linked to their final product.
* Compare the final product to the original design specification and record the evaluations.
* Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.
* Consider the views of others to improve their work
 |
| Vocabulary | ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble | pulley, gear, rotation, spindle, driver, follower, axle, motor, diagram, annotated drawings, mechanical system, input, process, output | reed switch, toggle switch, push-to-make switch, push-to-break switch, light dependent resistor (LDR), tilt switch, light emitting diode (LED), bulb, bulb holder, battery, battery holder, USB cable, wire, insulator, conductor, crocodile clip control, program, system, input device, output device, series circuit, parallel circuit |
| Y4 | **Autumn – Lighting it up** | **Spring – Pencil Cases** | **Summer – Mini Greenhouses** |
| Knowledge | * Understand how well products have been designed, made, what materials have been used and the construction technique.
* Start to understand whether products can be recycled or reused.
* Understand and start to order the main stages of making a product. Identify a purpose and establish criteria for a successful product.
* Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products and understand the importance of these developments.
* When planning explain their choice of materials and components including function and aesthetics.
* Understand how more complex electrical circuits and components can be used to create functional products.
* Understand the importance of evaluating their products by carrying out appropriate tests.
* Start to evaluate their work both during and at the end of the assignment.
* Be able to disassemble and evaluate familiar products and consider the views of others to improve them.
* Evaluate the key designs of individuals in design and technology has helped shape the world.
 | * The need to generate ideas, considering the purposes for which they are designing.
* How to design with purpose by identifying opportunities to design.
* Know how to strengthen, stiffen and reinforce existing fabrics.
* Understand how to secure join two pieces of fabric together.
* Understand the need for patterns and seam allowances.
* Know and use technical vocabulary relevant to the project.
* How to select from and use finishing techniques suitable for the product they are creating.
* The need to refine work and techniques as work progresses, continually evaluating the product design.
 | * The need to generate ideas, considering the purposes for which they are designing.
* How to design with purpose by identifying opportunities to design.
* The importance of a shell or frame structure using diagonal struts to strengthen.
* The relevance of developing prototypes and building frame and shell structures, showing awareness of how to strengthen, stiffen and reinforce.
* and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
* and use a wider range of materials and components, according to their functional properties and aesthetic qualities
* And use technical vocabulary relevant to the project.
* The need to refine work and techniques as work progresses, continually evaluating the product design.
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| Skills | * Design with purpose by identifying opportunities to design.
* Draw and label circuits by listing components of a light.
* Investigate how circuits work by testing them in different ways.
* Make products by working efficiently (such as by carefully selecting materials).
* Refine work and techniques as work progresses, continually evaluating the product design.
* Create series and parallel circuits.
* Improve upon existing designs, giving reasons for choices.
* Disassemble products to understand how they work.
* Understand and use electrical systems in their products linked to science coverage.
* Know and use technical vocabulary relevant to the project.
* Refine work and techniques as work progresses, continually evaluating the product design.
 | * Generate and clarify ideas through discussion with peers to develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups.
* Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas.
* Order the main stages of making.
* Select and use appropriate tools to measure, mark out, and combine with some accuracy related to their products.
* Explain their choice of materials according to functional properties and aesthetic qualities.
* Cut materials accurately and safely by selecting appropriate tools and measure and mark out to the nearest millimetre
* Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material.
* Select appropriate joining techniques/ resources.
* Join textiles with appropriate stitching.
* Select the most appropriate techniques to decorate textiles.
* Test and evaluate their own products against design criteria and the intended user and purpose.
* Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.
 | * Generate and clarify ideas through discussion with peers to develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups.
* Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas.
* Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams.
* Order the main stages of making.
* Select and use appropriate tools to measure, mark out, cut, score, shape and combine with some accuracy related to their products.
* Explain their choice of materials according to functional properties and aesthetic qualities.
* Select from and use materials and components according to their function and properties.
* Develop and use knowledge of how to construct strong, stiff shell structures.
 |
| Vocabulary | series circuit, fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip, control, program, system, input device, output device | fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance  | shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating, font, lettering, text, graphics, decision |
| Y3 | **Autumn – Photograph Frames** | **Spring – Story Books** | **Summer – Seasonal Food** |
| Knowledge | * Understand how well products have been designed, made, what materials have been used and the construction technique.
* Start to understand whether products can be recycled or reused.
