**Medium Term Planning 2021/22**

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| Year | Nursery | | | Subject | | Design and Technology | | | Academic Year 2021/22 | |
| Prior Knowledge | | | | End Point | | | | | Key Vocabulary | |
| Pushes objects through different shaped holes, and attempts to fit shapes into spaces on inset boards or puzzles  Beginning to select a shape for a specific space  Enjoys using blocks to create their own simple structures and arrangements  Notices and becomes interested in the transformative effect of their action on materials and resources | | | | • Explore - Uses 3D and 2D structures to explore materials and/or to express ideas.  • Design – Explores a variety of construction materials independently.  • Make – Make simple constructions.  • Tools and equipment - Shows increasing control in holding, using and manipulating a range of tools and objects such as hammers.  • Safety – Begins to recognise the need to use tools safely. | | | | | Scissors, cut, straight, join, hold, fix, glue, shape, safely, colour, create, make, why, change, pieces. | |
|  | | *I wonder what makes me so special?* | *I wonder why we celebrate?* | | *I wonder what changes in winter?* | | *I wonder how plants grow?* | *I wonder who lives there?* | | *I wonder why trees are green?* |
|  | | Sequence of Learning | Sequence of Learning | | Sequence of Learning | | Sequence of Learning | Sequence of Learning | | Sequence of Learning |
| 1 | | Creating houses from construction materials | Making Pumpkin Soup | | Child initiated activities such as making kites | | Observe the effects of cooking when making pancakes |  | |  |
| 2 | |  | Create fireworks from junk materials | | Making beds for pets | | Creating masks for a Mardi Gras Ball |  | |  |
| 3 | |  | Making Christmas Gifts | |  | |  |  | |  |
| 4 | |  |  | |  | |  |  | |  |
| 5 | |  |  | |  | |  |  | |  |
| *General learning throughout the year*  Children can self-select from a range of tools and materials in the continuous provision.  Children learn by experimenting with tools such as scissors, staplers and hole punches. They make use of fixing and joining materials such as sellotape, masking tape, string, pipe cleaners and glue.  Through questioning children are encouraged to talk about what they like about their work and other children’s designs and how they would improve it.  Help to design and make small worlds in line with topic. | | | | | | | | | | |

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| Year | Reception | | | Subject | | Design and Technology | | | Academic Year 2021/22 | |
| Prior Knowledge | | | | End Point | | | | | Key Vocabulary | |
| • Explore - Uses 3D and 2D structures to explore materials and/or to express ideas.  • Design – Explores a variety of construction materials independently. • Make – Make simple constructions.  • Tools and equipment - Shows increasing control in holding, using and manipulating a range of tools and objects such as hammers.  • Safety – Begins to recognise the need to use tools safely. | | | | 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 with 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 | | | | | Plan, ideas, design, make, build, construct, join, shape, tools, change, like, dislike, different, improve, healthy, unhealthy, fruit, vegetable, clean, safe, ingredients, cut, sew | |
|  | | *I wonder what makes me so special?* | *I wonder why we celebrate?* | | *I wonder what changes in winter?* | | *I wonder how plants grow?* | *I wonder who lives there?* | | *I wonder why trees are green?* |
|  | | Sequence of Learning | Sequence of Learning | | Sequence of Learning | | Sequence of Learning | Sequence of Learning | | Sequence of Learning |
| 1 | | Creating houses from construction materials | Making Pumpkin Soup | | Child initiated activities such as making kites | | Observing the effects of cooking by making pancakes |  | |  |
| 2 | |  | Creating fireworks from junk materials | | Making beds for pets | |  |  | |  |
| 3 | |  | Making Christmas gifts | |  | |  |  | |  |
| 4 | |  |  | |  | |  |  | |  |
| 5 | |  |  | |  | |  |  | |  |
| *General learning throughout the year*  Children can self-select from a range of tools and materials in the continuous provision.  Children learn by experimenting with tools such as scissors, staplers and hole punches. They make use of fixing and joining materials such as sellotape, masking tape, string, pipe cleaners and glue.  Through questioning children are encouraged to talk about what they like about their work and other children’s designs and how they would improve it.  Help to design and make small worlds in line with topic. | | | | | | | | | | |

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| Year | | Year 1 | | Subject | | Design and Technology | | | Academic Year 2021/22 |
| Prior Knowledge | | | | End Point | | | | | Key Vocabulary |
| . 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 with 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 | | | | **Year 1 End Points**  Use pictures and words to convey what they want to design / make.  Explore ideas by rearranging materials.  Select pictures to help develop ideas.  Use mock-ups e.g. recycled material trial models to try out their ideas.  Select materials from a limited range.  Explain what they are making.  Name the tools they are using.  Explore existing products and investigate how they have been made (including teacher-made examples).  Talk about their design as they develop and identify good and bad points.  Say what they like and do not like about items they have made and attempt to say why.  Start to use technical vocabulary.  Cut out shapes which have been created by drawing round a template.  Join materials in a variety of ways.  Decorate using a variety of techniques.  Know some ways of making structures stronger.  Show how to stiffen some materials.  Know how to make a simple structure more stable.  Attach wheels to a chassis using an axle.  Know some different ways of making things move in a 2-D plane.  Group familiar food products e.g. fruit and vegetables.  Cut and chop a range of ingredients.  Work safely and hygienically.  Know about the need for a variety of foods in a diet. | | | | | planning, investigating design, evaluate, make, user, purpose, ideas, product,  fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, |
