## Ampney Crucis C of E Primary School Progression Map

## Subject:

Design and Technology

## Intent:

Our DT curriculum will develop imaginative thinking in children to enable them to talk about what they like and dislike when designing and making. It will enable children to talk about how things work, and to draw and model their ideas. Throughout this curriculum children will be encouraged to select appropriate tools and techniques for making a product, whilst following safe procedures.

| Autumn | Maple (Reception) |  | Willow (Year 1 and 2) |  | Chestnut (Year 3 \& 4) |  | Oak (Year 5 \& 6) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cycle A | Cycle B | Cycle A | Cycle B | Cycle B | Cycle A | Cycle A | Cycle B |
| Knowledge | Develop cutting skills - grip \& control Joining techniques | Develop cutting skills - grip \& control Joining techniques | Focus: Textiles Consider how to make <br> a model stronger and more stable. Choose appropriate tools. Join materials. | 1.Food <br> Technology <br> Making Fruit <br> Kebabs <br> Use the principles of a healthy and varied diet prepare a fruit kebab. <br> Looking at where fruit is grown and tasting a variety of fruits | Structures: <br> Design an <br> Shadufs <br> How shapes and structures can be used to make an effective structure. Knowledge of materials. Build frame structures Making structures stronger Selecting and working with different materials. | Focus: <br> Construction How shapes and structures can be used to make an effective shields. Knowledge of Materials. | Food technology Knowledge food preparation equipment safely Trying different foods | Food <br> technology <br> Knowledge food <br> preparation <br> equipment <br> safely <br> Trying different foods |


| Skills |  |  | Planning <br> Designing <br> Measure <br> materials to use in a model or structure. Consider how to make <br> a model stronger and more stable. Choose appropriate tools. Join materials. | 1.Cutting, tasting evaluating Grating, Dicing Slicing Describe the ingredients used. Designing and planning based on healthy choices. | Build frame <br> structures <br> Making <br> structures <br> stronger <br> Selecting and <br> working <br> with different <br> materials. <br> Cutting <br> Joining <br> Designing <br> Evaluating | Build frame structures Making structures stronger Selecting and working with different materials. Cutting Joining Designing Evaluating | Cutting, evaluating Grating, Dicing Slicing, Designing and planning based on previous experience | Food <br> technology <br> Knowledge food <br> preparation <br> equipment <br> safely <br> Trying different foods |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Ampney Crucis C of E Primary School Progression Map |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject: |  |  |  |  |  |  |  |  |
| Intent: <br> Our DT curriculum will develop imaginative thinking in children to enable them to talk about what they like and dislike when designing and making. It will enable children to talk about how things work, and to draw and model their ideas. Throughout this curriculum children will be encouraged to select appropriate tools and techniques for making a product, whilst following safe procedures. |  |  |  |  |  |  |  |  |
| Spring | Maple (Reception) |  | Willow (Year 1 and 2) |  | Chestnut (Year 3 \& 4) |  | Oak (Year 5 \& 6) |  |
|  | Cycle A | Cycle B | Cycle A | Cycle B | Cycle B | Cycle A | Cycle A | Cycle B |
| Knowledge | Design creations before making Create props for role play Texture \& form | Design creations before making Create props for role play Texture \& form | Focus: Food and Nutrition <br> Food health and safety. <br> Understanding where food comes from. Understanding what a healthy and balanced diet consists of | Building Great <br> Fire of London <br> Tudor-style houses <br> Moon Zoom: <br> Moon buggy <br> Build Structures <br> Junk materials <br> Space buggy <br> To plan and <br> follow a <br> plan step-by- <br> step <br> To adapt a plan as | Eco recycling materials Knowing what materials would be best to use. <br> Knowing what shape to make their boat so that it will be functional. | Focus: <br> Construction and textiles <br> Final Product: <br> Design, build and evaluate an erupting volcano model <br> Knowledge of different types of containers. Knowledge of different materials and ways to join them. | Bridges <br> Children can apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products. | Travel bag use research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at a target market; use their knowledge of a broad range of existing |



