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| D:\Blyton School Logo.jpgBlyton cum Laughton Church of England Primary SchoolReading-Inspired Curriculum CURRICULUM KNOWLEDGE & SKILLS PROGRESSION: DESIGN and TECHNOLOGY Subject Responsibility: Mr Duke  |
| Olive EYFS |
| Design & Develop(Developing, planning and communicating ideas) | * Select appropriate resources
* Use gestures, talking and arrangements of materials and components to show design
* Use contexts set by the teacher and myself
* Use language of designing and making (join, build, shape, longer, shorter, heavier etc.)
 |
| Making(Working with tools, equipment, materials and components to make quality products) | * Construct with a purpose, using a variety of resources
* Use simple tools and techniques
* Build / construct with a wide range of objects
* Select tools & techniques to shape, assemble and join
* Replicate structures with materials / components
* Discuss how to make an activity safe and hygienic
* Record experiences by drawing, writing, voice recording
* Understand different media can be combined for a purpose
 |
| Product & Evaluation(Evaluating processes and products) | * Adapt work if necessary
* Dismantle, examine, talk about existing objects/structures
* Consider and manage some risks
* Practise some appropriate safety measures independently
* Talk about how things work
* Look at similarities and differences between existing objects / materials / tools
* Show an interest in technological toys
* Describe textures
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| Ivy Year 1/2 Cycle 1 | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
|  | See the source image**Linked text: Man on the Moon****Outcome: Space Vehicle Design – Can you help Bob return home?**  |  | **Linked text:** 29 Best Picture Books about Food images | Books, Childrens books ...**Oliver’s Fruit Salad****Outcome: A Fruit Salad including a range of healthy foods and prepared using appropriate techniques** |  | **Linked text:** Image result for the dinosaurs of waterhouse hawkins**The Dinosaurs of Waterhouse Hawkins** **Outcome: A 3D model of a Dinosaur Sculpture Park** |
| Extraordinary Lives |  |  |  |  |  | **CREATOR: Waterhouse Hawkins** |
| Design & Develop(Developing, planning and communicating ideas)  | * Begin to draw on their own experience to help generate ideas and research conducted on criteria.
* 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.
* Begin to develop their ideas through talk and drawings.
* Make templates and mock ups of their ideas in card and paper or using ICT.
 |
| Key vocabulary | plan • prepare • design • materials • ideas • use • model  |
| Making(Working with tools, equipment, materials and components to make quality products)  | * Begin to make their design using appropriate techniques.
* Begin to build structures, exploring how they can be made stronger, stiffer and more stable.
* Explore and use mechanisms (for example, levers, sliders , wheels and axles), in their products
* With help measure, mark out, cut and shape a range of materials.
* Explore using tools e.g. scissors and a hole punch safely.
* Begin to assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape.
* Begin to use simple finishing techniques to improve the appearance of their product.
 |
| Key vocabulary | * fast • slow • faster • slower • up • down • turn •wind-up • design • draw • sketch • tools • fix • glue • attach • brick • wood • stone • cloth • metal • foam • felt • paper • tissue • newspaper • cardboard • string • wool • clay • scissors • glue • tape • cut • stick • decorate
 |
| Product & Evaluation(Evaluating processes and products)  | * Start to evaluate their product by discussing how well it works in relation to the purpose (design criteria).
* When looking at existing products explain what they like and dislike about products and why.
* Begin to evaluate their products as they are developed, identifying strengths and possible changes they might make.
 |
| Key vocabulary | * change • improve • prefer • useful • unsuccessful • future • progress • evaluate
 |
| Food and Nutrition  | * Begin to understand that all food comes from plants or animals.
* Explore the understanding that food has to be farmed, grown elsewhere (eg 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.
* Know how to prepare simple dishes safely and hygienically, without using a heat source.
* Know how to use techniques such as cutting, peeling and grating.