| Assessment Questions |
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|  | Sequence of Learning : Robots | | Sequence of Learning : Fire Fire | | Sequence of Learning: Growth and Green Fingers | | Sequence of Learning : Family Album | Sequence of Learning : The Great Outdoors | |
|  |  | | Mechanisms - pop ups and simple card levers | | Food - preparing and combining foods | |  | To explore structures - stability and strength | |
| 1 | To use pictures and words to describe what they want to make and propose more than one idea for their product. | | To explore existing products and how they have been made and decide how existing products do/do not achieve their purpose. | | To be able to group food and vegetables and to be able to explain where food comes from. | | N/A | To be able to explore existing products and how they have been made. | |
| 2 | To use kits and reclaimed ideas to model more than one idea. | | To be able to use words or pictures to convey what they want to make. To be able to select appropriate technique explaining first...next... Last. | | To be able to use pictures and words to convey what they would like to design. | | N/A | To explore how to make a structure stronger. | |
| 3 | To be able to use drawings to record their ideas and add notes as they go along. | | To be able to use kits and reclaimed materials to model more than one idea. | | To select pictures to develop ideas for their design and explore ideas by rearranging the pictures. | | N/A | To be able to investigate a variety of ways to make materials stiffer and test ways of enabling ways to make the structure remain stable. | |
| 4 | To be able to select appropriate materials and tools to make their product. | | To be able to mark out materials to be cut using a template and to be able to fold, cut and tear paper and card. | | To be able to use drawing to record ideas as they are developed and add notes to drawings to help explanations. | | N/A | To be able to join appropriately for different materials eg glue or Sellotape. | |
| 5 | To be able to explain what they are making and which materials they are using and why. | | To be able to cut along paper and card along straight and curved lines. To be able to use a hole punch and insert paper fasteners for card. | | To be able to select ingredients from a limited range and use appropriate tools. | | N/A | To be able to use pictures and words to convey what they want to make. | |
| 6 | To be able to talk about their designs good and bad points and discuss how closely their finished design meets the criteria. | | To experiment with levers and sliders to find ways of making things move in a 2-d plane.  To be able to talk about their end product and discuss whether it has met their criteria. | | To be able to say what they like / dislike about their end product and attempt to say what their reasons are. | | N/A | To use kits or reclaimed materials to model their ideas.  To be able to discuss their work as it progresses and select materials and tools that are appropriate for what they have decided to make. | |
| Quiz Questions |  | |  | |  | |  |  | |

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| Year | | Year 1 /2 | Subject | | Design and Technology | | | Academic Year 2021/22 |
| Prior Knowledge | | | End Point | | | | | Key Vocabulary |
| 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 with 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 | | | Year 1 End Points  Use pictures and words to convey what they want to design / make.  Explore ideas by rearranging materials.  Select pictures to help develop ideas.  Use mock-ups e.g. recycled material trial models to try out their ideas.  Select materials from a limited range.  Explain what they are making.  Name the tools they are using.  Explore existing products and investigate how they have been made (including teacher-made examples).  Talk about their design as they develop and identify good and bad points.  Say what they like and do not like about items they have made and attempt to say why.  Start to use technical vocabulary.  Cut out shapes which have been created by drawing round a template.  Join materials in a variety of ways.  Decorate using a variety of techniques.  Know some ways of making structures stronger.  Show how to stiffen some materials.  Know how to make a simple structure more stable.  Attach wheels to a chassis using an axle.  Know some different ways of making things move in a 2-D plane.  Group familiar food products e.g. fruit and vegetables.  Cut and chop a range of ingredients.  Work safely and hygienically.  Know about the need for a variety of foods in a diet. | | Year 2 End Points  Propose more than one idea for their product.  Use ICT to communicate ideas.  Use drawings to record ideas as they are developed.  Add notes to drawings to help explanations.  Discuss their work as it progresses.  Select and name the tools needed to work the materials.  Explain which materials they are using and why.  Decide how existing products do / do not achieve their purpose.  Discuss how closely their finished product meets their own design criteria.  Cut, peel, grate, chop a range of ingredients.  Work safely and hygienically.  Know about the Eatwell Plate.  Understand where food comes from.  Start to use technical vocabulary.  Cut out shapes which have been created by drawing round a template.  Join materials in a variety of ways.  Decorate using a variety of techniques.  Know some ways of making structures stronger.  Show how to stiffen some materials.  Know how to make a simple structure more stable.  Attach wheels to a chassis using an axle.  Know some different ways of making things move in a 2-D plane. | | | taste, smell, texture, sweet, crunchy, juicy, soft, fruit, vegetable, cut, grate, peel, chop, ingredients, peel, skin,  join, axle, wheel, design, make, evaluate, product, vehicle, investigate, purpose, user, ideas, chassis  fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, |
