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| **Year 1****DT** | **Designing** | **Making**  | **Evaluating** |
| **Eat more fruit and vegetables**  | Identify a range of fruit and vegetables Describe the taster, texture and smell of different fruits and vegetables. Conduct a simple survey. Understand that fruit and vegetables are needed as part of a healthy diet. State what products they are designing and making Say whether their product is for themselves or other users Use simple design criteria to help develop their ideas  | Wash hands and make sure surfaces are clean.Prepare simple dishes hygienically and safely without a heat sourceUse cooking techniquessuch as: cutting, peeling and grating |  Talk about their design ideas and what they have madeMake simple judgements of how the product met their design ideas. |
| **Moving minibeasts** | Represent ideas through talking and drawing.Discuss what their steps for making could be.Understand what the product is and who it is for.Explain what product they will be designing and making.Explain who their product will be used by.Describe what their product will be used for.Discuss what difficulties they may have making their product.  | Choose suitable tools for makingFollow safety procedures.Use a range of mechanisms. Measure, mark, cut materials using scissors.Join, assemble and combine materials and components. Make a product that moves and say why they have chosen a moving part. | Talk about their design ideas and what they have madeMake simple judgements of how the product met their design ideas. |
| **Stable Structures** | Communicate their ideas through discussion. Compare plans and photographs, discussing what is the same and different about them. Communicate design ideas through drawing.Explain what product they will be designing and making and discuss the purpose of their design.   | Select appropriate materials thinking about the purpose of their product. Follow their design plan to make a product. Follow safety procedures.Measure, mark, cut materials using scissors.Join, assemble and combine materials.  | Evaluate a range of existing products by;* Understanding what a product is and who it is for.
* Understanding how a product works and how it is used.
* Identifying where you might find this product.

Talk about their design ideas and what they have madeMake simple judgements of how the product met their design ideas.Use technical language when talking about their product.  |

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| **Year 2****DT** | **Designing** | **Making**  | **Evaluating** |
| **Puppets**  | Understand what a product is and who it is for.Understand how a product works and how it is used.Identify where you might find this product.Identify the materials used to make the product.Express an opinion about a product.Create templates/pattern pieces and explore materials whilst developing ideas.Explain what product they will be designing and making.Explain who their product will be used by.Explain why their product is suitable for the intended user. Use simple design criteria to help develop ideas. | Use a running stitch and/or over stitch to join two pieces of fabric together.Use a needle and thread to attach buttons and other features to material.Know how to work safely with a variety of sharp tools, such as needles and scissors.Measure, mark, cut and shape materials and componentsUse finishing techniques, including skills learnt in Art.  | Talk about their design ideas and what they have madeMake simple judgements of how the product met their design ideasSuggest how their product could be improved. |
| **Vehicles** | Understand what a product is and who it is for.Understand how a product works and how it is used.Identify the materials used to make the product.Express an opinion about a product.Create labelled diagrams of designs. Explain what product they will be designing and making.Explain who their product will be used by.Explain why their product is suitable for the intended user. Use simple design criteria to help develop ideas. | Use different ways of attaching wheels and axles to chassis. Choose suitable tools for making whilst explaining why they should be usedFollow safety proceduresMeasure, mark, cut and shape materials and componentsIdentify ways in which they could improve their products and amend accordingly.Join materials as part of a moving product.  | Talk about their design ideas and what they have madeMake simple judgements of how the product met their design ideasSuggest how their product could be improved.  |
| **Perfect Pizzas** | Understand that food comes from plants or animalsUnderstand that food has to be farmed, caught, or grown.Explain what it means to be hygienic.Sort foods into the 5 groups using The Eatwell Plate. Identify that people should eat at least 5 portions of fruit and vegetables a dayDiscuss personal preference when designing products. Represent ideas through talking, drawing and writing.  | Describe the texture of food. Prepare simple dishes hygienically and safely without a heat sourceUse cooking techniquessuch as: cutting, peeling and grating | Talk about their design ideas and what they have madeMake simple judgements of how the product met their design ideasSuggest how their product could be improved. |