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| Key vocabulary | * healthy • unhealthy • source • fruit • vegetables • clean • safe • dirty • unsafe • amount • ingredients • recipe • weight • vegetarian
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| Ivy Year 1/2 Cycle 2 | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| See the source image**Linked text: The Great Fire of London: Anniversary edition of The Great Fire of 1666****Outcome: A 3D model of a house from the time** | **Christmas Industry Week:** **Design, make and evaluate a product to sell at the Christmas Fayre** | See the source image**Linked text:** **Florette****Outcome: A Bug Hotel** **made from a range of natural materials** |  |  | See the source image**Linked text:** **What Mr Darwin Saw****Outcome: An animal puppet made from a range of fabrics and joining techniques** |
| Extraordinary Lives |  |  |  |  |  |  |
| Design & Develop(Developing, planning and communicating ideas)  | * 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.
* Identify 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.
* Develop their ideas through talk and drawings and label parts. Make templates and mock ups of their ideas in card and paper or using IT.
 |
| Key vocabulary | * plan • prepare • design • materials • ideas • use • model • development • market research • survey • template
 |
| Making(Working with tools, equipment, materials and components to make quality products) | * Begin to select tools and materials; use correct vocabulary to name and describe them.
* Build structures, exploring how they can be made stronger, stiffer and more stable.
* With help measure, cut and score with some accuracy.
* Start to assemble, join and combine materials in order to make a product.
* Demonstrate how to cut, shape and join fabric to make a simple product. Use basic sewing techniques.
* Start to choose and use appropriate finishing techniques.
 |
| Key vocabulary | * fast • slow • faster • slower • up • down • turn •wind up • design • draw • sketch • tools • fix • glue • attach • features • brick • wood • stone • cloth • metal • foam • felt • paper • tissue • newspaper • cardboard • string • wool • clay • scissors • glue • tape • cut • stick • decorate
 |
| Product & Evaluation(Evaluating processes and products) | * Evaluate their work against their design criteria.
* Look at a range of existing products and explain what they like and dislike about them and why.
* Start to evaluate their products as they are developed, identifying strengths and changes they might make.
* With confidence talk about their ideas, saying what they like and dislike about them.
 |
| Key vocabulary | * change • improve • prefer • useful • unsuccessful • future • progress • modify • alter • adapt • original • finished article • evaluate • graphics
 |
| Food and Nutrition | * Understand that all food comes from plants or animals.
* Know that food has to be farmed, grown elsewhere (e.g home) or caught.
* Understand how to name and sort foods into the five groups in ‘The Eat Well Plate.’
* Demonstrate how to prepare simple dishes safely and hygienically, without using a heat source.
* Demonstrate how to use techniques such as cutting, peeling and grating.
 |
| Key vocabulary | * healthy • unhealthy • source • fruit • vegetables • clean • safe • dirty • unsafe • amount • ingredients • recipe • weight • nutrients • vegetarian • dietary requirements
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| Willow Year 3/4 | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1 & 2** |
|  | **CYCLE 1:** **Outcome: Pop-up Book Illustration (Podkin)** **CYCLE 1 & 2 Christmas Industry Week:** **Design, make and evaluate a product to sell at the Christmas Fayre – wrapping paper designs**  |  | See the source image**CYCLE 2:** **Linked text:** **The Defenders****Outcome: A magnet game** | https://images-na.ssl-images-amazon.com/images/I/61gY7EnvnhL._SX480_BO1,204,203,200_.jpgImage result for how to train your dragon book**CYCLE 1:** **Linked text:** **Viking Voyagers/How to Train Your Dragon: Textiles****Outcome: A Viking age bag** **https://images-na.ssl-images-amazon.com/images/I/51UtaE3X7WL._SX396_BO1,204,203,200_.jpg****CYCLE 2:** **Linked text: Anglo-Saxon Britain** **Outcome: An Anglo-Saxon rune bag** |
| Extraordinary Lives |  |  |  |  | **CREATOR**: Jules Verne (CYCLE 2)  |
| Design & Develop(Developing, planning and communicating ideas) | * **Y3** With growing confidence generate ideas for an item, considering its purpose and the user/s.