* Understand and start to order the main stages of making a product. Identify a purpose and establish criteria for a successful product.
* Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products and understand the importance of these developments.
* When planning explain their choice of materials and components including function and aesthetics.
* Explain their choice of tools and equipment in relation to the skills and techniques they will be using.
* Understand the importance of starting to work safely and accurately with a range of simple tools.
* Start to think about their ideas as they make progress and be willing to change things if this helps them to improve their work.
* Understand their design criteria evaluate their completed products against it.
 | * The need to generate ideas, considering the purposes for which they are designing.
* How to design with purpose by identifying opportunities to design.
* Understand and use lever and linkage mechanisms.
* Distinguish between fixed and loose pivots.
* Know and use technical vocabulary relevant to the project.
* how mechanical systems such as levers and linkages or pneumatic systems create

movement.* The need to refine work and techniques as work progresses, continually evaluating the product design.
 | * The need to generate ideas, considering the purposes for which they are designing.
* How to design with purpose by identifying opportunities to design and research e.g. web based recipes.
* Know how to use appropriate equipment and utensils to prepare and combine food.
* Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught.
* Know and use relevant technical and sensory vocabulary appropriately.
* The need to work within health and safety guidance (inc. hygiene)
 |
| Skills | * Identify some of the great designers (such as Brunel, Mackintosh, Philip Treacy, Marcel Breuer) in all of the areas of study generate ideas for designs.
* Improve upon existing designs, giving reasons for choices.
* Investigate and disassemble products to understand how they work.
* Cut materials accurately and safely by selecting appropriate tools.
* Measure and mark out to the nearest millimetre.
* Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).
* Select appropriate joining techniques/ resources.
* Choose suitable techniques to construct products or to repair items.
* Strengthen materials using suitable techniques.
* Design with purpose by identifying opportunities to design.
* Make products by working efficiently (such as by carefully selecting materials).
* Refine work and techniques as work progresses, continually evaluating the product design.
 | * Generate and clarify ideas through discussion with peers to develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups.
* Use annotated sketches and appropriate information to develop and communicate ideas.
* Order the main stages of making.
* Select and use appropriate tools to measure, mark out, and combine with some accuracy related to their products.
* Explain their choice of materials according to functional properties and aesthetic qualities.
* Cut materials accurately and safely by selecting appropriate tools and measure and mark out to the nearest millimetre
* Select from and use finishing techniques suitable for the product they are creating.
* Use lever and linkage mechanisms.
* Distinguish between fixed and loose pivots.
* Know and use technical vocabulary relevant to the project.
* Test and evaluate their own products against design criteria and the intended user and purpose.
* Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.
 | * Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s.
* Plan or follow the main stages of making.
* Select from and use a range of appropriate utensils and equipment with some accuracy related to their product.
* Select from a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught.
* Use relevant technical and sensory vocabulary appropriately.
* Use appropriate equipment and utensils to prepare and combine food.
* Work within health hygiene guidance.
* Select from and use finishing techniques suitable for the product they are creating.
* Test their product against the original design criteria and with the intended user.
* Evaluate the ongoing work and the final product with reference to the design criteria and the views of others.
 |
| Vocabulary | Free standing, shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating, font, lettering, text, graphics, decision | mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating | name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet |
| Y2 | **Autumn - Vehicles** | **Spring – Puppets** | **Summer – Seaside Snacks** |
| Knowledge | * The need to begin to develop their design ideas through discussion, observation, drawing and modelling.
* The importance of identifying a purpose for what they intend to design and make.
* Understand how to identify a target group for what they intend to design and make based on a design criteria
* How to develop their ideas through talk and drawings and label parts.
* The importance of the right selection of tools and materials; use correct vocabulary to name and describe them.
* About the movement of simple mechanisms such as levers, sliders, wheels and axles
* The correct technical vocabulary for the projects they are undertaking
* The need to talk about their ideas, saying what they like and dislike about them.
* About the simple working characteristics of materials and components.
* Understand the need to evaluate their products as they are developed, identifying strengths and possible changes they might make.
 | * The need to begin to develop their design ideas through discussion, observation, drawing and modelling.
* The importance of identifying a purpose for what they intend to design and make.
* Understand how to identify a target group for what they intend to design and make based on a design criteria.
* How to develop their ideas through talk and drawings and label parts.