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| **Year 3****DT** | **Designing** | **Making**  | **Evaluating** |
| **Storybooks** | Recognise products that contain lever and linkage systems.Explain why a particular mechanism has been used for a particular purposeUse technical vocabulary to describe lever and linkage systems. Explore existing products identifying who made the product, when it was made and what its purpose is.Use existing products to identify why materials have been chosen.Share and clarify ideas through discussion. Order the main stages of making. Choose materials to use based on the suitability of their properties. Use diagrams and annotated sketches.  | Cut and shape materials with some precision to make their mechanisms work. Choose suitable tools for making whilst explaining why they should be used.Use design criteria whilst making.Follow safety procedures. Measure, mark, cut and shape materials and components with some accuracyJoin, assemble and combine materials and components with some accuracy.Use finishing techniques, including skills learnt in Art with some accuracy | Evaluate how well an existing product has been designed and made and works. Evaluate the effectiveness of their designs and make choices based on these evaluations. Use design criteria to evaluate product – identifying both strengths and areas for development.Consider the views of others, including intended user, whilst evaluating product.  |
| **British Inventors**  | Understand how British inventions have impacted on people’s lives. Know about some famous British inventions and their work. Research famous inventions. Choose materials to use based on suitability of their properties. Explain how to reinforce materials to build a solid structure. Use diagrams and annotated sketches.  | Use a range of techniques to reinforce materials. Use a range of techniques to waterproof materials. Use a design criteria when making.  | Evaluate the effectiveness of existing products, thinking about purpose and design. Use design criteria to evaluate product – identifying both strengths and areas for development. |
| **Light-Up Signs**  | Use a design criteria to design products. Share and clarify ideas through discussion. Order the main stages of making. Choose materials to use based on the suitability of their properties. Adapt designs considering limitations. Use diagrams and annotated sketches.  | Select tools and equipment suitable for the task.Explain their choice of tools and equipment in relation to the skills and techniques they will be using.Select materials and components suitable for the task.Explain their choice of materials and components according to functional properties and aesthetic qualities.Use computer-aided technology within their designs. Make a product that uses both electrical and mechanical components. Use a simple circuit.  | Use design criteria to evaluate product – identifying both strengths and areas for development.Consider the views of others, including intended user, whilst evaluating product.  |



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| **Year 4****DT** | **Designing** | **Making**  | **Evaluating** |
| **Seasonal Stockings** | Explore existing products by; * Identifying who made the product, when it was made and what its purpose is
* Identifying why materials have been chosen
* Identifying whether products can be recycled or reused.

Understand intended users and their own product by:* Describing the purpose of their product.
* Identifying design features that will appeal to intended users.
* Developing their own design criteria and use for planning ideas
* Generating realistic ideas that meet needs of user and take into account availability of resources.

Share and clarity ideas through discussionOrder the main stages of making. Use diagrams, annotated sketches and computer Represent ideas in diagrams, annotated sketches, cross-sectional drawings computer based programmes (where appropriate) | Thread a needle and secure a knot.Identify different sewing stiches. Join 2 pieces of fabric together using a sewing stitch. Apply a range of finishing techniques, including those from art and design, with some accuracy. Use design criteria whilst makingFollow safety procedures. | Evaluate existing products by:* Evaluating how well the product has been designed and made.
* Evaluating how well the product works.
* Evaluating how well the product achieves its purpose.

Evaluate their own product by:* Using design criteria to evaluate product – identifying both strengths and areas for development
* Evaluating the way their product looks and the way that it works.
* Considering the views of others, including intended user, whilst evaluating product
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| **Making Mini Greenhouses**  | Explore existing products by; * Identifying what the purpose of the product is
* Identifying why materials have been chosen

Identify stable structures and what makes them stable. Discuss how structures can be make more and less stable. Choose materials to use based on suitability of their properties. Decide how to join materials to make an airtight seal.Follow a specific design criteria when designing. Share and clarify design ideas through discussion. Represent ideas in diagrams, annotated sketches, cross-sectional drawings computer based programmes (where appropriate) | Choose suitable tools for making whilst explaining why they should be used.Use design criteria whilst makingFollow safety procedures. Measure, mark, cut and shape materials and components with some accuracy.Join, assemble and combine materials and components with some accuracy.Alter their product as they go.  | Evaluate their own product by:* Using design criteria to evaluate product – identifying both strengths and areas for development
* Evaluating the way their product looks and the way that it works.
* Considering the views of others, including intended user, whilst evaluating product
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| **Seasonal Food**  | Understanding food and food preparation by:* Knowing that the seasons can affect food produce.

Sort foods into the 5 groups using The Eatwell Plate and identify that this makes up a healthy diet.Identify that food and drink are needed to provide energy for a healthy and active lifestyle | Prepare simple dishes hygienically and safely, using a heat source.  Present their food product in an interesting way. Use cooking techniques such as: weighing, chopping, peeling, grating slicing, mixing, spreading, kneading and baking |  |

