

***Consideration, Care and Courtesy***

**St Edmund’s Catholic Primary School**

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| **Design Technology Curriculum Document** | |
| **Aims** | The EYFS Curriculum aims to ensure that all pupils:   * 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   The national curriculum for design and technology aims to ensure that all pupils:   * develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world * build and apply a repertoire of knowledge, understanding and skills in order to design and make high quality prototypes and products for a wide range of users * critique, evaluate and test their ideas and products and the work of others * understand and apply the principles of nutrition and learn how to cook |

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| EYFS - Design Technology – Structures  Captial Culture: DT Day parent gallery/visit-workshop from professional | | | | | |
|  | Research | Design | | Make | Evaluate |
| **Nursery** | Explore different materials freely, to develop their ideas about how to use them and what to make. (EAD) | Develop their own ideas and then decide which materials to use to express them. (EAD)  Use drawing to represent ideas (EAD) | | Join different materials and explore different textures. (EAD)  Choose the right resources to carry out own plans. (PD)  Use one-handed tools and equipment, for example, making strips in paper with scissors. (PD)  Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen, or one which is suggested  to them (PSE) |  |
| **Reception** | Explore, use and refine a variety of artistic effects to express their ideas and feelings (EAD)  Articulate their ideas and thought in well-formed sentences (CLL) | Draw with increasing complexity and detail, such as representing a face with a circle and including details. (EAD)  Create collaboratively, sharing ideas, resources and skills (EAD)  Return to and build on their previous learning, refining ideas and developing their ability to represent them. (EAD) | | Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen (CLL)  Develop their small motor skills so that they can use a range of tools ‘competently, safely and confidently’ (PD) |  |
| **Early Learning Goals** |  | Express their ideas and feelings about their experiences using full sentences (CLL:S) | | Use a range of small tools, including scissors, paint brushes and cutlery (PD:FMS)  Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function (EAD:CM) | Share their creations, explaining the process they have used (EAD:CM) |
| **Vocabulary** | | | | | |
|  | How? Why? What?  Sad, shocked, excited, happy etc  I think… I know… | Metal, cardboard, paper, wool, wood, fabric, tissue, string, drawing, picture, label.  I am using … because…  I am going to … to make it better. | Why?  Tape, glue, scissors, cut, fold, rough, smooth, shiny, dull, bumpy, bendy, hard, soft, safely, paint brushes, cultery | | The … went well because …  I would change … because … |

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| EYFS - Cooking and Nutrition  Capital Culture: Make items for parents | | | | | | |
|  | Research | | Design | | Make | Evaluate |
| **Nursery** | Explore different materials freely, to develop their ideas about how to use them and what to make. (EAD) | | Develop their own ideas and then decide which materials to use to express them. (EAD) | | Choose the right resources to carry out own plans. (PD)  Use one-handed tools and equipment, for example, making strips in paper with scissors. (PD)  Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen, or one which is suggested  to them (PSE) |  |
| **Reception** | Know and talk about the different factors that support their overall health and wellbeing:  regular physical activity  healthy eating PSE)  Articulate their ideas and thought in well-formed sentences (CLL) | | Create collaboratively, sharing ideas, resources and skills (EAD)  Return to and build on their previous learning, refining ideas and developing their ability to represent them. (EAD) | | Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen (CLL)  Develop their small motor skills so that they can use a range of tools ‘competently, safely and confidently’ (PD) | Express their opinions on things they like or dislike. |
| **Early Learning Goals** |  | | Express their ideas and feelings about their experiences using full sentences (CLL:S) | | Use a range of small tools, including scissors, paint brushes and cutlery (PD:FMS)  Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function (EAD:CM) | Share their creations, explaining the process they have used (EAD:CM) |
| **Vocabulary** | | | | | | |
