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| Curriculum Coverage (NC)  What are the most basic requirements from the National Curriculum? | | | | | | |
| EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| **Design**  ♣ design purposeful, functional, appealing products for themselves and other users based on design criteria  ♣ generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology  **Make**  ♣ select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]  ♣ select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics  **Evaluate**  ♣ explore and evaluate a range of existing products  ♣ evaluate their ideas and products against design criteria  **Technical knowledge**  ♣ 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. Cooking and nutrition:  ♣ use the basic principles of a healthy and varied diet to prepare dishes  ♣ understand where food comes from.  **Cooking and Nutrition:**  ♣ understand and apply the principles of a healthy and varied diet | | | **Design**  ♣ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups  ♣ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design  **Make**  ♣ select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately  ♣ select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities  **Evaluate**  ♣ investigate and analyse a range of existing products  ♣ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work  ♣ understand how key events and individuals in design and technology have helped shape the world Technical knowledge  ♣ apply their understanding of how to strengthen, stiffen and reinforce more complex structures  ♣ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]  ♣ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]  ♣ apply their understanding of computing to program, monitor and control their products.  **Cooking and Nutrition:**  ♣ 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 & processed. | | | |
| Pedagogy  At St Mary’s CofE (Aided) Primary School, we will use the six essentials of good practice in D&T:  -USER: Children should have a clear idea of who they are designing their project for – considering needs, wants, interests or preferences  -PURPOSE: children should know what the products they design and make are for. It should perform a clearly defined task that can be evaluated in use.  -FUNCTIONALITY: Children should design and make products that function in some way to be successful.  -DESIGN DECISIONS: Children need opportunities to select materials, components and techniques -INNOVATION: Children need scope to be original in their thinking and need open starting points  -AUTHENTICITY: Children should design and make believable, real and meaningful products.  Each of the learning experiences will ensure that the children have 3 stages of learning:  1) Investigative and Evaluative Activities: Children learn from a range of existing products, learning about D&T in the wider world  2) Focused Tasks: Where they are taught specific technical knowledge, designing skills and making skills  3) Design, Make and Evaluate Assignment: where children create functional products with users and purposes in mind | | | | | | |