* **Y4**  Start to generate ideas, considering the purposes for which they are designing – link with mathematics and science
* **Y3** Start to order the main stages of making a product.
* **Y3** Identify a purpose and establish criteria for a successful product.
* **Y3** Understand how well products have been designed, made, what materials have been used and the construction technique.
* **Y3 & Y4** Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.
* **Y3** Start to understand whether products can be recycled or reused.
* **Y3** Know to make drawings with labels when designing.
* **Y4** Confidently makelabelled drawings from different views showing specific features
* **Y3 & Y4** When planning, explain their choice of materials and components including function and aesthetics.
* **Y4** 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 attempt fails.
* **Y4** When planning, consider the views of others, including intended users, to improve their work
 |
| Key vocabulary | * plan • organise • prototype • initial ideas • criteria • diagrams • labels • brief • product • consumer • customer • target audience • purpose
 |
| Making(Working with tools, equipment, materials and components to make quality products) | * **Y3** Select a wider range of tools and techniques for making their product e.g. construction materials and kits, textiles, food ingredients, mechanical components and electrical components.
* **Y3** Start to work safely and accurately using a range of tools
* **Y4** Select a wider range of tools and techniques for making their product safely.
* **Y4** Know how to measure, mark our, cut and shape a range of materials, using appropriate tools, equipment and techniques.
* **Y3** Explain their choice of tools and equipment in relation to the skills and techniques they will be using.
* **Y3** Start to understand that mechanical and electrical systems have an input process and output.
* **Y3** Know how simple electrical circuits and components can be used to create functional products
* **Y3** Start to understand that mechanical systems such as levers and linkages or pneumatic systems create movement.
* **Y4** Know how mechanical systems such as cams or gears create movement.
* **Y3** Measure, mark out, cut, score and assemble components with more accuracy.
* **Y3** Start to measure, tape or pin, cut and join fabric with some accuracy.
* **Y4** Demonstrate how to measure, tape or pin, cut and join fabric with some accuracy.
* **Y4** Understand how to reinforce and strengthen a 3D framework
* **Y3** Start to think about their ideas as they progress and be willing to change things if this helps to improve their work.
* **Y4** Begin to use finishing techniques to strengthen and improve the appearance of their product using a range of equipment.
 |
| Key vocabulary | * materials • mould • liquid • solid • form • shape • adhesive • hand-made • packaging • presentation • machine made • durable
 |
| Product & Evaluation(Evaluating processes and products) | * **Y3** Start to evaluate their product against original design criteria eg how well it meets its intended purpose.
* **Y4** Evaluate their products carrying out appropriate tests
* **Y4** Start to evaluate their work both during and at the end of an assignment
* **Y3** Begin to disassemble and evaluate products and consider the views of others to improve them.
* **Y4** Be able to disassemble and evaluate familiar products and consider the views of others to improve them
* **Y3 & Y4**  Evaluate the key designs of individuals in design and technology has helped shape the world
 |
| Key vocabulary | * assess • edit • improve • alter • outcome • develop • test • analyse • effective • design criteria • models • quality • function
 |
| Food and Nutrition | * **Y3** Start to know (**Y4** Understand…) that food is grown, reared and caught in the UK, Europe and the wider world
* **Y3 & Y4** Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source
* **Y3** Begin to understand how to (**Y4** Know how to…) use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking
* **Y3** Start to understand (**Y4** Know…) that a healthy diet is made up from a variety and balance of different food and drink, as depicted in ‘The Eat Well Plate’.