|  | Fruit, meat, vegetables, pasta, rice, chocolate, cakes, sweets  Healthy/unhealthy  Calcium, vitamins  Water – hydrated/dehydrated  I like …because…  … is healthy because …  … is unhealthy because … | Vocabulary depending on item being investigated and made.  I am using … because …  We are …  What do you think?  Why have you chosen that? | | Spoon, knife, fork, bowl, pan, board.  How can you make it better?  What happens/will you do first? Second? Third?  Why does that happen? | | The … went well because …  I would change … because …  I have made … |

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| **Year One/Two**  **Cycle A**  **Food Technology**  **Focus Designer: Jamie Oliver**  **Brief: Exploring and designing a new healthy salad for the cafeteria at school**  **Capital culture: Send a recipe book to be sold to the school community** | | | |
| **Focus and Questions**  Research:   1. Who is Jamie Oliver? What was so significant about his healthy school meal campaign? Why is it important to have a varied diet? How does the Eatwell Plate help us to understand the need of a varied and balanced diet? 2. Give children a variety of different food items. How have these been made? Are they healthy or unhealthy? Where would they go on the Eatwell Plate? What do you like about these items? What do you dislike about them?   Design:   1. Which ingredients do you think would make a good salad? Why do you think the ingredient you have picked would make a good salad? Use pictures to create a mood-board of some good ingredients for a salad and explain why they would be good. 2. How could you make a salad that is unique and would attract more children to the salad bar? How are you going to make it? Ask children to draw their design and write some brief instructions on how they would make it.   Make:   1. How are you going to make your design? What equipment will you need? How will you know your salad is a success?   Evaluate:   1. What do you like about your salad? Has it met the brief? What did other people think of your meal? What went well? What would you do differently next time? Create a recipe card. | | | |
| **Objectives** | | | |
| Research | Design | Make | Evaluate |
| To develop an understanding of Jamie Oliver and his campaign for healthy school meals.  Know about the need for a variety of foods in a diet.  Begin to understand the Eatwell plate.  Explore existing products and investigate how they have been made (including teacher-made examples) and develop a design criteria.  Say what they like and do not like about items they have investigated and attempt to say why. | Select materials (ingredients) from a limited range.  Explain which materials (ingredients) and why.  Explain what they are making.  Select pictures to help develop ideas.  Use drawing to record ideas as they are developed.  Add notes to drawings to help explanations. | Discuss their work as it progresses.  Cut and chop a range of ingredients.  Work safely and hygienically.  Cut, peel, grate, chop a range of ingredients. | Evaluate their ideas and products against the design criteria. |
| **Vocabulary** | | | |
| Fruit, vegetables, fats, dairy, carbohydrates, proteins, sugars, design criteria, evaluation, brief. | Specific fruit/vegetable names and explaining why they have chosen these materials  (healthy, unhealthy, variety, diet) | Cut, chop, peel, grate, ingredients | Design criteria, evaluation, brief. |

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| **Year One/Two**  **Cycle A**  **Resistant Materials**  **Focus Designer: Robert Sabuda**  **Brief: Pop-up books based on a traditional tale for Skelmersdale library**  **Capital culture: Showcase in Skelmersdale Library (take to the library to show the librarians)** | | | | | | |
| **Focus and Questions**  Research:   1. Who is Robert Sabuda? What is he famous for? What is the purpose of a pop-up books? Do we know any pop-up books? Are there any stories that would find pop-ups useful? How do you make a pop-up book? Let children explore making one of their own using models and mock-ups. What technique works best for you? What are the features of a pop-up book? (design criteria)   Design:   1. What is a lever? What is a slider? How could these be incorporated into a pop-up story? Can you make your own lever and/or slider? What materials do you need to make one? How could this be used in a story? 2. What stories do you know which would benefit from being told by using a pop-up? (Fairy Tales) Can you design a pop-up for a Fairy Tale? What movement could you incorporate? Can you think of a different movement you could use? For a different scene? Children to make multiple design ideas.   Make:   1. Which design is your favourite? Why? Let children begin to make their own pop-up book based on one of their designs. How could you join the different pieces of material together? How could you make your product stronger? 2. Children to revisit their pop-up book and begin to refine. Some may choose to treat the first as a mock-up. What went well during the building? What problems did you face? How could you overcome them?   Evaluate:   1. Did your product meet the brief? What went well? What could have gone better? Did you book move? How did it move? What did you do to make it move? Would other people be able to make it move? | | | | | | |
