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| CURRICULUM PROGRESSION YEAR 1 | | | |
| DESIGN and TECHNOLOGY | | | |
| **Designing** | **Making** | **Evaluating** | **Technical Knowledge** |
| * State what products they’re designing and making. * Describe what the products are for. | * Select a range of tools and equipment * Select a range and materials and components. * Cut out and shape materials and components. * Use simple techniques to join materials and components. | * Talk about what they’re making * Make simple judgements about their products. | * To know about simple working characteristics about materials and components. * How structures can be made stronger, stiffer and more stable. * That all food comes from plants or animals. |
| CURRICULUM PROGRESSION YEAR 2 | | | |
| DESIGN and TECHNOLOGY | | | |
| **Designing** | **Making** | **Evaluating** | **Technical Knowledge** |
| * Say whether their products are for themselves or others. * Say how their products will work. * Say how they will make their products suitable for their intended users. * Use simple design criteria to help develop their ideas. | * Select a range of tools, materials and equipment and explain their choices. * Measure, mark, cut out and shape components. * Use a range of materials and components, including textiles, food ingredients and mechanical components. | * Make simple judgements about their products and ideas against design criteria. * Suggest how their products can be improved. | * To know about the movement of simple mechanisms such as levers, sliders, wheels and axles. * To know the technical vocabulary for the products they are undertaking. * Know that a 3D textiles product can be assembled from two identical fabric shape. * To know that foods can be combined according to their sensory characteristics. * To know that everyone should eat at least five portions of fruit and vegetables a day. |
| CURRICULUM PROGRESSION YEAR 3 | | | |
| DESIGN and TECHNOLOGY | | | |
| **Designing** | **Making** | **Evaluating** | **Technical Knowledge** |
| * Describe the purpose of their products. * Explain how the particular part of their product works. * Gather information about the needs and wants of a particular group of people. * Generate simple sketches to show their ideas. | * Select tools and equipment suitable for the task. * Select materials and components suitable for the task. * Follow procedures for safety and hygiene. * Measure, mark, cut out, shape, combine and join materials and components with some accuracy. | * Identify strengths and weaknesses in their products. * Use their design criteria to evaluate their completed products. | * How to make strong, stiff structures. * How mechanical systems such as levers and linkages or pneumatic systems crate movement. |
| CURRICULUM PROGRESSION YEAR 4 | | | |
| DESIGN and TECHNOLOGY | | | |
| **Designing** | **Making** | **Evaluating** | **Technical Knowledge** |
| * Work confidently in a range of contexts such as the home, school, leisure, culture, industry and the wider environments. * Indicate the design features of their products which will appear to the intended user. * Develop their own design criteria and use these to inform their ideas. * Generate carefully annotated sketches to show their ideas. | * Explain their choice of tools and equipment in relation to the skills and techniques they will be using. * Explain their choice of materials and components according to functional qualities and aesthetic qualities. * Review procedures for safety and hygiene. * Measure, mark, cut out, shape, combine and join materials and components with greater accuracy. | * Consider the views of others including intended users to improve their work. * Use their design criteria to evaluate their completed products. | * How simple electrical components and circuits can be used to create functional products. * How to program a computer to control their products. For example IQ controllers and technical Lego. * That food ingredients can be fresh, precooked and processed.. * That to fit and healthy, food and drink are needed to provide energy for the body. |
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| CURRICULUM PROGRESSION YEAR 5 | | | |
| DESIGN and TECHNOLOGY | | | |
| **Designing** | **Making** | **Evaluating** | **Technical Knowledge** |
| * Describe the purpose of their products. * Confidently explain how particular parts of their products work. * Identify the needs once preferences and values of particular individuals and groups. * Share and clarify their ideas through discussion. * Model their ideas, using prototypes and pattern pieces. | * Produce an appropriate list of tools, equipment and materials that they need. * Formulate step by step guide to making. * Accurately measure, mark out, cut and shape components and materials. * Accurately assemble, join and combine components and materials. | 1. **Their own ideas and products**   • identify the strengths and areas for development in their ideas and products  • consider the views of others, including intended users, to improve their work   1. **Existing Products**   • how well products have been designed  • how well products have been made  • why materials have been chosen  • what methods of construction have been used  • how well products work  • how well products achieve their purposes  • how well products meet user needs and wants | • How to use learning from science to help design and make products that work  • How to use learning from mathematics to help design and make products that work  • That materials have both functional properties and aesthetic qualities  ***• how more complex electrical circuits and components can be used to create functional***  ***products***  ***• how to program a computer to monitor changes in the environment and control their***  ***products***  ***• how to reinforce and strengthen a 3D framework*** |
| CURRICULUM PROGRESSION YEAR 6 | | | |
| DESIGN and TECHNOLOGY | | | |
| **Designing** | **Making** | **Evaluating** | **Technical Knowledge** |
| * Indicate the design features of their products that will appeal to intended users. * Carry out research using surveys, interviews and questionnaires. * Use annotated sketches, cross sectional drawing and exploded diagrams. To develop and communicate ideas. | * Produce an appropriate list of tools, equipment and materials that they need. * Formulate step by step guide to making. * Accurately measure, mark out, cut and shape components and materials. * Accurately assemble, join and combine components and materials. * Accurately apply a range of finishing techniques. * Use techniques that involve a number of steps. * Demonstrate resourcefulness when tackling practical problems. | 1. **Their own ideas and products**   ***• critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make***  ***• evaluate their ideas and products against their original design specification***   1. **Existing products**   ***In late KS2 pupils should also investigate and analyse:***  ***• how much products cost to make***  ***• how innovative products are***  ***• how sustainable the materials in products are***  ***• what impact products have beyond their intended purpose*** | *• That materials can be combined and mixed to create more useful characteristics*  • That mechanical and electrical systems have an input, process and output  *• The correct technical vocabulary for the projects they are undertaking*  ***• How mechanical systems such as cams or pulleys or gears create movement***  ***• That a 3D textiles product can be made from a combination of fabric shapes***  ***• That a recipe can be adapted by adding or substituting one or more ingredients.*** |