* **Y3** Begin to know that to be active and healthy, food and drink are needed to provide energy for the body.
 |
| Key vocabulary | * healthy • unhealthy • balanced • vitamins • disease • nutrition • healthy eating • hygiene • diet • grams • storage • presentation • taste • texture • flavour • disinfect • bacteria
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| Fig Year 4/5 | **Autumn 1** | **Autumn 2** | **Spring 1 & 2** | **Summer 1 & Summer 2** |
| See the source image**CYCLE 1:****Linked text:** **The Invention of Hugo Cabret** **Outcome: A Zoetrope inspired by the films of Georges Melies** | **CYCLE 1 & 2 Christmas Industry Week****Design, make and evaluate a product to sell at the Christmas Fayre: Use a graphics package to create Victorian style gift cards** | See the source image**CYCLE 2:** **Linked text: Guitar Genius****Outcome: A musical instrument**  | **CYCLE 1:** https://cdn.faber.co.uk/media/catalog/product/cache/1/image/325x/040ec09b1e35df139433887a97daa66f/2/6/26719.books.origjpg.jpg**Linked text:** **Secrets of a Sun King** **Outcome: A vehicle with pulleys and levers to move pyramid stones** |
| Extraordinary Lives | **CREATOR**: Georges Melies |  |  |  |  |
| Design & Develop(Developing, planning and communicating ideas) | * **Y4**  Start to generate ideas, considering the purposes for which they are designing – link with mathematics and science
* **Y5** Start to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces
* **Y5** Begin to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose
* **Y4** Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.
* **Y4** Confidently makelabelled drawings from different views showing specific features
* **Y5** Draw up a specification for their design – link with mathematics and science
* **Y4** When planning, explain their choice of materials and components including function and aesthetics.
* **Y4** 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 attempt fails.
* **Y5** Start to understand how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose
* **Y5** Use results of investigations, information sources, including ICT when developing design ideas.
* **Y4** When planning, consider the views of others, including intended users, to improve their work
 |
| Key vocabulary | * plan • organise • prototype • initial ideas • criteria • diagrams • labels • annotate • brief • product • consumer • customer • target audience • purpose • application
 |
| Making(Working with tools, equipment, materials and components to make quality products) | * **Y4** Select a wider range of tools and techniques for making their product safely.
* **Y5** With growing confidence select appropriate materials, tools and techniques.
* **Y4** Know how to measure, mark our, cut and shape a range of materials, using appropriate tools, equipment and techniques.
* **Y4** Demonstrate how to measure, tape or pin, cut and join fabric with some accuracy.
* **Y5** Begin to measure and mark out more accurately
* **Y4** Understand how more complex electrical circuits and components can be used to create functional products.
* **Y5** Understand that mechanical and electrical systems have an input, process and output
* **Y4** Know how mechanical systems such as cams or gears create movement.
* **Y4** Understand how to reinforce and strengthen a 3D framework
* **Y4** Begin to use finishing techniques to strengthen and improve the appearance of their product using a range of equipment.
* **Y5** With growing confidence apply a range of finishing techniques, including those from art and design
* **Y5** Demonstrate how to use skills in using different tools and equipment safely and accurately and with growing confidence cut and join with accuracy to ensure a good-quality finish to the product.
 |
| Key vocabulary | * materials • mould • liquid • solid • form • shape • adhesive • lattice • mass-produce • hand-made • packaging • presentation • machine made • dimensions • durable
 |
| Product & Evaluation(Evaluating processes and products) | * **Y4** Evaluate their products by carrying out appropriate tests
* **Y5** Start to evaluate a product against the original design specification and by carrying out tests
* **Y4** Start to evaluate their work both during and at the end of an assignment
* **Y5** Evaluate their work both during and at the end of an assignment
* **Y5** Begin to evaluate it personally and seek evaluation from others
* **Y4** Be able to disassemble and evaluate familiar products and consider the views of others to improve them
* **Y4 &** **Y5** Evaluate the key designs of individuals in design and technology has helped shape the world
 |
| Key vocabulary | * assess • edit • improve • alter • outcome • develop • test • analyse • effective • fit for purpose • design criteria • alternatives • models • quality • function
 |
| Food and Nutrition | * **Y4** Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source
* **Y5** Begin to understand that seasons may affect the food available
* **Y5** Understand how food is processed into ingredients that can be eaten or used in cooking
* **Y5** Start to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking
* **Y5** Begin to understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health
 |
| Key vocabulary | * healthy • unhealthy • balanced • vitamins • disease • nutrition • healthy eating • hygiene • diet • grams • storage • presentation • taste • texture • flavour • disinfect • bacteria
 |
| Clover Year 5/6  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1 & 2** |
|  | **CYCLE 1 & 2****Christmas Industry Week: Design, make and evaluate a product to sell at the Christmas Fayre**  |  | Hello Lighthouse: Amazon.co.uk: Sophie Blackall: Books**CYCLE 1:** **Linked text:** **Hello Lighthouse** **Outcome: A working lighthouse** Glow in the Dark: Nature's Light Spectacular - Another Read ...**CYCLE 2:** **Linked text:** **Nature’s Light Spectacular****Outcome: Pin-hole Camera** | Image result for The Wolf WilderImage result for the lost book of adventure childrens**CYCLE 1:** **Linked text: Wolf Wilder/ The Lost Book of Adventure** **Outcome:**  **Den design – building a den outside and put it to the test with a bucket of cold water****Outcome: Moving Toys - design a mechanism using cams and gears to create the movement of a wolf****CYCLE 2:** **Outcome: Moving Toys - design a mechanism using cams, gears. Hydraulics and pneumatics to create an Olympic themed toy****Food and Nutrition** **Outcome: Cooking savoury dishes** |
| Extraordinary Lives |  |  |  | **INNOVATOR:** Alhazen (CYCLE 2) |  |
| Design & Develop(Developing, planning and communicating ideas) | * **Y5** Start to generate, (**Y6** Generate,…) develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces
* **Y5** Begin to use (**Y6** Use…) research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose
* **Y5 & Y6** Draw up a specification for their design – link with mathematics and science
* **Y6** Identify the strengths and areas for development in their ideas and products
* **Y5** Start to understand (**Y6** Know…) how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose
* **Y5** Use results of investigations, information sources, including ICT when developing design ideas.
 |
| Key vocabulary | * plan • organise • prototype • initial ideas • criteria • diagrams • labels • annotate • brief • product • consumer • customer • target audience • purpose • application • constraints • client
 |
| Making(Working with tools, equipment, materials and components to make quality products) | * **Y5** With growing confidence (**Y6** Confidently…) select appropriate materials, tools and techniques.
* **Y6** Plan the order of their work, choosing appropriate materials, tools and techniques.
* **Y6** Suggest alternative methods of making if the first attempts fail.
* **Y6** Use tools safely and accurately
* **Y5** Begin to measure and mark out more accurately.
* **Y6** Understand that mechanical and electrical systems have an input, process and output.
* **Y6** Understand how mechanical systems such as cams, pulleys or gears create movement.
* **Y6** Know how more complex electrical circuits and components can be used to create functional products.
* **Y6** Assemble components to make working models.
* **Y6** Construct products using permanent joining techniques.
* **Y6** Know how to reinforce and strengthen a 3D framework
* **Y5** With growing confidence apply a range of finishing techniques, including those from art and design
* **Y6** Accurately apply a range of finishing techniques, including those from art and design
* **Y5** Demonstrate how to use skills in using different tools and equipment safely and accurately and with growing confidence cut and join with accuracy to ensure a good-quality finish to the product.
 |
| Key vocabulary | * materials • mould • liquid • solid • form • shape • adhesive • lattice • mass-produce • hand-made • packaging • presentation • machine made • dimensions • durable
 |
| Product & Evaluation(Evaluating processes and products) | * **Y5** Start to evaluate a product against the original design specification and by carrying out tests
* **Y6** Evaluate their products, identifying strengths and areas for development and carrying out appropriate tests.