* Understand how simple 3-D textile products are made, using a template to create two identical shapes.
* Understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling.
* Explore different finishing techniques
* Understand, know and use technical vocabulary relevant to the project.
 | * Begin to understand that all food comes from plants or animals.
* Explore the understanding that food has to be farmed, grown elsewhere (e.g. home) or caught.
* Start to understand how to name and sort foods into the five groups in ‘The Eat well plate’
* Begin to understand that everyone should eat at least five portions of fruit and vegetables every day.
* Understand how to prepare simple dishes safely and hygienically, without using a heat source.
* Understand how to use techniques such as cutting, peeling and grating
 |
| Skills | * 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 vocabulary to name and describe them
* Measure, cut and score with some accuracy
* Use hand tools safely and appropriately
* 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
 | * Start to generate ideas by drawing on their own and other people's experiences.
* Begin to develop their design ideas through discussion, observation, drawing and modelling.
* Plan by suggesting what to do next.
* Select and use tools, equipment, skills and techniques to perform practical tasks, explaining their choices.
* Select new and materials, components to create their products.
* Use simple finishing techniques suitable for the products they are creating.
* Investigate how simple 3-D textile products are made, using a template to create two identical shapes.
* How to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling.
* Explore different finishing techniques
* Know and use technical vocabulary relevant to the project.
* Explore a range of existing products related to their design criteria.
* Evaluate their product by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria
 | * Design appealing products for a particular user based on simple design criteria.
* Generate initial ideas through own experiences and questioning.
* Develop and communicate these ideas through talk and drawings.
* Select and use appropriate fruit and vegetables, processes and tools
* Use basic food handling, hygienic practices and personal hygiene
* Select and use simple utensils, tools and equipment to perform a job e.g. peel, cut, slice, squeeze, grate and chop safely.
* Select from a range of ingredients according to their characteristics to create a chosen product.
* Evaluate their ideas and products against design criteria
* Use the basic principles of a healthy and varied diet to prepare dishes
* Understand where food comes from
 |
| Vocabulary | 2-D, 3-D, Cut, Materials, Metal, Plastic, PVA glue, Wire, Wood, Design, Plan, Product, wheels, axles and chassis | joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish, Centimetre/metre, needle, pin, ribbon, silk, stitch, tape measure, thread, Velcro, wool, zip | Amount, Baking Sheet, Basin, Chopping Board, Cleaning cloths, Grater, Ingredients, Knead, Masher, Measure, Measuring jug, Measuring spoons, Method, Mixing bowl, Pastry cutters, Peeler, Recipe, Saucepans, Scales, Sieve, Weigh, Wooden spoon |
| Y1 | **Autumn – Eat More Fruit and Vegetables** | **Spring – Moving Pictures** | **Summer – Stable Structures** |
| Knowledge | * Begin to understand that all food comes from plants or animals.
* Explore the understanding that food has to be farmed, grown elsewhere (e.g. home) or caught.
* Start to understand how to name and sort foods into the five groups in ‘The Eat well plate’
* Begin to understand that everyone should eat at least five portions of fruit and vegetables every day.
* Understand how to prepare simple dishes safely and hygienically, without using a heat source.
* Understand how to use techniques such as cutting, peeling and grating
 | * Begin to understand the development of existing products: What they are for, how they work, materials used. Start to suggest ideas and explain what they are going to do.
* Understand how to identify a target group for what they intend to design and make based on a design criteria.
* Explore and use sliders and levers and understand how they work.
* Understand that different mechanisms produce different types of movement.
* Know and use technical vocabulary relevant to the project.
 | * The need to begin to develop their design ideas through discussion, observation, drawing and modelling.
* The importance of identifying a purpose for what they intend to design and make.
* How to develop their ideas through talk and drawings and label parts.
* The importance of the right selection of tools and materials; use correct vocabulary to name and describe them.
* How to make freestanding structures stronger, stiffer and more stable.
* The correct technical vocabulary for the projects they are undertaking.
* About the simple working characteristics of materials and components.
* Understand the need to evaluate their products as they are developed, identifying strengths and possible changes they might make.
 |
| Skills | * Design appealing products for a particular user based on simple design criteria.
* Generate initial ideas through own experiences and questioning.
* Develop and communicate these ideas through talk and drawings.