| Assessment Questions |
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|  | Sequence of Learning: The places where I live | | Sequence of Learning: Penguins, Pigs and Possums - | Sequence of Learning: Explorers | | Sequence of Learning: Growth and Green Fingers - Observational drawings and paintings | Sequence of Learning: Buckets and Spades | |
| 1 | N/A | | N/A | To explore existing products and investigate how they have been made. | | To explore existing products and how they have been made. To decide how existing products do/do not achieve their purpose. | N/A | |
| 2 | N/A | | N/A | To make vehicles with construction kits which contain wheels. | | To develop a food vocabulary, group familiar food products and explain where food comes from. | N/A | |
| 3 | N/A | | N/A | To use pictures and words to convey what they want to design and make. | | To cut, peel, grate and chop a range of ingredients. To work safely and hygienically. | N/A | |
| 4 | N/A | | N/A | To discuss their work as it progresses. To select materials that will meet the design criteria. To explain what they are making and which materials they are using and why. | | To use words and pictures to convey what they want to design and make. | N/A | |
| 5 | N/A | | N/A | To say what they like and do not like about the product they have made and attempt to say why.  To say what they would change if they made it again. | | To discuss their work as it progresses, explaining what they are making and which ingredients they are using and why. | N/A | |
| 6 | N/A | | N/A |  | | To say what they like and do not like about the product they have made and attempt to say why.  To say what they would change if they made it again. | N/A | |
| Quiz Questions |  | |  |  | |  |  | |

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| Year | | Year 2 | | Subject | | Design and Technology | Academic Year 2021/22 | | |
| Prior Knowledge | | | | End Point | | | Key Vocabulary | | |
| Use pictures and words to convey what they want to design / make.  Explore ideas by rearranging materials.  Select pictures to help develop ideas.  Use mock-ups e.g. recycled material trial models to try out their ideas.  Select materials from a limited range.  Explain what they are making.  Name the tools they are using.  Explore existing products and investigate how they have been made (including teacher-made examples).  Talk about their design as they develop and identify good and bad points.  Say what they like and do not like about items they have made and attempt to say why.  Start to use technical vocabulary.  Cut out shapes which have been created by drawing round a template.  Join materials in a variety of ways.  Decorate using a variety of techniques.  Know some ways of making structures stronger.  Show how to stiffen some materials.  Know how to make a simple structure more stable.  Attach wheels to a chassis using an axle.  Know some different ways of making things move in a 2-D plane.  Group familiar food products e.g. fruit and vegetables.  Cut and chop a range of ingredients.  Work safely and hygienically.  Know about the need for a variety of foods in a diet. | | | | Propose more than one idea for their product.  Use ICT to communicate ideas.  Use drawings to record ideas as they are developed.  Add notes to drawings to help explanations.  Discuss their work as it progresses.  Select and name the tools needed to work the materials.  Explain which materials they are using and why.  Decide how existing products do / do not achieve their purpose.  Discuss how closely their finished product meets their own design criteria.  Cut, peel, grate, chop a range of ingredients.  Work safely and hygienically.  Know about the Eatwell Plate.  Understand where food comes from.  Start to use technical vocabulary.  Cut out shapes which have been created by drawing round a template.  Join materials in a variety of ways.  Decorate using a variety of techniques.  Know some ways of making structures stronger.  Show how to stiffen some materials.  Know how to make a simple structure more stable.  Attach wheels to a chassis using an axle.  Know some different ways of making things move in a 2-D plane. | | | investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function  fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients | | |
| Assessment Questions | | |
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|  | Sequence of Learning : The Place Where I Live | | Sequence of Learning : Fighting Fit | | Sequence of Learning: Explorers | | | Sequence of Learning: Farm Shop | Sequence of Learning: The Wind in the Willows |
| 1 | N/A | | N/A | | Mechanisms - wheels and axles  To investigate a variety of vehicles and their uses and features. | | | Food - the eatwell plate, where food comes from, principles of a healthy diet.  To evaluate existing products | Textiles - using a template, simple joining, choice of stitches, choice of materials  To investigate a range of  puppets and their features. |
