**D&T - Yearly Overview**

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|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Year 7** | Plastics: Picture frame/clocks |  | Textiles:Puppets |  | Textiles:Halloween Party |  |
| **Year 8** | Metals: Key fob |  | Electronics: Greeting card |  | Textiles |  |
| **Year 9** | Timber products |  | Materials: Hats |  | Textiles |  |
| **Year 10** | New accredited course |  | New accredited course |  | Food hygiene certificate level 1 |  |
| **Year 11** | New accredited course |  | New accredited course |  | Food hygiene certificate level ½Skills entry 3 |  |

Objectives

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|  | Entry 1 | Entry 2 | Entry 3 | Level 1 |
| Design | -[] talk about my ideas and make simple drawings-[] use colour in my design work | -[] suggest improvements to my design-[] use given research to aid my design work-[] make labelled drawings of my design/product | -[] develop and communicate my ideas through discussion-[] solve given design problems using research-[] refer to a specification when designing-[] make annotated sketches and mock ups of my design/product | -[] Identify and solve my own design problems using a range of research-[] communicate design ideas through oral and digital presentations-[] develop specifications to inform the design of effective products-[] use a variety of approaches to generate creative ideas-[] make detailed plans, cross-sectional and exploded diagrams and CAD models |
| Make | **-[] follow safety rules**-[] use simple tools under guidance-[] use given materials to build simple structures and create simple products | **-[] remember basic safety rules**-[] use a range of tools & equipment-[] find out how to change the shapes of different materials (e g by cutting/bending/stretching)-[] build a product made out of more than one component | -[] select the correct equipment/tool for a specific task-[] follow written instructions to learn how to use new equipment safely-[] use a number of processes to complete a product (e g cutting/shaping/joining)-[] select a suitable material depending on its property (e g reflection/stiffness)-[] construct a simple series electrical circuit-[] strengthen, stiffen and reinforce more complex structures | -[] complete and follow a risk assessment-[] select from and use specialist tools, techniques, processes, equipment and machinery precisely including CAM -[] select from and use a full range of materials taking into account their properties-[] manufacture a complex product that meets a detailed specification |
| Evaluate | -[] say what I like and dislike about my design/product-[] compare my own design/product to an existing one | -[] design a product based on a design criteria-[] explore and evaluate a range of existing products-[] evaluate my ideas and products against design criteria | -[] test and evaluate my work against a specification, taking into account views of others-[] investigate and analyse a range of existing work-[] investigate new and emerging technologies | -[] test, evaluate and refine my work against a specification, taking into account the views of users-[] analyse the existing work of other designers to develop and broaden my understanding-[] investigate new and emerging technologies |
| Technical Knowledge | -[] name a variety of everyday materials (e g wood/plastic/metal)-[] describe some of the properties of simple materials (e g hard/reflective) | -[] compare how things move on different surfaces-[] investigate different forces (magnetic/electrical)-[] understand that different materials are used for different products and applications -[] group together a variety of everyday materials-[] begin to understand simple mechanisms (e g wheels and axles/levers)-[] understand that electronic systems are used in products | -[] recognise some common conductors and insulators-[] understand simple electrical systems (e g series circuits incorporating switches, bulbs, buzzers and motors)-[] identify the different properties of a range of materials (e g magnetic/conductor/pliable)-[] understand how mechanical systems create movement in their products (e g gears, pulleys, cams & levers) | -[] understand and measure electric current, potential difference and resistance-[] understand how the properties of materials and components can achieve functioning solutions-[] understand more complex mechanical systems (e g rotary and linear motion)-[] understand how electrical and electronic systems can be used in sophisticated products (e g movement sensors)-[] understand the difference between series and parallel circuits-[] understand how simple computing and electronics embed intelligence into products (e g sensors) |
| Food Tech | -[]know to wash my hands before touching food-[] identify healthy and unhealthy foods and drinks-[]I understand that what I eat and drink affects my health-[] understand where food comes from-[] prepare a simple uncooked meal (e g a sandwich/salad) | -[] follow basic food hygiene and safety rules-[] use some simple cooking techniques (e g boil/bake)-[] use simple equipment and utensils to prepare food (e g a peeler/knife/chopping board)-[] follow a simple recipe-[] select the right equipment to prepare food-[] identify the different food groups | -[] use a range of cooking techniques (e g fry/grill/steam)-[] follow food hygiene and safety rules when working with meat and fish-[] use a range of cooking equipment and utensils safely (e g hob, oven, whisk)-[] select and prepare ingredients-[] follow a detailed recipe-[] understand how food groups combine to make a healthy diet-[] be aware of different dietary needs (e g gluten free)-[] season and flavour food | -[] maintain food hygiene and safety standards in the kitchen-[] plan a meal based on specific dietary requirements-[] combine various cooking techniques to create a meal-[] understand and apply the principles of nutrition and health to prepare a range of dishes-[] adapt existing recipes and use my own recipes-[] use awareness of taste, texture and smell to decide how to season dishes and combine ingredients-[] understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed |