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| **Year 5****DT** | **Designing** | **Making**  | **Evaluating** |
| **Building Bridges** | Identify different methods of construction and discuss benefits of different designs. Use prototypes to refine and develop design ideas. Produce lists for the tools, equipment and materials they will be using.Choose materials to use based on suitability of their properties. Represent ideas in diagrams, annotated sketches, cross-sectional drawings, exploded diagrams or computer aided design (where appropriate). Develop their own design criteria and use for planning ideasGenerate innovative ideas that meet needs of user and take into account availability of resources.Work collaboratively taking into account the views of others.  | Use a range of different techniques when building and discuss why different techniques may be more effective. Follow a design criteria when making. Explain their choice of tools and equipment in relation to the skills and techniques they will be using.Measure, mark, cut and shape materials and components accurately.Join, assemble and combine materials and components accurately.Demonstrate problem solving skills when encountering a mistake or practical problem.Refine ideas through testing products.  | Evaluate their own work and ideas against the design criteria and product specification. Critically evaluate the work of others, offering constructive feedback and explaining limitations. Use design criteria to evaluate product – identifying both strengths and areas for developmentEvaluate products by testing certain aspects from the design criteria. Evaluate their product based on functionality. Consider the views of others whilst evaluating product |
| **Chinese Inventions** | Know about some major inventions and how they have changed the world. Modify designs for suit their needs. Describe the purpose of their product.Identify design features that will appeal to intended users.Select suitable materials considering the properties of different materials. Use prototypes to develop and test ideas. Generate innovative ideas that meet needs of user and take into account availability of resources.Generate and follow their own design criteria from a design brief. Represent ideas in diagrams, annotated sketches, cross-sectional drawings, exploded diagrams or computer aided design (where appropriate).  |  Follow safety procedures when making. Demonstrate problem solving skills when encountering a mistake or problem. Choose suitable tools for making whilst explaining why they should be used.Use design criteria whilst making.Measure, mark, cut and shape materials and components accurately.Join, assemble and combine materials and components accurately.Use finishing techniques, including skills learnt in Art accurately. Make changes to design during making process and make note of these changes and reasons behind them.  | Evaluate the properties of existing materials. Evaluate an existing product by considering:* how well products have been designed
* why materials have been chosen
* how well products work
* how well products achieve their purposes
* how well products meet user needs and wants

Evaluate prototype products to help inform design choices. Evaluate their own product by:* Using design criteria to evaluate product – identifying both strengths and areas for development
* Evaluating their product based on appearance and functionality.
* Considering the views of others, including intended user, whilst evaluating product
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| **Fashion and Textiles** | Identify who made the product, when it was made and what its purpose is.Identify what the product is made from and how environmentally friendly the materials are.Identify who their product is made from and what its purpose is. Represent ideas in diagrams and annotated sketches. Use pattern pieces to aid design.  | Use a variety of functional and decorative sewing techniques. Thread a needle and tie threads. Use simple stitching to create hems.Join fabric using hand-stitching. Measure, mark, cut and shape materials and components accurately.Use finishing techniques, including skills learnt in Art accurately.  | Use design criteria to evaluate product – identifying both strengths and areas for developmentEvaluate their product based on appearance and functionality. Consider the views of others, including intended user, whilst evaluating product |
| **Year 6****DT** | **Designing** | **Making**  | **Evaluating** |
| **Bird House Builders** | Identify who made the product, when it was made and what its purpose is.Identify what the product is made from and how environmentally friendly the materials are.Identify the method of construction.Represent ideas in diagrams, annotated sketches, cross-sectional drawings and exploded diagrams. Create a design description for their product. Identify design features that will appeal to intended users.Produce lists for the tools, equipment and materials they will be usingChoose materials to use based on suitability of their properties and aesthetic qualities.Share and clarify ideas through discussion.  | Choose suitable tools for making whilst explaining why they should be usedUse design criteria whilst makingFollow safety procedures. Measure, mark, cut and shape materials and components accuratelyJoin, assemble and combine materials and components accuratelyDemonstrate problem solving skills when encountering a mistake or practical problem.Make amendments to plan to make construction easier. Use finishing techniques that involve a number of steps, including skills learnt in Art accurately.  | Use design criteria to evaluate own and others product – looking at quality of end product and design and whether it is fit for its intended purposeConsider the views of others whilst evaluatingCritically evaluate the quality of their design process. How well did they plan, design and make? |
| **Burgers** | Sort foods into the 5 groups using The Eatwell Plate and identify that this makes up a healthy dietIdentify that food and drink provide certain nutritional and health benefits which support a healthy lifestyleIdentify that people should eat at least 5 portions of fruit and vegetables a dayExplain how their product should be stored with reasons. Begin to pair complimentary flavours together and think about taste profile when choosing ingredients.Understand which foods are reared, caught, or grown and that this happens in the UK and across the globeUnderstand that sometimes raw ingredients need to be processed before they can be used in cooking (eg. De-feathering a chicken)Create a design description for their productHighlight the impact of time, resources and cost within their design ideasIdentify the needs, wants preferences and value of particular individuals and groups. Represent ideas in diagrams, annotated sketches.  | Prepare simple dishes hygienically and safely, where needed with a heat source. Use cooking techniques such as: chopping, peeling, grating slicing, mixing. Follow a recipe and instructions accurately when making.  | Evaluate food and suggest ways in which the flavour or appearance could be changed by changing the recipe. Use a sensory profile to evaluate existing products. Evaluate existing products by:* Evaluating how well the product has been designed and made. Including value for money.
* Evaluating how well the product meets users’ needs and wants.
* Evaluating the nutritional value of a product

Use design criteria to evaluate own product – looking at quality of end product and design and whether it is fit for its intended purposeConsider the views of others, including intended user, whilst evaluatingCritically evaluate the quality of their design process. How well did they plan, design and make? |