* **Y6** Evaluate their work both during and at the end of an assignment
* **Y6** Evaluate against their original criteria and suggest ways that their product could be improved.
* **Y5** Begin to evaluate it personally and seek evaluation from others
* **Y5** Evaluate the key designs of individuals in design and technology has helped shape the world
* **Y6** Record their evaluations using drawings with labels
* **Y5 & Y6** Evaluate the key designs of individuals in design and technology has helped shape the world
 |
| Key vocabulary | * assess • edit • improve • alter • outcome • develop • test • analyse • effective • fit for purpose • design criteria • alternatives • models • quality • function • functionality
 |
| Food and Nutrition | * **Y6** Understand that seasons may affect the food available.
* **Y6** Understand how food is processed into ingredients that can be eaten or used in cooking
* **Y6** Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source
* **Y6** Know different food and drink contain different substances – nutrients, water and fibre – that are needed for health
 |
| Key vocabulary | * healthy • unhealthy • balanced • vitamins • disease • nutrition • healthy eating • hygiene • diet • cross contamination • grams • storage • presentation • taste • texture • flavour • disinfect • bacteria
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|  | **Olive (EYFS)** | **Fir (Year 1)** | **Ivy (Year 2)** | **End of KS1****expectations** | **Year Three****(Willow)** | **Year Four****(Willow/Fig)** | **Year Five****(Fig/Clover)** | **Year Six****(Clover)** | **End of KS2 expectations** |
| Technical Knowledge: Materials & Structure |  | \*begin to measure and join materials, with some support\*describe differences in materials \*suggest ways to make material/product stronger | \*measure materials\*describe some different characteristics of materials\*join materials in different ways\*use joining, rolling or folding to make it stronger\*use own ideas to try to make product stronger | \*Build structures, exploring how they can be made stronger, stiffer and more stable  | \*use appropriate materials\*work accurately to make cuts and holes\* join materials\*begin to make strong structures  | **\***measure carefully to avoid mistakes\*attempt to make product strong \*continue working on product even if original didn’t work\*make a strong, stiff structure | **\***select materials carefully, considering intended use of product and appearance \*explain how product meets design criteria\*measure accurately enough to ensure precision\*ensure product is strong and fit for purpose\*begin to reinforce and strengthen a 3D frame  | **\***select materials carefully, considering intended use of the product, the aesthetics and functionality. \*explain how product meets design criteria\* reinforce and strengthen a 3D frame | \*Apply their understanding of how to strengthen, stiffen and reinforce more *complex structures* |
| Technical Knowledge: Mechanisms |  | \*begin to use levers or slides  | \*use levers or slides \*begin to understand how to use wheels and axles | \*Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.  | \*select appropriate tools / techniques\*alter product after checking, to make it better\*begin to try new/different ideas\*use simple lever and linkages to create movement  | **\***select most appropriate tools / techniques \*explain alterations to product after checking it\*grow in confidence about trying new / different ideas. \*use levers and linkages to create movement | **\***refine product after testing\*grow in confidence about trying new / different ideas\*begin to use cams, pulleys or gears to create movement \*use pneumatics to create movement | **\***refine product after testing, considering aesthetics, functionality and purpose \*incorporate hydraulics and pneumatics \*be confident to try new / different ideas \*use cams, pulleys and gears to create movement  | \**Understand* and use mechanical systems in their products [for example, *gears, pulleys, cams,* levers and *linkages*]  |
| Technical Knowledge: Textiles |  |  | \*measure textiles\*join textiles together to make a product, and explain how I did it\*carefully cut textiles to produce accurate pieces\*explain choices of textile \*understand that a 3D textile structure can be made from two identical fabric shapes. |  | **\***join different textiles in different ways\*choose textiles considering appearance and functionality\*begin to understand that a simple fabric shape can be used to make a 3D textiles project | **\***think about user when choosing textiles\*think about how to make a product strong and look better\* begin to devise a template\*explain how to join things in a different way\*understand that a simple fabric shape can be used to make a 3D textiles project\*begin to use their own template | **\***think about user and aesthetics when choosing textiles\*think of a range of ways to join things\*begin to understand that a single 3D textiles project can be made from a combination of fabric shapes.\*make a prototype | **\***think about user’s wants/needs and aesthetics when choosing textiles\*make product attractive and strong\*use a range of joining techniques\*think about how product might be sold\*think carefully about what would improve product\*understand that a single 3D textiles project can be made from a combination of fabric shapes.  |  |
| Technical Knowledge: Food & Nutrition | \*Begin to understand some food preparation tools, techniques and processes \*Practise stirring, mixing, pouring, blending\*Discuss how to make an activity safe and hygienic\*Discuss use of senses\*Understand need for variety in food\*Begin to understand that eating well contributes to good health | \*describe textures\*wash hands & clean surfaces \*think of interesting ways to decorate food \*say where some foods come from, (i.e. plant or animal)\*describe differences between some food groups (i.e. sweet, vegetable etc.)\*discuss how fruit and vegetables are healthy\*cut, peel and grate safely, with support | \*explain hygiene and keep a hygienic kitchen\*describe properties of ingredients and importance of varied diet\*say where food comes from (animal, underground etc.)\*describe how food is farmed, home-grown, caught\*draw eat well plate; explain there are groups of food \*describe “five a day”\*cut, peel and grate with increasing confidence | \*Use the basic principles of a healthy and varied diet to prepare dishes\*Understand where food comes from.  | **\***carefully select ingredients \*use equipment safely\*make product look attractive \*think about how to grow plants to use in cooking \*begin to understand food comes from UK and wider world\*describe how healthy diet= variety/balance of food/drinks\*explain how food and drink are needed for active/healthy bodies.\*prepare and cook some dishes safely and hygienically \*grow in confidence using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking | **\***explain how to be safe/hygienic\*think about presenting product in interesting/ attractive ways\*understand ingredients can be fresh, pre-cooked or processed\*begin to understand about food being grown, reared or caught in the UK or wider world\*describe eat well plate and how a healthy diet=variety / balance of food and drinks\*explain importance of food and drink for active, healthy bodies\*prepare and cook some dishes safely and hygienically\*use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking | **\***explain how to be safe / hygienic and follow own guidelines \*present product well - interesting, attractive, fit for purpose\*begin to understand seasonality of foods\*understand food can be grown, reared or caught in the UK and the wider world\*describe how recipes can be adapted to change appearance, taste, texture, aroma\*explain how there are different substances in food / drink needed for health \*prepare and cook some savoury dishes safely and hygienically including, where appropriate, use of heat source\* use range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. | **\***understand a recipe can be adapted by adding / substituting ingredients\*explain seasonality of foods\*learn about food processing methods \*name some types of food that are grown, reared or caught in the UK or wider world \*adapt recipes to change appearance, taste, texture or aroma.\*describe some of the different substances in food and drink, and how they can affect health\*prepare and cook a variety of savoury dishes safely and hygienically including, where appropriate, the use of heat source. \*use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. | \**Understand and apply* the principles of a healthy and varied diet *\*Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques* \**Understand seasonality,* and know where and *how a variety of ingredients are grown, reared, caught and processed.*  |
| Technical Knowledge: Electrical Systems |  |  |  |  | \*use simple circuit in product\*learn about how to program a computer to control product.  | \*use number of components in circuit\*program a computer to control product | \*incorporate switch into product\*confidently use number of components in circuit**\***begin to be able to program a computer to monitor changes in environment and control product | \*use different types of circuit in product\* think of ways in which adding a circuit would improve product\* program a computer to monitor changes in environment and control product | *\*Understand and use electrical systems in their products [for example, series circuits* |