| **Objectives** | | | | | | |
| **Research** | **Design** | | | **Make** | **Evaluate** | |
| To explore pop-up art by Robert Sabuda and how he creatively tells a story through his work.  To explore how he uses techniques to create pop-up art in order to develop a design criteria.  Use mock-ups e.g. recycled material trial models to research folding techniques in order to try out their ideas. | Propose more than one idea for their product.  Select materials from a limited range.  Explain how they will use the techniques they have chosen.  To explore and use mechanisms e.g. levers, slides in their products | | | Talk about their design as they develop and identify good and bad points.  Cut out shapes which have been created by drawing around a template.  Join materials in a variety of ways using tape, glue and paper fastenings.  Show how to stiffen and strengthen some materials.  Know some different ways of making things move in a 2D plane. | Evaluate their ideas and products against a design criteria.  Say what they like and do not like about items they have made and attempt to say why. | |
| **Vocabulary** | | | | | | |
| Slider, lever, pivot, card, join, pull, push, cut | Slider, lever, pivot, card, join, fold.  Explaining why the children have made design  I have chosen… because… | | | Slider, level, pivot, cut, fold, join, template, | Design criteria, evaluation and brief. | |
| **Year One/Two**  **Cycle B**  **Textiles**  **Focus Designer: Corinne Young**  **Brief: Creating a synthetic flower for a floral display which will be shared with the church community.**  **Capital culture: Flower gallery to be shared with the church community.** | | | | | | |
| **Focus and Question**  Research   1. Who is Corinne Young? What is she famous for? How does she make her flowers? What is special about her flowers? What makes a good flower design? Create a design criteria with the class that aides the brief. 2. What type of stitching does Corinne Young use in making her flower designs? How do we do a simple running stitch? Children to practice making a simple running stitch.   Design:   1. What makes a good flower design? Revisit the design criteria. What type of flowers would the church community like to see? How could we create one of these flowers? Children to do multiple designs of different flowers. Why have you chosen these designs? 2. How are you going to make your design? What tools and equipment will you need? Explore making a mock-up out of card.   Make:   1. What steps will you need in order to make your design? What equipment are you going to need? What problems might you face? How will you overcome them?   Evaluate:   1. Did your product meet the brief? What went well? What could have gone better? Did you outcome look like a flower? Would it be suitable to share with the church community? Who else might like your work? | | | | | | |
| **Objectives** | | | | | | |
| **Research** | **Design** | | **Make** | | | **Evaluate** |
| To explore Corinne Young and her hand-sewn synthetic flowers.  To explore how she uses techniques to create her flowers  To investigate and practice techniques for simple running stitch. | Use drawings to record ideas as they develop.  Add notes to drawings explaining choices.  Explain what they are making.  Create a mock-up out of card, | | Talk about their design as they develop and identify good and bad points.  Use a simple stitch to join two different materials (running stitch).  Cut out shapes which have been create by drawing round a template. | | | Evaluate their ideas and products against the design criteria.  Say what they like and do not like about items they have made and attempt to say why. |
| **Vocabulary** | | | | | | |
| Names of different fabrics, types of stitches, sections of a flower. | Template, mock-up, fabrics, stitches  Explain what stitches they will use during the process and how the different fabrics will form parts of the flower. | Template, pattern, pieces, mark out, sew, stitch, join, decorate, finish | | | | Design criteria, evaluation and brief |

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| **Year One/Two**  **Cycle B**  **Food Technology:**  **Focus Designer: Takehiro Kishimoto**  **Brief: Creating an edible piece of artwork for a party using fruit and/or vegetables.**  **Capital culture: Picnic with parents** | | | | | | | |