* Select and use appropriate fruit and vegetables, processes and tools
* Use basic food handling, hygienic practices and personal hygiene
* Select and use simple utensils, tools and equipment to perform a job e.g. peel, cut, slice, squeeze, grate and chop safely.
* Select from a range of ingredients according to their characteristics to create a chosen product.
 | * Begin to develop their ideas through talk and drawings. Make templates and mock ups of their ideas in card and paper or using ICT
* Design appealing products for a particular user based on simple design criteria.
* Generate initial ideas and design criteria through own experiences.
* Develop and communicate these ideas through talk and drawings and mock ups where relevant.
* Select and use simple tools and equipment to perform a job; marking out, cutting, joining and finishing; cut, shape and join paper and card.
* Select from a range of materials according to their characteristics to create a chosen product.
* Explore and evaluate a range of products to determine the intended user’s preferences for the product

Evaluate their ideas throughout and finished products against design criteria, including intended user and purpose. | * Design appealing products for a particular user based on simple design criteria.
* Generate initial ideas and design criteria through own experiences.
* Develop and communicate these ideas through talk and drawings and mock ups where relevant.
* Select and use simple tools and equipment to perform a job e.g. marking out cutting, joining and finishing; cut, shape and join paper and card.
* Select from a range materials according to their characteristics to create a chosen product.
* Know how to make freestanding structures stronger, stiffer and more stable.
* Know and use technical vocabulary relevant to the project.
* Explore and evaluate a range of products to determine the intended user’s preferences for the product

Evaluate their ideas throughout and finished products against design criteria, including intended user and purpose. |
| Vocabulary  | Amount, Baking Sheet, Basin, Chopping Board, Cleaning cloths, Grater, Ingredients, Knead, Masher, Measure, Measuring jug, Measuring spoons, Method, Mixing bowl, Pastry cutters, Peeler, Recipe, Saucepans, Scales, Sieve, Weigh, Wooden spoon | planning, investigating design, evaluate, make, user, purpose, ideas, slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards, product | cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cylinder |
| Reception |

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| **Exploring Media and Materials – Creating with Materials** |
| **EYFS Development Bands** | **Key Learning**  | **Vocabulary and Language** |
| **Birth To Five Matters*****Range 5***• Develops an understanding of how to create and use sounds intentionally • Continues to explore colour and how colours can be changed • Develops an understanding of using lines to enclose a space, and begins to use drawing to represent actions and objects based on imagination, observation and experience • Uses various construction materials, e.g. joining pieces, stacking vertically and horizontally, balancing, making enclosures and creating spaces • Uses tools for a purpose***Range 6***• Uses their increasing knowledge and understanding of tools and materials to explore their interests and enquiries and develop their thinking • Develops their own ideas through experimentation with diverse materials, e.g. light, projected image, loose parts, watercolours, powder paint, to express and communicate their discoveries and understanding. • Expresses and communicates working theories, feelings and understandings using a range of art forms, e.g. movement, dance, drama, music and the visual arts.**Statutory Framework Early years Foundation Stage Curriculum 2021**Creating with Materials Children at the expected level of development will: - Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; - Share their creations, explaining the process they have used; - Make use of props and materials when role playing characters in narratives and stories | **Explore –** Experiment and build with a range of construction resources, find out about the properties and functions of different construction materials.**Design** – Talk about ideas, choose resources, tools and techniques with a purpose in mind.**Make –** Make models using different construction materials, e.g. construction kits, reclaimed materials, experiment wit different ways to build, construct and join resources.**Evaluate –** Talk about what they like/dislike about their models/constructions, say why, and how they would change them.**Tools and equipment –** Use equipment and tools to build, construct and make simple models and constructions, use tools and equipment linked to food preparation.**Safety –** Handle and use equipment appropriately and safely. | Recycled paper, cardboard, plastic, foil, polystyrene, natural, man-made, waterproof, construct, build, assemble, join, plan, design, structure, thick, thin, firm, hard, strong, twist, turn, through, on, in, underneath, next to, on top.Join, assemble, construct, model, build, design, screwing, building, balancing, threading, slotting, structure, model, tall, taller, big, small.Linked to food/food preparation: cook, bake, weigh, mix, roll, cut, whisk, mash, sieve, peel, chop, spread, names of fruit and vegetables, nutrition, healthy, unhealthy. |

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| Nursery |