| 2 |  | |  | | To investigate wheels, axles and chassis. | | | To understand where food comes from. | To work with fabric  to create a finger puppet. |
| 3 |  | |  | | To investigate ways of creating and decorating the body of a  vehicle. | | | To understand the need for a varied diet. | To develop and practise skills. |
| 4 |  | |  | | To design a vehicle. | | | To describe different foods. | To design a finger puppet. |
| 5 |  | |  | | To make a vehicle based on a design. | | | To design a product. | To follow a design to make a puppet. |
| 6 |  | |  | | To evaluate a finished product. | | | To make a product. | To follow a design to make a puppet. |
|  |  | |  | |  | | | To evaluate the finished product. | To evaluate a  finished product. |
| Quiz Questions |  | |  | |  | | |  |  |

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| Year | | Year 3 | | Subject | Design and Technology | | | Academic Year 2021/22 | |
| Prior Knowledge | | | | End Point | | | | Key Vocabulary | |
| Propose more than one idea for their product.  Use ICT to communicate ideas.  Use drawings to record ideas as they are developed.  Add notes to drawings to help explanations.  Discuss their work as it progresses.  Select and name the tools needed to work the materials.  Explain which materials they are using and why.  Decide how existing products do / do not achieve their purpose.  Discuss how closely their finished product meets their own design criteria.  Cut, peel, grate, chop a range of ingredients.  Work safely and hygienically.  Know about the Eatwell Plate.  Understand where food comes from.  Start to use technical vocabulary.  Cut out shapes which have been created by drawing round a template.  Join materials in a variety of ways.  Decorate using a variety of techniques.  Know some ways of making structures stronger.  Show how to stiffen some materials.  Know how to make a simple structure more stable.  Attach wheels to a chassis using an axle.  Know some different ways of making things move in a 2-D plane. | | | | 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.  Propose realistic suggestions as to how they can achieve their design ideas.  Select from a range of tools for cutting, shaping, joining and finishing.  Use tools with accuracy.  Select from materials according to their functional properties.  Use appropriate finishing techniques.  Investigate similar products to the one to be made to give starting points for a design.  Research needs of user.  Decide which design idea to develop.  Consider and explain how the finished product could be improved.  Discuss how well the finished product meets the user’s design criteria.  Investigate key events and individuals in design and technology.  Use an increasingly appropriate technical vocabulary for tools materials and their properties.  Understand seam allowance.  Prototype a product.  Sew on buttons and make loops.  Strengthen frames with diagonal struts.  Measure and mark square section, strip and dowel accurately to 1cm.  Incorporate a circuit into a model.  Use electrical systems such as switches bulbs and buzzers.  Use ICT to control products.  Use linkages to make movement larger or more varied.  Follow instructions / recipes.  Join and combine a range of ingredients.  Begin to understand the food groups on the Eatwell Plate. | | | | user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing  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 | |
| Quiz Questions | |
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|  | Sequence of Learning : There’s No place Like Home | | Sequence of Learning : Healthy Humans 3D clay or textile sculpture | | | Sequence of Learning: Rock and Roll | Sequence of Learning : The Iron Man | | Sequence of Learning : What the Romans did for Us |
| 1 |  | | LO: To learn that food can be divided into different groups and sandwiches can form part of a healthy diet. | | |  | LO: To investigate and evaluate products with lever and linkage systems. | |  |
| 2 |  | | LO: To taste a variety of different breads and sandwiches and examine flavours and textures. | | |  | LO: To experiment with a range of techniques to create moving mechanisms. | |  |
| 3 |  | | LO: To design and plan a sandwich for a Christmas Party Picnic. | | |  | LO: To explore and experiment with a range of different fonts and graphic techniques. | |  |
| 4 |  | | LO: To be able to create a healthy sandwich. | | |  | LO: To be able to plan and design a storybook. | |  |
| 5 |  | | LO: To be able to evaluate a finished product. | | |  | LO: To be able to make a storybook with moving mechanisms using a design. | |  |
| 6 |  | |  | | |  | LO: To be able to evaluate a finished product. | |  |
| Quiz Questions |  | |  | | |  |  | |  |

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| Year | Year 3/ 4 | Subject | | | Design and Technology | | | Academic Year 2021/22 |
| Prior Knowledge | | End Point | | | | | | Key Vocabulary |