| **Focus and Questions**  Research:   1. Who is Takehiro Kishimoto and what makes him so special? What do he make his creations out of? Why do you think he does this? Who would be interest in his work? Why do you think this? Investigate his work and create a whole class design criteria. 2. How can we sort these different food items? (Fruit and vegetables) What makes something a fruit? What makes something a vegetable? Where do the different foods come from? Why do you think Takehiro uses these types of foods? (Bright, eye-catching, easy to mould, healthy…) How does this link to a party?   Design:   1. Which fruits and vegetables are you going to use? Why have you chosen these? Children to try some different fruit and vegetables and rate it against design criteria. 2. What could you make out of fruit to attract someone to try your edible artwork? How many different ideas can you come up with? How are you going to make it? What tools will you need? Children to draw multiple fruit picture ideas e.g. a cat out of strawberries, cherries and banana, then explain what tools they will need.   Make:   1. What ingredients will you need? What tools will you need? How can we keep safe? What techniques will you be using? (Chopping, peeling, cutting etc.)   Evaluate:   1. Did your product meet the brief? What went well? What could have gone better? Did it look like the intended outcome? Would someone at a picnic want to try your creation? | | | | | | | |
| **Objectives** | | | | | | | |
| **Research** | **Design** | | | **Make** | | | **Evaluate** |
| To investigate Takehiro Kishimoto and his innovative fruit carvings.  Group familiar food products e.g. fruit and vegetables.  Understand where food comes from.  To help develop a design criteria. | Select materials (ingredients) from a limited range.  Select and name the tools needed to work the materials (ingredients)  Explain what they are making.  Select pictures to help develop ideas.  Use drawing to record ideas as they are developed.  Add notes to drawings to help explanations. | | | Discuss their work as it progresses.  Explain which materials (ingredients) and why.  Cut and chop a range of ingredients.  Work safely and hygienically.  Cut, peel, grate, chop a range of ingredients.  Decorate using a variety of techniques | | | Evaluate their ideas and products against the design criteria. |
| **Vocabulary** | | | | | | | |
| Fruit, vegetables, texture, cut, slice, peel, grate, chop, design criteria, evaluation, brief. | Specific fruit/vegetable names and explaining why they have chosen these foods.  I have chosen… because… | | Cut, peel, grate, chop, ingredients (as well as specific techniques e.g. slicing) | | | | Design criteria, evaluation, brief |
| **Year Three/Four**  **Cycle A**  **Textiles**  **Focus Designer: Vivienne Westwood**  **Brief: Create a draw-string bag for a new shop.**  **Capital culture: Creating a promotional poster for the shop advertising their new bag.** | | | | | | | |
| **Focus and Questions**  Research:   1. Who is Vivienne Westwood? What is she famous for? What is punk? Why is Vivienne Westwood a significant person in design? What makes a Vivienne Westwood design unique? What are her bags like? Create a design criteria with the class. 2. How do you do a running stitch? How do you do a back stitch? Allow children time to practice using the sewing needle and thread to master these stitches.   Design:   1. What type of materials does Vivienne Westwood use in her designs? What aesthetic qualities does her work usually include? Can you recreate any of these designs or patterns? Let children explore making patterns and markings in the style of VW. 2. Revisit the design criteria and prior learning. Design a selection of different bags. Can you label the key features of your bag? Do they link to the design criteria?   Make:   1. What type of stitching will you need to do in order to make your bag? What is the process needed to make a bag? What will you do if you make a mistake? (Focus on the Iterative Approach)   Evaluate:   1. Did the product meet the brief? What went well? What could have gone better? Would your product be suitable for the intended audience? | | | | | | | |
| **Objectives** | | | | | | | |
| Research | | Design | | | Make | Evaluate | |
| To investigate Vivienne Westwood and her influence on textiles design.  To investigate different styles and techniques for making a draw-string bag in order to develop a design criteria.  To research and practice a running and back stitch. | | Plan a sequence of actions to make a product.  Think ahead about the order of their work and decide upon tools and materials.  Propose realistic suggestions as to how they can achieve their design ideas.  Record the plan by drawing using annotated sketches.  Consider aesthetic qualities of materials chosen. | | | Use tools with accuracy.  Select from a range of tools for cutting, shaping, joining and finishing.  Prepare pattern pieces as a template.  Understand seam allowance.  Use a running stitch and back stitch. | Evaluate their ideas and products against a design criteria.  Consider and explain how the finished product could be improved.  Discuss how well the finished product meets the design criteria. | |
| **Vocabulary** | | | | | | | |
| Vivienne Westwood, punk, tartan, fabric, pattern, sewing, seam allowance, stitches, draw-string | | Specific fabrics and materials that have been chosen and to explain why these have been picked. | | | Different names of the fabrics used, running stitch, back stitch, seam allowance, template, joining, finishing | Design criteria, evaluation, brief, strengths, weaknesses | |

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| **Year Three/Four**  **Cycle A**  **Food Technology**  **Focus Designer: Tony Gemignani**  **Brief: Exploring healthy pizzas for a new Italian restaurant.**  **Capital culture: Cooking for parents/carers.** | | | |
| **Focus and Questions**  Research:   1. Who is Tony Gemignani? Why is he a significant person? What is special about his pizzas? How do you make a healthy pizza? What is the Eatwell Plate? Develop a design criteria for making a pizza. 2. Where do ingredients come from? Where do some different fruits and vegetables come from? What makes produce fresh? What produce would be fresh this time of year?   Design:   1. How do you make a pizza? What would be the process? Revisit the design criteria. Develop multiple designs for different types of pizzas. 2. Which pizza would you like to make? Why? How will you make your pizza? What tools will you need? What ingredients will you need? Draw and annotate sketches explaining the creation process. Write a set of instructions.   Make:   1. How will you make your pizza? How will you know it has been a success? Revisit design criteria.   Evaluate:   1. What went well? What could have gone better? Did you meet the design brief? Was your final product suitable for your intended audience? | | | |
| **Objectives** | | | |
| **Research** | **Design** | **Make** | **Evaluate** |
| To investigate the origin of the pizza with a focus on Tony Gemignani in order to develop a design criteria.  To understand the food groups on the Eatwell Plate.  Make healthy eating choices – use the *Eatwell plate. (Know where and how ingredients are reared and caught as well as food origins)*  Understand seasonality to choose fresh produce.  To develop a design criteria. | Develop more than one design or adaptation of an initial design.  Plan a sequence of actions to make a product.  Think ahead about the order of their work and decide upon tools and materials.  Record the plan by drawing using annotated sketches. | Follow instructions  Join and combine a range of ingredients.  Prepare food using a variety of different tools and utensils.  Cook food using an oven. | Evaluate their ideas and products against a design criteria.  Consider and explain how the finished product could be improved. |
| **Vocabulary** | | | |
| Processed, seasonal, harvested, healthy diet, varied diet, fresh. | Specific food items/ingredients that have been chosen and to explain why these have been picked. | Different names of equipment and utensils used. | Design criteria, evaluation and brief. |

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| **Year Three/Four**  **Cycle B**  **Resistant Materials**  **Focus Designer: Augustin Fresnel**  **Brief: Creating a model lighthouse for a seaside town.**  **Capital culture: Lighthouse gallery** | | | |
| **Focus and Questions**  Research:   1. Who is Augustin Fresnel? What is he famous for? How can electrical circuits be used in a lighthouse model? Develop a design criteria for a successful lighthouse model.   Design:   1. Revisit design criteria. What are the key features of a lighthouse? What is its purpose? Develop several different designs that are annotated and rendered. 2. How else can we create a design? What is CAD? How does CAD help us with structures? Create a CAD model of a lighthouse using TinkerCAD. 3. What is a prototype? Why do we make prototypes? How will we know if our prototype is successful? Use junk model to make a model of the lighthouse they designed on TinkerCAD. Was our prototype a success? What would we do differently next time?   Make:   1. How are you going to make your model sturdy? How will you make your model strong? How will you incorporate the light into your model? What materials will you use? How will you know if you have been successful?   Evaluate:   1. What went well? What could have gone better? Did your final product meet the brief? Would your product work as a lighthouse? | | | |
| **Objectives** | | | |
| **Research** | **Design** | **Make** | **Evaluate** |
