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| **D.T.** | **EYFS** | **Y1** | **Y2** | **Y3** | **Y4** | **Y5** | **Y6** |
| **Developing, Planning and Communicating Ideas** | * Can children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function?
* Can children use what they have learned about media and materials in original ways, thinking about uses and purposes?
* Can they represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories?
 | * Can they identify the key features of an existing product?
* Can they think of some ideas on their own?
* Can they plan an outcome through pictures with labels?
* Can they explain their ideas orally?
 | * Can they generate ideas through comparing existing products?
* Can they create an innovative product?
* Can they choose the most appropriate tools and materials and explain their choices?
* Can they describe their design by using pictures, diagrams and words?
 | * Can they plan their design using accurate diagrams and information?
* Can they plan the equipment/tools needed and give reasons why?
* Can they start to order the main stages of making their product?
* Can they identify a design criterion and establish a purpose/audience for their product?
* How realistic are their plans? E.g., tools, equipment, materials, components.
 | * Can they create a final design for their product based on initial ideas and revisions based on existing ideas?
* Can they create a detailed plan considering their target audience, design criteria and intended purpose?
 | * Can they survey their target audience and use this to generate ideas?
* Can they take a user’s view into account when designing?
* Can the produce a detailed step-by-step plan for their design method?
* Can they suggest some alternative designs and compare the benefits and drawbacks to inform the design process and outcome?
 | * Can they use a range of information to inform their design?
* Can they use market research to inform plans?
* Can they work within constraints?
* Can they justify their plan to someone else?
* Can they consider culture and society in their design?
* Have they considered the use of the product when selecting materials?
* Have they thought about how their product can be marketed through packaging and advertising?
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| **Working with Tools, Equipment, Materials and Components to Make Products** | * Can they explain what they are making?
* Can they select the appropriate resources and tools?
* Can they explain which tools they are using and why?
* Can they use tools safely?
 | * Can they join materials/components together in different ways?
* Can they measure materials to use in a model or structure?
* Can they use joining, folding or rolling to make it stronger?
 | * Can they use equipment and tool accurately and safely?
* Can they select the most appropriate materials, tools and techniques to use?
* Can they manipulate materials using a range of tools and equipment?
* Can they measure, cut and assemble with increasing accuracy?
 | * Can they use equipment and tools with increased accuracy and safely?
* Can they select the most effective materials, tools and techniques to use?
* Can they manipulate materials effectively using a range of tools and equipment?
* Can they measure, cut and assemble accurately?
 | * Can they choose appropriate tools and materials to ensure that the final product will appeal to the audience?
* Can they use a range of tools and equipment with good accuracy and effectiveness, within established safety parameters?
 | * Can they choose appropriate tools and materials to ensure that the final product will appeal to the audience?
* Can they use a range of tools and equipment with good accuracy and effectiveness, within established safety parameters?
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| **Evaluating Processes and Products** | * Can they describe how their products works?
* Can they identify success and next steps?
 | * Can they assess how well their product works?
* If they did it again, can they explain what they would improve?
 | * Can they start to think about their ideas as they make progress and be willing to make changes if this helps them to improve their work?
* Can they assess how well their product works in relation to the purpose?
* Can they explain how they could change their design to make it better?
 | * Can they think about their ideas as they progress and make changes to improve their work?
* Can they assess how well their product works in relation to the design criteria and intended purpose?
* Can they explain how they could improve their design and how their improvements would affect the original outcome?
 | * Can they continuously check that their design is effective and fit for purpose?
* Can they assess how well their product works in relation to the design criteria and intended purpose and suggest improvements?
* Can they evaluate appearance and function against the original design criteria?
 | * How well do they test and evaluate their final product?
* Is it fit for purpose?
* What would improve it?
* Would different resources have improved their product?
* Would they need more or different information to make it even better?
* Does their product meet all design criteria?
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| **Mechanisms****(Y6 Electrical & Mechanical)** | * Can they make a product which moves?
* Can they cut materials using scissors?
* Can they describe the materials using different words?
* Can they say why they have chosen moving parts?
 | * Can they join materials together as part of a moving product?
* Can they explain how different parts move?
 | * Can they make a product which uses mechanical components?
* Can they use a range of components? E.g., levers, linkages and pneumatic systems
 | * Can they use a simple circuit and add components to it?
* Can they make a product which uses both electrical and mechanical components?
 | * Can they refine their product after testing it?
* Can they incorporate hydraulics and pneumatics?
 | * Can they use different kinds of circuits in their product to improve it?
* Can they incorporate a switch into their product?
* Can they refine their product after testing it?
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| **Construction and Use of Materials** | * Can they arrange pieces of the construction before building?
* Can they make a structure/model using different materials?
 | * Can they make sensible choices of which materials to use for their construction?
* Can they make their structure stronger, stiffer or more stable?
 | * Can they join materials effectively to build a product?
* Can they use a range of techniques to shape and mould materials?
* Can they use finishing techniques? E.g. sanding, varnishing, glazing etc
 | * Can they measure accurately to build effective structures?
* Can they use a range of techniques to shape and mould?
* Can they experiment with a range of techniques to increase stability in a structure?
* Can they use finishing techniques, showing an awareness of audience? E.g., sanding, varnishing. Glazing etc
 | * Are their measurements accurate enough to ensure precision?
* Can they demonstrate that their product is strong and fit for purpose?
* Are they motivated to refine and further improve their product?
 | * Are their measurements accurate enough to ensure precision?
* Can they demonstrate that their product is strong and fit for purpose?
* Are they motivated to refine and further improve their product?
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| **Textiles** | * Can they group fabrics and threads by colour and texture?
* Can they weave a pattern?
* Can they identify when patterns are used in textile design?
 | * Can they measure an amount of a textile?
* Can they join textiles together to make a product using techniques such as stitching?
* Can they cut textiles accurately?
* Can they explain why they chose a certain textile?
* Can they bond fabrics together?
* Can they build an image using fabrics?
* Can they create a large-scale textile or sculpture piece through class collaboration?
 | * Can they join textiles of different types in a range of ways?
* Can they choose textiles both for their appearance and qualities?
* Can they begin to use a range of simple stitches?
* Can they use fabric to build an image?
* Can they add details to a piece of work?
* Can they add texture to a piece of work?
 | * Can they consider which materials are fit for purpose and join them appropriately?
* Can they devise a template or pattern for their product?
* Can they explore a range of textures using textiles?
* Can they transfer a drawing into a textile design?
* Can they use artist to influence their textile designs?
 | * Can they consider the audience when choosing textiles?
* Can they make up a prototype first?
* Can they use a range of joining techniques?
* Can they devise a template or pattern for their product?
* Can they explore a range of textures using textiles?
* Can they transfer a drawing into a textile design?
* Can they experiment with different ways of exploring textiles?
* Can they use artists to influence their textile designs?
 | * Can they consider the audience when choosing textiles?
* Can they make up a prototype first?
* Can they use a range of joining techniques?
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| **Food & Nutrition** | * Can they cut food safely?
 | * Can they describe the ingredients they are using?
 | * Can they describe how ingredients come together?
 | * Do they know how to be hygienic and safe when using food?
 | * Can they show how to be both hygienic and safe in the kitchen?
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