| **Year 2 End Points**  Propose more than one idea for their product.  Use ICT to communicate ideas.  Use drawings to record ideas as they are developed.  Add notes to drawings to help explanations.  Discuss their work as it progresses.  Select and name the tools needed to work the materials.  Explain which materials they are using and why.  Decide how existing products do / do not achieve their purpose.  Discuss how closely their finished product meets their own design criteria.  Cut, peel, grate, chop a range of ingredients.  Work safely and hygienically.  Know about the Eatwell Plate.  Understand where food comes from.  Start to use technical vocabulary.  Cut out shapes which have been created by drawing round a template.  Join materials in a variety of ways.  Decorate using a variety of techniques.  Know some ways of making structures stronger.  Show how to stiffen some materials.  Know how to make a simple structure more stable.  Attach wheels to a chassis using an axle.  Know some different ways of making things move in a 2-D plane. | | **Year 3 End Points**  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.  Propose realistic suggestions as to how they can achieve their design ideas  Select from a range of tools for cutting, shaping, joining and finishing.  Use tools with accuracy.  Select from materials according to their functional properties.  Use appropriate finishing techniques.  Investigate similar products to the one to be made to give starting points for a design.  Research needs of user.  Decide which design idea to develop.  Consider and explain how the finished product could be improved.  Discuss how well the finished product meets the user’s design criteria.  Investigate key events and individuals in design and technology.  Use an increasingly appropriate technical vocabulary for tools materials and their properties.  Understand seam allowance.  Prototype a product.  Sew on buttons and make loops.  Strengthen frames with diagonal struts.  Measure and mark square section, strip and dowel accurately to 1cm.  Incorporate a circuit into a model.  Use electrical systems such as switches bulbs and buzzers.  Use ICT to control products.  Use linkages to make movement larger or more varied.  Follow instructions / recipes.  Join and combine a range of ingredients.  Begin to understand the food groups on the Eatwell Plate. | | | **Year 4 End Points**  Record the plan by drawing using annotated sketches.  Use prototypes to develop and share ideas.  Consider aesthetic qualities of materials chosen.  Use CAD where appropriate.  Prepare pattern pieces as templates for their design.  Select from techniques for different parts of the process.  Draw / sketch existing products in order to analyse and understand how products are made.  Identify the strengths and weaknesses of their design ideas in relation to purpose / user.  Consider and explain how the finished product could be improved.  Investigate key events and individuals in design and technology.  Use an increasingly appropriate technical vocabulary for tools materials and their properties.  Understand seam allowance.  Prototype a product.  Sew on buttons and make loops.  Strengthen frames with diagonal struts.  Measure and mark square section, strip and dowel accurately to 1cm.  Incorporate a circuit into a model.  Use electrical systems such as switches bulbs and buzzers.  Use ICT to control products.  Use linkages to make movement larger or more varied  Make healthy eating choices – use the Eatwell plate.  Understand seasonality.  Know where and how ingredients are reared and caught.  Prepare and cook using different cooking techniques. | | | user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing  evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations  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 |
| Assessment Questions |
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|  | Sequence of Learning: Sparks Might Fly | | Sequence of Learning: The Great Plague | Sequence of Learning: Passport to Europe | | Sequence of Learning: Water, Water Everywhere | Sequence of Learning: How does Your Garden Grow? | |
| 1 | To investigate existing products. | | N/A | To think about what we need to take when we travel. | | N/A | To investigate existing products – wooden garden planters. | |
| 2 | To design a small torch to be used by a teacher when they’ve been stranded in the classroom. | | N/A | To evaluate and explore existing products to create design criteria. | | N/A | To design garden planters – different sizes for eco gardens and use around the school grounds. | |
| 3 | To make a torch for a stranded teacher | | N/A | To design a product based on set criteria. | | N/A | To make garden planters – group 1 | |
| 4 | To make a torch for a stranded teacher | | N/A | To create a final product to set criteria. | | N/A | To make garden planters – group 2 | |
| 5 | To make a torch for a stranded teacher | | N/A | To create a final product to set criteria. | | N/A | To make garden planters – group 3 | |
| 6 | To evaluate my product. | | N/A | To evaluate a product to a set design and criteria. | | N/A | To evaluate my/our product | |
| Quiz Questions |  | |  |  | |  |  | |

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| Year | | Year 4/ 5 | Subject | | Design and Technology | | | | Academic Year 2021/22 |
| Prior Knowledge | | | End Point | | | | | | Key Vocabulary |
| **Year 3 End Points**  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.  Propose realistic suggestions as to how they can achieve their design ideas  Select from a range of tools for cutting, shaping, joining and finishing.  Use tools with accuracy.  Select from materials according to their functional properties.  Use appropriate finishing techniques.  Investigate similar products to the one to be made to give starting points for a design.  Research needs of user.  Decide which design idea to develop.  Consider and explain how the finished product could be improved.  Discuss how well the finished product meets the user’s design criteria.  Investigate key events and individuals in design and technology.  Use an increasingly appropriate technical vocabulary for tools materials and their properties.  Understand seam allowance.  Prototype a product.  Sew on buttons and make loops.  Strengthen frames with diagonal struts.  Measure and mark square section, strip and dowel accurately to 1cm.  Incorporate a circuit into a model.  