| To investigate the origin of the lighthouse with a focus on Augustin Fresnel in order to develop a design criteria.  To explore how electrical systems can be used to create a lighthouse. | Develop more than one design or adaptation of an initial design.  Plan a sequence of actions to make a product.  Record the plan by drawing using annotated sketches.  Use prototypes to develop and share ideas.  Decide which design idea to develop.  Identify the strengths and weaknesses of their design ideas in relation to purpose/user.  Use CAD where appropriate. | Use electrical systems such as switches, bulbs and buzzers.  Incorporate a circuit into a model.  Select from materials according to their functional properties.  Strengthen frames with diagonal struts.  Measure and mark sections accurately to 1cm. | Evaluate their ideas and products against a design criteria.  Consider and explain how the finished product could be improved.  Discuss how well the finished product meets the design criteria. |
| **Vocabulary** | | | |
| Structure, lighthouse, Augustin Fresnel, electrical system, circuit, lens, battery, bulb, circuit | Specific materials relating to the designing phase and explaining why they have chosen to use this. | Different names of equipment and tools used.  Measuring, cutting, joining, switch, bulb, battery, buzzer, circuit | Design criteria, evaluation, brief, strengths, weaknesses |

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| **Year Three/Four**  **Cycle B**  **Food Technology:**  **Focus Designer: Mary Berry**  **Brief: Creating an afternoon tea menu for members of the public/family/care home.**  **Capital culture: Parents to be invited into school for an afternoon tea.** | | | |
| **Focus and Questions**  Research:   1. Who is Mary Berry? What is she famous for? What is an afternoon tea? What are the components? Begin to construct a design criteria. 2. What is a recipe? How do you make scones? Are there any different types of scones? What other ingredients may you add to a scone?   Design:   1. Revisit the design criteria. Children to design their own menu for an afternoon tea. What are the key components of your afternoon tea? What ingredients will you need? Annotate around your designs. 2. Create a final design for an afternoon tea spread. What will be the signature dish? What type of scone will you make? Why?   Make:   1. How do you make a scone? What unique ingredients will you add? How will you mix the ingredients? What equipment will you need? Children to create the scones and then construct a menu to go alongside it.   Evaluate:   1. What went well? What could have gone better? Did your final product meet the brief? Would others enjoy your final product? How successful was it? | | | |
| **Objectives** | | | |
| **Research** | **Design** | **Make** | **Evaluate** |
| To investigate Mary Berry and the impact she has had on home cooking through the ages.  To investigate the origin and components of the afternoon tea.  To investigate similar products to the one to be made to give starting points for a design (e.g., researching different types of scones)  To develop a design criteria. | Develop more than one design or adaptation of an initial design.  Propose realistic suggestions as to how they can achieve their design ideas.  Record the plan by drawing using annotated sketches.  Consider aesthetic qualities of materials chosen. | Follow instructions/recipes.  Join and combine a range of ingredients.  Prepare food using a variety of different equipment and utensils. | Evaluate their ideas and products against a design criteria.  Consider and explain how the finished product could be improved. |
| **Vocabulary** | | | |
| Afternoon tea, Queen Victoria, cake, scone, sandwich, cake stand, spreads, jams, toppings, strawberries, Mary Berry. | Specific food items/ingredients that have been chosen and to explain why these have been picked. | Different names of equipment and utensils being used. | Design criteria, evaluation, brief |

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| **Year Five/Six**  **Cycle A**  **Food Technology**  **Focus Designer: John Harvey Kellogg**  **Brief: Create a protein bar for a sports personality.**  **Capital culture: Let some sports coaches try and assess their protein bars.** | | | | | | |
| **Focus and Questions**  Research:   1. Who is John Harvey Kellogg? What is he famous for? What is a healthy and varied diet? Develop a design criteria 2. What is protein for? What are its benefits? How does it fit into a healthy diet? How do you make a breakfast bar? What are the features? What recipes can you find? How could we incorporate protein into the bar? What makes a good protein bar? Explore tasting and rating.   Design:   1. What ingredients will you use for your protein bar? How will you make it? Design a variety of different protein bars. Annotate sketches and begin to write some simple instructions and ideas for what you may do. 2. What alternative ideas may you have? What final design will you come up with? What ingredients will you need? What steps will you need to include to make your final design?   Make:   1. How are you going to make your final design? What equipment will you need? How will you know that your product has been a success? Children to make their protein bar and begin to refine their prototype   Evaluate:   1. What went well? What could have gone better? Did your product meet the brief? Would a sports personality use your product? Would you see it at a store/gym? | | | | | | |