|  |  |  |  |  |  |  |  | stitching in their product. <br> Evaluating your own project. Evaluating a peer's project |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Ampney Crucis C of E Primary School Progression Map |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject: |  |  |  |  |  |  |  |  |
| Intent: <br> Our DT curriculum will develop imaginative thinking in children to enable them to talk about what they like and dislike when designing and making. It will enable children to talk about how things work, and to draw and model their ideas. Throughout this curriculum children will be encouraged to select appropriate tools and techniques for making a product, whilst following safe procedures. |  |  |  |  |  |  |  |  |
| Summer | Maple (Reception) |  | Willow (Year 1 and 2) |  | Chestnut (Year 3 \& 4) |  | Oak (Year 5 \& 6) |  |
|  | Cycle A | Cycle B | Cycle A | Cycle B | Cycle A | Cycle B | Cycle A | Cycle B |
| Knowledge | Improve creations \& explain process used Share creations | Improve <br>  <br> explain process <br> used <br> Share creations | Focus: <br> Structures and construction Knowing what materials would be best to use. Knowing what shape to make their tunnel so that it will be functional. | Focus <br> sewing <br> Creating <br> bunting <br> Design <br> purposeful, <br> functional, <br> appealing <br> products for <br> themselves. | Children select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] accurately. They select from and use a | Focus: Cooking and Nutrition <br> Understand how ingredients are grown, reared, caught and processed. Knowledge of what makes a sandwich. Knowledge of food | Using materials: Greek ship Children use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular | Torches <br> They understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. |


|  |  |  |  |  | wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities | hygiene and safe preparation. <br> Knowledge of where different foods come from. | individuals or groups. <br> They generate, develop, model and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes, pattern pieces and computeraided design. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Skills |  |  | Designing a functional product based on <br> design criteria. <br> Communicating their ideas through drawings. <br> Selecting from and using a range of suitable tools/material. Evaluating their own product. Explore joining | Design purposeful, functional, appealing products for themselves. Using a needle and thread safely Evaluate their ideas and products against design criteria | with growing confidence, carefully select from a range of tools and equipment, explaining their choices; select from a range of materials and components according to their functional properties and aesthetic qualities; | Evaluate a range of <br> ingredients from around European. Use research to design different foods. Write instructions for how to make it. Make -using knifes and paying attention to food hygiene. Evaluation/ peer evaluation. | design products that have a clear purpose and indicate the design features of their products that will appeal to the intended user; explain how particular parts of their products work; use annotated sketches, crosssectional drawings and exploded | Making a circuit that <br> powers a motor <br> How to create a <br> sturdy structure <br> Planning <br> Designing <br> Measuring <br> Safe use of <br> tools <br> (saw, glue gun) |


|  |  |  | techniques to increase strength. |  | place the main stages of making in a systematic order; <br> Practical skills and techniques learn to use a range of tools and equipment safely, appropriately and accurately and learn to follow hygiene procedures; use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components; with growing independence, measure and mark out to the nearest cm and millimetre; cut, shape and score materials with some |  | diagrams (possibly including computer-aided design) to develop and communicate their ideas; generate a range of design ideas and clearly communicate final designs; learn to use a range of tools and equipment safely and appropriately and learn to follow hygiene procedures; independently take exact measurements and mark out, to within 1 millimetre; use a full range of materials and components, including construction materials and kits, textiles, and mechanical components; |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


|  |  |  |  |  | cut a range of <br> materials with <br> precision and <br> accuracy; <br> assemble, join <br> and combine <br> anape and score <br> material and <br> components <br> materials with <br> precision and <br> accuracy; <br> assemble, join <br> accuracy <br> and combine <br> materials and <br> components <br> with accuracy; |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Impact (end points) |  |  |  |
| :---: | :---: | :---: | :---: |
| Maple (Reception) | Willow (Year 1 \& 2) | Chestnut (Year 3 \&4) | Oak (Year 5 \&6) |
| Cycle A/Cycle B | Cycle A/Cycle B | Cycle A/Cycle B | Cycle A/Cycle B |
| Children to be able to safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Children junk model confidently, evaluating and changing their models. Children handle equipment and tools effectively. | Children should be able to confident using different types of media to create moving pictures. They should be able to design their ideas and think about the materials used before making them. They are able to use different tools safely and competently. Children will be able to use a range of cutting and joining techniques. Children will be able to make simple plans, and design according to a criteria. | Children should be able to know how shapes and structures can be used to make effective products. They should be able to select appropriate materials for their final pieces of work. Children should have a clear understanding of characteristics and properties of food ingredients. Children can evaluate their final product and suggest improvements to their designs. | Children should be able to consolidated their knowledge of different materials and how to strengthen where appropriate. They will have learnt how to create simple circuits to power motors and solve problems when they arrive. Children can plan then evaluate, identifying areas for improvement. <br> Children have a very good understanding of the purpose and target market of a product. They will able to use refined skills to create a range of projects that link to their foundation topics and wider world issues. |