Use electrical systems such as switches bulbs and buzzers.  Use ICT to control products.  Use linkages to make movement larger or more varied.  Follow instructions / recipes.  Join and combine a range of ingredients.  Begin to understand the food groups on the Eatwell Plate. | | | **Year 4 End Points**  Record the plan by drawing using annotated sketches.  Use prototypes to develop and share ideas.  Consider aesthetic qualities of materials chosen.  Use CAD where appropriate.  Prepare pattern pieces as templates for their design.  Select from techniques for different parts of the process.  Draw / sketch existing products in order to analyse and understand how products are made.  Identify the strengths and weaknesses of their design ideas in relation to purpose / user.  Consider and explain how the finished product could be improved.  Investigate key events and individuals in design and technology.  Use an increasingly appropriate technical vocabulary for tools materials and their properties.  Understand seam allowance.  Prototype a product.  Sew on buttons and make loops.  Strengthen frames with diagonal struts.  Measure and mark square section, strip and dowel accurately to 1cm.  Incorporate a circuit into a model.  Use electrical systems such as switches bulbs and buzzers.  Use ICT to control products.  Use linkages to make movement larger or more varied.  Make healthy eating choices – use the Eatwell plate.  Understand seasonality.  Know where and how ingredients are reared and caught.  Prepare and cook using different cooking techniques. | | | | **Year 5 End Points**  Record ideas using annotated diagrams.  Use models, kits and drawings to help formulate design ideas.  Sketch and model alternative ideas.  Decide which design idea to develop.  Develop one idea in depth.  Select from and use a wide range of tools.  Cut accurately and safely to a marked line.  Select from and use a wide range of materials  Research and evaluate existing products.  Consider user and purpose.  Consider and explain how the finished product could be improved related to design criteria.  Investigate key events and individuals in design and technology.  Use the correct vocabulary appropriate to the project.  Join materials using appropriate methods.  Create 3=-D textile products using pattern pieces.  Understand pattern layout with textiles.  Cut strip wood, dowel, square section wood accurately to 1mm.  Build frameworks to support mechanisms.  Stiffen and reinforce complex structures.  Use mechanical systems such as cams, pulleys and gears.  Use electrical systems such as motors and switches.  Program, monitor and control using ICT.  Join and combine a widening range of ingredients.  Select and prepare foods for a particular purpose.  Know where and how ingredients are grown and processed. | | evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations  design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype  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 |
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|  | Sequence of Learning : Fitter, Higher, Stronger | | | Sequence of Learning : Hunted Food - simple savoury food and cooking techniques | | Sequence of Learning: Passport to Europe Textiles - seams, stiffening and strengthening, materials and fastenings | | Sequence of Learning : The of Food | Sequence of Learning : A Kingdom United |
| 1 | N/A | | | (+) To know that in some parts of the world, food is scarce.    Task: Children to gain an awareness of the lives of people around the world less fortunate than ourselves. Pupils describe the lives of some children living in the third world. | | Investigate similar products to the one to be made to give starting points for a design.  Research needs of user.  Draw/sketch products to help analyse and understand how products are made.  Identify the strengths and weaknesses of their design ideas in relation to purpose/user.  Investigate key events and individuals in design and technology. | | N/A | N/A |
| 2 | N/A | | | (+) To evaluate existing products.    Task: Children investigate and evaluate the contents of an aid parcel. Answering question prompts such as…  What is good about it?  How could it be improved?  How would they feel existing in this way? | | Develop vocabulary for tools, materials and their properties.  Understand seam allowance.  Join fabrics using running stitch, over sewing, blanket stitch.  Prototype a product using J cloths.  Use prototype to make pattern.  Explore strengthening and stiffening of fabrics.  Explore fastenings (inventors?) and recreate some.  Sew on buttons and make loops.  Use appropriate decoration techniques. | | N/A | N/A |
| 3 | N/A | | | (+) To understand the elements of a healthy balanced diet.    Task: Children to write and explain the essential elements of a balanced diet. | | Develop more than one design or adaptation of an initial design.  Decide which design idea to develop.  Plan a sequence of actions to make a product.  Record the plan by drawing using annotated sketches.  Use prototypes to develop and share ideas.  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.  Consider aesthetic qualities of materials chosen. | | N/A | N/A |
| 4 | N/A | | | (+) To analyse texture, taste and develop sensory vocabulary.    Task: Children to taste and respond to a variety of different foods e.g. root vegetables, lentils and rice. Pupils make notes on their textures and taste. | | Prepare pattern pieces as templates for their design.  Use tools with accuracy.  Select from techniques for different parts of the process.  Select from materials according to their functional properties.  Plan the stages of the making process.  Use appropriate finishing techniques. | |  |  |
| 5 | N/A | | | (+) To create a check list for my relief package to include.    Task: children to list and explain the essential elements that their relief package must include. | | Prepare pattern pieces as templates for their design.  Use tools with accuracy.  Select from techniques for different parts of the process.  Select from materials according to their functional properties.  Plan the stages of the making process.  Use appropriate finishing techniques. | | N/A | N/A |
| 6 | N/A | | | (+) To create a food package container.  .  (+) To make a food package to be delivered to a child in a third world country.  (+) To critically evaluate and respond to a design. | | Consider and explain how the finished product could be improved.  Discuss how well the finished product meets the design criteria of the user. | | N/A | N/A |
| Quiz Questions |  | | |  | |  | |  |  |

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| Year | | Year 5/6 | Subject | | Design and Technology | | | | Academic Year 2021/22 | | |
| Prior Knowledge | | | End Point | | | | | | | | Key Vocabulary |
| **Year 4 End Points**  Record the plan by drawing using annotated sketches.  Use prototypes to develop and share ideas.  Consider aesthetic qualities of materials chosen.  Use CAD where appropriate.  Prepare pattern pieces as templates for their design.  Select from techniques for different parts of the process.  Draw / sketch existing products in order to analyse and understand how products are made.  Identify the strengths and weaknesses of their design ideas in relation to purpose / user.  Consider and explain how the finished product could be improved.  Investigate key events and individuals in design and technology.  Use an increasingly appropriate technical vocabulary for tools materials and their properties.  Understand seam allowance.  Prototype a product.  Sew on buttons and make loops.  Strengthen frames with diagonal struts.  Measure and mark square section, strip and dowel accurately to 1cm.  Incorporate a circuit into a model.  Use electrical systems such as switches bulbs and buzzers.  Use ICT to control products.  Use linkages to make movement larger or more varied.  Make healthy eating choices – use the Eatwell plate.  Understand seasonality.  Know where and how ingredients are reared and caught.  Prepare and cook using different cooking techniques. | | | **Year 5 End Points**  Record ideas using annotated diagrams.  Use models, kits and drawings to help formulate design ideas.  Sketch and model alternative ideas.  Decide which design idea to develop.  Develop one idea in depth.  Select from and use a wide range of tools.  Cut accurately and safely to a marked line.  Select from and use a wide range of materials  Research and evaluate existing products.  Consider user and purpose.  Consider and explain how the finished product could be improved related to design criteria.  Investigate key events and individuals in design and technology.  Use the correct vocabulary appropriate to the project.  Join materials using appropriate methods.  Create 3=-D textile products using pattern pieces.  Understand pattern layout with textiles.  Cut strip wood, dowel, square section wood accurately to 1mm.  Build frameworks to support mechanisms.  Stiffen and reinforce complex structures.  Use mechanical systems such as cams, pulleys and gears.  Use electrical systems such as motors and switches.  Program, monitor and control using ICT.  Join and combine a widening range of ingredients.  Select and prepare foods for a particular purpose.  Know where and how ingredients are grown and processed. | | | **Year 6**  Plan the sequence of work.  Devise step by step plans which can be read / followed by someone else.  Use exploded diagrams and cross-sectional diagrams to communicate ideas.  Make prototypes.  Use researched information to inform decisions.  Produce detailed lists of ingredients / components / materials and tools.  Refine their product – review and rework / improve.  Identify the strengths and weaknesses of their design ideas.  Report using correct technical vocabulary.  Discuss how well the finished product meets the design criteria having tested on/discussed outcomes with the user.  Understand how key people have influenced design in a variety of contexts.  Investigate key events and individuals in design and technology.  Understand and apply the principles of a healthy and varied diet.  Choose ingredients to support healthy eating choices when designing their food products.  Prepare and cook a variety of mostly savoury dishes using a range of cooking techniques.  Use the correct vocabulary appropriate to the project.  Join materials using appropriate methods.  Create 3=-D textile products using pattern pieces.  Understand pattern layout with textiles.  Cut strip wood, dowel, square section wood accurately to 1mm.  Build frameworks to support mechanisms.  Stiffen and reinforce complex structures.  Use mechanical systems such as cams, pulleys and gears.  Use electrical systems such as motors and switches.  Program, monitor and control using ICT. | | | | | design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype  function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, prototype  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 |
| Assessment Questions |
|  | Sequence of Learning: A kingdom United | | | Sequence of Learning: Food Glorious Food | | | Sequence of Learning: Design and Technology Earthlings | Sequence of Learning: Inventors and Inventions | | Sequence of Learning: Amazon Adventure | |
| 1 | N/A | | | LO: To understand that different festivals and celebrations have special foods. | | | N/A | LO: To investigate and evaluate everyday products or toys with moving am mechanisms. | | <https://www.data.org.uk/media/3221/primary-planning-links-september-2016.pdf>  LO: To investigate existing products, disassembling where possible, to explore the pattern-making process and joining methods. | |
