



DT – Key Skills

| | Year 3 | Year 4 | Year 5 | Year 6 |
|--------------------------|--|---|--|---|
| | Cook Well, EatwellGreenhouseMaking It Move | Fresh Food, Good Food Tomb Builders Functional and Fancy Fabrics | Eat the SeasonsArchitectureMoving Mechanisms | Food for LifeEngineerMake Do and Mend |
| Design | Develop design criteria to inform a design. Plan which materials will be | Use annotated sketches and exploded diagrams to test and communicate their ideas. | Use pattern pieces and computer-aided design packages to design a product. | Develop design criteria for a functional and appealing product that is fit for purpose, communicating ideas clearly in a range of ways. |
| | needed for a task and explain why. | | | |
| Make | Create shell or frame structures using diagonal struts to strengthen them. | Prototype shell and frame structures, showing awareness of how to strengthen, stiffen and reinforce them. | Build a framework using a range of materials to support mechanisms. | Select the most appropriate materials and frameworks for different structures, explaining what makes them strong. |
| | | Choose from a range of materials, showing an understanding of their different characteristics. | Select and combine materials with precision. | Choose the best materials for a task, showing an understanding of their working characteristics. |
| | Use tools safely for cutting and joining materials and components. | Select, name and use tools with adult supervision. | Name and select increasingly appropriate tools for a task and use them safely. | Select appropriate tools for a task and use them safely and precisely. |
| | Explore and use a range of mechanisms (levers, sliders, axles, wheels and cams) in models or products. | Explore and use a range of mechanisms (levers, axles, cams, gears and pulleys) in models or products. | Use mechanical systems in their products, such as pneumatics. | |
| | Use appliances safely with adult supervision. | Create detailed decorative patterns on fabric using printing techniques. | | Pin and tack fabrics in preparation for sewing and more complex pattern work. |
| | | Hand sew a hem or seam using a running stitch. | | Use different methods of fastening for function and decoration, including press studs, Velcro and buttons. |
| Evaluate | Suggest improvements to their products and describe how to implement them, beginning to take the views of others into account. | Identify what has worked well and what aspects of their products could be improved, acting on their own suggestions and those of others when making improvements. | Test and evaluate products against a detailed design specification and make adaptations as they develop the product. | Demonstrate modifications made to a product as a result of ongoing evaluation by themselves and to others. |
| Technical Knowledge | Explain how an existing product benefits the user. | Explain how and why a significant designer or inventor shaped the world. | Describe the social influence of a significant designer or inventor. | Create a detailed comparative report about two or more products or inventions. |
| | Explain the similarities and difference between the work of two designers. | Create and complete a comparison table to compare two or more products. | Explain how the design of a product has been influenced by the culture or society in which it was designed or made. | Present a detailed account of the significance of a favourite designer or inventor. |
| | Describe how key events in design and technology have shaped the world. | Investigate and identify the design features of a familiar product. | Explain the functionality and purpose of safety features on a range of products. | Analyse how an invention or product has significantly changed or improved people's lives. |
| | Explain how an existing product benefits the user. | | Survey users in a range of focus groups and compare results. | |
| Cooking and Nutrition | Identify and name foods that are produced in different places. | Design a healthy snack or packed lunch and explain why it is healthy. | Describe what seasonality means and explain some of the reasons why it is beneficial. | Explain how organic produce is grown. |
| | Identify the main food groups (carbohydrates, protein, dairy, fruits and vegetables, fats and sugars). | Identify and name foods that are produced in different places in the UK and beyond. | Evaluate meals and consider if they contribute towards a balanced diet. | Follow a recipe that requires a variety of techniques and source the necessary ingredients independently. |
| | Prepare and cook a simple savoury dish. | Identify and use a range of cooking techniques to prepare a simple meal or snack. | Use an increasing range of preparation and cooking techniques to cook a sweet or savoury dish. | Plan a healthy daily diet, justifying why each meal contributes towards a balanced diet. |
| | | Work safely with everyday chemical products under supervision, such as disinfectant hand wash and surface cleaning spray. | | |