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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.
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| 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.
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| 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.
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| 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 work1. **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.*** |