| 2 | N/A | | | LO: To understand the importance of healthy eating – Jamie Oliver. | | | N/A | LO: To investigate different types of cam mechanisms. | | LO: To research the prospective user’s requirements. Present a design specification with sketches. | |
| 3 | N/A | | | LO: To design and make an attractive meal to be eaten at a celebration by a child from a variety of countries and cultures.  Mexico | | | N/A | LO: To investigate ways of strengthening structures for a moving toy. | | LO: To make a bag which carries an item of equipment for an explorer. | |
| 4 | N/A | | | LO: To design and make an attractive meal to be eaten at a celebration by a child from a variety of countries and cultures.  Italy | | | N/A | LO: To be able to design a moving toy with a cam mechanism. | | As above | |
| 5 | N/A | | | LO: To design and make an attractive meal to be eaten at a celebration by a child from a variety of countries and cultures.  China | | | N/A | LO: To be able to follow a design to create a moving toy with a cam mechanism. | | As above | |
| 6 | N/A | | | LO: To design and make an attractive meal to be eaten at a celebration by a child from a variety of countries and cultures.  India | | | N/A | LO: To be able to evaluate a finished moving toy. | | LO: To present the product to the 'user' and evaluate together against the design criteria. | |
| Quiz Questions |  | | |  | | |  |  | |  | |

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| Year | | Year 6 | Subject | Design and Technology | | | Academic Year 2021/22 | |
| Prior Knowledge | | | End Point | | | | Key Vocabulary | |
| **Year 5 End Points**  Record ideas using annotated diagrams.  Use models, kits and drawings to help formulate design ideas.  Sketch and model alternative ideas.  Decide which design idea to develop.  Develop one idea in depth.  Select from and use a wide range of tools.  Cut accurately and safely to a marked line.  Select from and use a wide range of materials  Research and evaluate existing products.  Consider user and purpose.  Consider and explain how the finished product could be improved related to design criteria.  Investigate key events and individuals in design and technology.  Use the correct vocabulary appropriate to the project.  Join materials using appropriate methods.  Create 3=-D textile products using pattern pieces.  Understand pattern layout with textiles.  Cut strip wood, dowel, square section wood accurately to 1mm.  Build frameworks to support mechanisms.  Stiffen and reinforce complex structures.  Use mechanical systems such as cams, pulleys and gears.  Use electrical systems such as motors and switches.  Program, monitor and control using ICT.  Join and combine a widening range of ingredients.  Select and prepare foods for a particular purpose.  Know where and how ingredients are grown and processed. | | | **Year 6**  Plan the sequence of work.  Devise step by step plans which can be read / followed by someone else.  Use exploded diagrams and cross-sectional diagrams to communicate ideas.  Make prototypes.  Use researched information to inform decisions.  Produce detailed lists of ingredients / components / materials and tools.  Refine their product – review and rework / improve.  Identify the strengths and weaknesses of their design ideas.  Report using correct technical vocabulary.  Discuss how well the finished product meets the design criteria having tested on/discussed outcomes with the user.  Understand how key people have influenced design in a variety of contexts.  Investigate key events and individuals in design and technology.  Understand and apply the principles of a healthy and varied diet.  Choose ingredients to support healthy eating choices when designing their food products.  Prepare and cook a variety of mostly savoury dishes using a range of cooking techniques.  Use the correct vocabulary appropriate to the project.  Join materials using appropriate methods.  Create 3=-D textile products using pattern pieces.  Understand pattern layout with textiles.  Cut strip wood, dowel, square section wood accurately to 1mm.  Build frameworks to support mechanisms.  Stiffen and reinforce complex structures.  Use mechanical systems such as cams, pulleys and gears.  Use electrical systems such as motors and switches.  Program, monitor and control using ICT. | | | | function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, prototype  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 | |
| Assessment Questions | |
|  | Sequence of Learning : Survival | | Sequence of Learning : Britten’s got talent | | Sequence of Learning: Heroes and Villains | Sequence of Learning : Super Sleuth | | Sequence of Learning : Oh I do like to be beside the seaside |
| 1 | N/A | | N/A | | To research Jamie Oliver and his contribution to school dinners. | N/A | | To research and evaluate existing products. |
| 2 | N/A | | N/A | | To explore recipes and recipes and create my own balanced meal. | N/A | | To investigate mechanical systems. |
| 3 | N/A | | N/A | | To prepare and cook a healthy balanced meal. | N/A | | To design a product that includes lights and one moving component. |
| 4 | N/A | | N/A | | To prepare and cook a healthy balanced meal. | N/A | | To construct a supporting structure. |
| 5 | N/A | | N/A | | To prepare and cook a healthy balanced meal. | N/A | | To combine and secure all components. |
| 6 | N/A | | N/A | | To evaluate the preparation and cooking of a balanced meal. | N/A | | To evaluate a product against a design criteria. |
| Quiz Questions |  | |  | |  |  | |  |