| **Objectives** | | | | | | |
| Research | Design | | Make | | | Evaluate |
| To investigate John Harvey Kellogg and the world-wide impact he has had on nutrition.  Understand and apply the principles of a healthy and varied diet in order to develop a design criteria.  Devise a step-by-step plan for what they are going to do/need to do e.g. explore creating a recipe. | Select and prepare food for a particular purpose.  Consider user and purpose.  Choose ingredients to support healthy eating choices when designing their food products.  Record ideas using annotated diagrams.  Sketch and model alternative ideas.  Develop one idea in depth.  Plan the sequence of work to make.  Produce a detailed list of ingredients. | | Join and combine a widening range of ingredients.  Prepare ingredients using a variety of different cooking utensils and equipment.  Prepare food accurately, safely and hygienically.  Refine their product. | | | Identify strengths and weaknesses of their designs and products.  Discuss how well the final product meets the design criteria. |
| **Vocabulary** | | | | | | |
| Kelloggs, protein, fibre, fruit, vegetables, dairy, fats, | Specific food items/ingredients that have been picked and explain why these have been chosen. | | Different names of the equipment and utensils being used as well as the different food preparation techniques e.g. dicing | | | Design criteria, evaluation, brief, audience, purpose. |
| **Year Five/Six**  **Cycle A**  **Resistant Materials**  **Focus Designer: Charles Rothschild**  **Brief: Creating habitats for a local creature.**  **Capital culture: Place habitat in the forest school area and monitor throughout the week** | | | | | | |
| **Focus and Questions**  Research:   1. Who is Charles Rothschild? What organisation is he famous for? What role do they do? Why is he important? Why is he a significant individual? 2. What local creatures appear in our area? What existing habitats do we have around school? Visit forest school area and EYFS (bug hotel). How do these habitats work? What type of animals would use them? What are there strengths? What are there weaknesses?   Design:   1. What animal will you create a habitat for? What will be the purpose of the habitat? What type of habitat do they like? How will you create a similar habitat? Children to pick a local animal and research/design a variety of different habitat ideas. 2. How will you make your habitat? What features must it have? Create a final design. Annotate the design with key features considering the audience and purpose. What equipment/resources will you need?   Make:   1. How are you going to make your habitat? What equipment will you need? How will you strengthen your habitat? Is it weather proof? How will you ensure it is suitable?   Evaluate:   1. What went well? What could have gone better? Did your design meet the intended brief? Did any animals use your habitat? | | | | | | |
| **Objectives** | | | | | | |
| **Research** | | **Design** | | **Make** | **Evaluate** | |
| To explore and investigate Charles Rothschild and the Wildlife Trust and how they help protect local wildlife.  To investigate what local creatures appear in our area.  To research and evaluate existing products in order to create a design criteria. | | Consider user and purpose.  Develop one idea in depth.  Record ideas using annotated diagrams.  Sketch and model alternative ideas.  Plan the sequence of work to make.  Produce a detailed list of resources and explain how they will be used. | | Select from and use a wide range of tools.  Join materials using appropriate methods.  Cut strip wood, dowel, square section wood accurately to 1mm.  Cut accurately and safely to a marked line.  Build frameworks to support mechanisms e.g. a door or lid.  Stiffen and reinforce complex structures. | Identify the strengths and weaknesses of their design ideas.  Discuss how well the finished product meets the design criteria. | |
| **Vocabulary** | | | | | | |
| Charles Rothschild, habitat, wildlife, nature, security, safety, comfort, strength, sturdy, secure. | | Specific materials relating to the designing phase and explaining why they have chosen to use this. | | Different names of equipment and tools used. | Design criteria, evaluation, brief, strengths, weaknesses | |

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| **Year Five/Six**  **Cycle B**  **Food Technology**  **Focus Designer: Bear Grylls**  **Brief: Developing a meal for an explorer.**  **Capital culture: Bush tucker lunch in the forest school area** | | | |
