**Rockcliffe CE School – Whole School Design and Technology Overview**

Below is an overview of the design and technology learning focus for each term/half term in each class.

Class teachers may choose to adapt the schemes of work to suit their class but must ensure full coverage throughout the two-yearly cycle.

|  |
| --- |
| 2022-2023 |
|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| **EYFS** | **All about me-** **Design-** Design a puppet of family or themselves. **Make-** Make a puppet either using split pins or a stick puppet.  | **Alien invasion-****Design-** Design a streamline rocket comparing which travels the furthest. **Make-** Make their own rocket.  | **Traditional tales-****Design-** Design a chair for baby bear test different ways of strengthening and reinforcing. **Make-** Make a model of baby bear’s chair.**Design-** design a gingerbread man. **Make-**Make gingerbread men.  | **Spring has sprung-****Design-** Design a fruit salad using locally grown produce. **Make-** Make a fruit salad. | **Sea adventures-** **Design-** Design a pirate hat. **Make-** Make a pirate hat selecting their own materials. | **Around the world-** **Design-** Design a mode of transport. **Make-** Make their mode of transport choosing their own materials.  |
| **Year 1 / 2** | **Cooking and Nutrition- Fruit and vegetables.** **Design**- Design a smoothie/soup carton by hand or using ICT software.**Make-** Chopping fruits and vegetables to create a smoothie/soup. **Evaluate-** tasting and evaluating different foods. -Taste and evaluate your own design.  | **Textiles- Pouches.** **Design-** Designing a pouch for an explorer. **Make-** Selecting and cutting fabrics for sewing. -Threading a needle.-Sewing a running stitch with evenly spaced, neat stitched to join fabric. -Cutting fabric using a template. -Create a prototype using paper. **Evaluate-** Evaluate existing products and deconstructing to see how it is made. -Evaluating their own designs against the design criteria.  | **Mechanisms- Moving books.** **Design-** Design a moving story book about superheroes to a given audience. **Make-** Follow a design to create moving models that use leavers and sliders. **Evaluate-** Testing a finished product to see if it works as planned and how deciding how problems can be fixed.  |
| **Year 2 / 3** | **Cooking and Nutrition- Harvest and Eating seasonally.** **Design-** Create a healthy and nutritious recipe for a savoury tart using seasonal ingredients, considering the taste, texture, smell and appearance of the dish. **Make-** Create and prepare a safe workspace to work in, considering rules to avoid food contamination. **Evaluate-** Taste different seasonal foods to influence the design process. -Try existing products to evaluate the taste combination and price point. -Describe the benefits of eating seasonally.  | **Structure- constructing a Castle.** **Design-**Design a Castle to appeal to HM the Queen. -Drawing and labelling a Castle design using 2D shapes, labelling using 3D shapes that will be used when constructing, materials needed and colours. **Make-** Constructing a range of 3D geometric shapes using nets. -Create special features for individual designs. -Making facades from a range of recycles materials. **Evaluate-** Evaluate own designs and suggest points for modification.  | **Mechanism- Making a moving monster****Design-** Create our own design criteria as a class. -Design a moving monster to fit the class design criteria. **Make-** make linkages using card for levers and slit pins for pivots. -Cutting and assembling components neatly.**Evaluate-** Evaluate own designs against design criteria and use peer feedback to modify final design.  |
| **Year 4** | **Textiles- Making an Egyptian collar.** **Design-**design an Egyptian collar to fit a design brief. **Make-** Create an Egyptian colour using beading and appliqué skills. -Thread a needle.**Evaluate-** Evaluate your own designs against the success criteria.  | **Structures- Pavilions****Design-** design a stable pavilion structure that is aesthetically pleasing and selecting materials to create a desired effect.-Building frame structures designed to support weight. **Make-** Creating a range of different shaped frame structures.-Make a variety of free standing frame structures.- select appropriate materials to make a strong structure. -Re-inforce corners to strengthen structures. **Evaluate-** Testing prototype structures to see if it works as planned and how deciding how problems can be fixed. -Evaluate own works.  | **Food and nutrition- Adapting a recipe.** **Design-** Adapt a Tudor biscuit recipe to appeal to the class’ taste with a consideration to budget.**Make-** Follow a baking recipe and adapt this to create a new recipe. -Cooking safely, following basic hygiene rules. -Adapting a recipe.**Evaluate-** Evaluate a recipe considering taste, smell, texture and appearance.**-**Describing the impact of budget on the selection of ingredients.-Evaluating and comparing a range of products.-Suggesting modifications. |
| **Year 5** | **Electrical-Electric greetings cards.** **Design-** Design a greetings card for the festive period which includes and electrical element.**Make-** Use card and electrical materials to create a card with electrical components. -Create circuits to ensure understanding that can be applied to greetings card. -Understand how to adapt circuits to fit the purpose. **Evaluate-** Evaluate existing cards and how they’re made up to be streamlined. **-**Evaluate own cards to modify.  | **Mechanisms- pop-up books.** **Design-** designing a pop-up book which uses a mixture of structures and mechanisms. -Naming each mechanism, input and output accurately. -Storyboarding ideas for a book.**Make-** Following a design brief to make a pop-up book, neatly and with focus on accuracy. -Making mechanisms and structures using sliders, pivots and folds to produce movement.-Using layers and spacers to hide the workings of mechanical parts for an aesthetically pleasing result. **Evaluate-** Evaluate own designs and suggest how their design can be improved.  | **Cooking and nutrition- What could be heathier?** **Design-** Adapting a traditional recipe, understand that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients. -Writing an amended method for a recipe to incorporate the relevant changes to ingredients. -Designing appealing packaging to reflect a recipe using CAD. **Make-** Cutting and preparing vegetables safely. -Using equipment safely, including knives, hot pans and hobs. -Knowing how to avoid cross contamination. Following recipe step by step. **Evaluate-** Evaluating existing recipes. -taste test final products. **-**Evaluating healthy and safety in production to minimise cross contamination. |
| **Year 6** | **Cooking and nutrition- come dine with me.****Design-** Design a 3 course menu to a specific theme considering variety, texture, taste and look. **Make-** Make a three course meal based round a specific theme.**Evaluate-** taste test a range of foods to inspire your own menu. Taste your own food and reflect on what you can change in future cooking.  |  **Textiles- Tie Dye t-shirt.** **Design-** explore different ways of folding, pinning and tying to create different patterns and effects.Design a tie dye t-shirt using different sewing skills to embellish. **Make-** Make a tie dye t-shirt using different embellishment and sewing skills. **Evaluate-** Evaluate their own work and explain what they would do differently in future.  | **Digital- Travel POS.** **Design-** Design a POS based on a brief from a music producer for a Motown album launch. **Make-** make a POS stand using CAD. Make on brand merchandise including keyrings, badges, pens and leaflets. **Evaluate-** Evaluate the effectiveness of current POS stands and use this to influence your design process. |