Design Technology Progression

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

Statutory content

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products

	Year 3	Year 4	Year 5	Year 6
Design	•Can they show that their design meets a range of requirements? •Can they describe their design using an accurately labelled sketch and words? •Can they produce a plan and explain it to others?	Can they show that their design meets a range of requirements? Can they put together a step-by-step plan which shows the order and also what equipment and tools they need? Can they suggest some improvements and say what was good and not so good about their original design?	Can they come up with a range of ideas after they have collected information? Do they take a user's view into account when designing? Can they produce a detailed step-by-step plan? Can they suggest some alternative plans and say what the good points and drawbacks are about each?	Can they use a range of information to inform their design? Can they use market research to inform plans? Can they follow and refine their plan if necessary?
Make	•Can they use equipment and tools accurately and safely?	•Can they show a good level of expertise when using a range of tools and equipment? •Do they work at their product even though their original idea might not have worked?	Can they use a range of tools and equipment expertly? Do they persevere through different stages of the making process?	Can they select and use tools and materials precisely? Do they change the way they are working if needed?
Evaluate	•Can they evaluate their product, thinking of both appearance and the way it works? •Can they explain what they changed which made their design even better?	•Can they evaluate their product, thinking of both appearance and the way it works? •Can they begin to explain how they can improve their original design?	•Do they keep checking that their design is the best it can be? •Can they evaluate appearance and function against the original criteria?	How well do they test and evaluate their final product? Does their product meet all design criteria? Did they consider the use of the product when selecting materials?
Cooking and nutrition	Can they choose the right ingredients for a product? Can they describe how their combined ingredients come together? Can they set out to grow plants such as cress and herbs from seed with the intention of using them for their food product?	•Do they know what to do to be hygienic and safe? •Have they thought what they can do to present their product in an interesting way?	Can they describe what they do to be both hygienic and safe? How have they presented their product well?	Can they explain how their product should be stored with reasons? Can they set out to grow their own products with a view to making a salad, taking account of time required to grow different foods?
Textiles	•Can they join textiles of different types in different ways? •Can they choose textiles both for their appearance and also qualities?	 Do they think what the user would want when choosing textiles? Can they devise a template? Can they explain how to join things in a different way? 	How have they made their product attractive and strong? Can they make up a prototype first? Can they use a range of joining techniques?	Have they thought about how their product could be sold? Have they given considered thought about what would improve their product even more?

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	Year 3	Year 4	Year 5	Year 6
Electrical mechanical	Can they use a simple circuit? Can they use a number of components?	•Can they add things to their circuits? •Can they incorporate a switch into their product?	Can they make a product which uses both electrical and mechanical components? Can they refine their product after testing it?	Can they use different kinds of circuit in their product? Can they incorporate hydraulics and pneumatics?
Stiff and flexible	Can they work accurately to make cuts and holes? Can they join materials?	•Can they measure carefully so as to make sure they have not made mistakes? •How have they attempted to make their product strong?	Are their measurements accurate enough to ensure that everything is precise? How have they ensured that their product is strong and fit for purpose?	Can they justify why they selected specific materials? How have they ensured that their work is precise and accurate? Can they hide joints so as to improve the look of their product?
Mouldable materials	Can they use a range of techniques to shape and mould? Do they use finishing techniques?	Can they use a range of advanced techniques to shape and mould? Do they use finishing techniques, showing an awareness of audience?	Are they motivated enough to refine and further improve their product using mouldable materials?	Can they justify why the chosen material was the best for the task? Can they justify design in relation to the audience?