| **Focus and Questions**  Research:   1. Who is Bear Grylls? What is he famous for? How does he adapt his cooking skills to meet his needs? What examples can you find? Generate a design criteria for a Bear Grylls inspired meal. 2. Where are some of our foods from? Where do we grow food? What foods are grown locally? What food could you find in a forest? What local foods could you scavenge?   Design:   1. What type of foods would an explorer need? Would it need to be healthy? What healthy ingredients would you be able to find naturally? Create a list of naturally found foods. 2. What dishes could you make with your scavenged foods? How will they look? How will you make them? Sketch a variety of different meal options, annotating and rendering. Write some simple instructions explaining how you would make them.   Make:   1. What ingredients will you need? How will you prepare the food? How will you combine the food?   Evaluate:   1. What went well? What could have gone better? Did you meet the brief? Would your meal be suitable for an explorer? Why? | | | |
| **Objectives** | | | |
| **Research** | **Design** | **Make** | **Evaluate** |
| To investigate Bear Grylls and how he has adapted his cooking and food preparation to meet his unique needs in order to develop a design criteria.  Know where and how ingredients are grown and processed.  To explore foods that can be easily scavenged and found in the wild. | Consider user and purpose.  Choose ingredients to support healthy eating choices when designing their food products.  Record ideas using annotated diagrams.  Sketch and model alternative ideas.  Develop one idea in depth.  Plan the sequence of work to make.  Produce a detailed list of ingredients. | Prepare and cook a variety of dishes using a range of cooking techniques.  Join and combine a widening range of ingredients.  Prepare food through using a variety of different cooking utensils and equipment.  Prepare food accurately, safely and hygienically.  Refine their product. | Identify strengths and weaknesses of their designs and products.  Discuss how well the final product meets the design criteria. |
| **Vocabulary** | | | |
| Bear Grylls, scavenger, explorer, hunter, gatherer, fruits, vegetables, fungi, proteins, energy | Specific food items/ingredients that have been picked and explain why these have been chosen. | Different names of the equipment and utensils being used as well as the different food preparation techniques e.g. dicing | Design criteria, evaluation, brief, audience, purpose. |

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| **Year Five/Six**  **Cycle B**  **Textiles**  **Focus Designer: Maxine Clark**  **Brief: Creating animal plushies for a zoo gift shop.**  **Capital culture: Teddy bear picnic with FSU** | | | |
| **Focus and Questions**  Research:   1. Who is Maxine Clark? What is she famous for? What is build-a-bear? Why is this unique? Generate design criteria 2. What is a running, back and blanket stitch? How do you do them? Explore making and practicing the different stitch types.   Design:   1. What type of stuffed animal would you expect to see at a zoo gift shop? What makes a good design? Design a set of different stuff animal plushies. Annotate ideas and render. 2. Which final design will you choose? Why is this design a good design? How will you make it?   Make:   1. How will you make your design? What equipment will you need? How will you attach buttons? What is seam allowance?   Evaluate:   1. What went well? What could have gone better? Did your product meet the brief? Was it suitable for the intended audience? | | | |
| **Objectives** | | | |
| **Research** | **Design** | **Make** | **Evaluate** |
| To investigate Maxine Clark and her world-wide impact with her invention.  To research and evaluate existing products in order to develop a design criteria.  To research and practice a running, back and blanket stitch. | Consider user and purpose.  Develop one idea in depth.  Record ideas using annotated diagrams.  Sketch and model alternative ideas.  Plan the sequence of work to make.  Produce a detailed list of materials and explain how they will be used. | Create 3=-D textile products using pattern pieces.  Use tools with accuracy.  Understand and use pattern layout with textiles.  To sew on buttons.  Use a running stitch, back stitch and blanket stitch.  Use a seam allowance accurately. | Identify the strengths and weaknesses of their design ideas.  Discuss how well the finished product meets the design criteria. |
| **Vocabulary** | | | |
| Maxine Clark, build-a-bear, teddy bear, stuffed animals, textiles, cotton, polyester | Seam allowance, running stitch, back stitch, blanket stitch, template, pattern piece. | Different names of the fabrics and equipment being used as well as the different stitches. | Design criteria, evaluation, brief, audience, purpose. |