**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.

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| 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. | |