This progression of skills document details how each key skill develops sequentially in Design Technology throughout school.

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| **Areas of study** | **EYFS** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **Design** | |  | | --- | | Talk about ideas, choose resources, tools and techniques with a purpose in mind | | |  | | --- | | Use pictures and words to convey what they want to design/make  Explore ideas by rearranging materials  Select pictures to help develop ideas  Use mock-ups e.g. recycled material, trial models to try out their ideas | | |  | | --- | | Propose more than one idea for their product  Use ICT to communicate ideas  Use drawings to record ideas as they are developed  Add notes to drawings to help explanations | | |  | | --- | | Develop more than one design or adaptation of an initial design  Plan a sequence of actions to make a product  Think ahead about the order of their work and decide upon tools and materials  Propose realistic suggestions as to how they can achieve their design ideas. | | |  | | --- | | Record the plan by drawing using annotated sketches  Use prototypes to develop and share ideas  Consider aesthetic qualities of materials chosen  Use CAD where appropriate | | |  | | --- | | Record ideas using annotated diagrams  Use models, kits and drawings to help formulate design ideas  Sketch and model alternative ideas  Decide which design idea to develop | | |  | | --- | | Plan the sequence of work  Devise step by step plans which can be read/followed by someone else  Use exploded diagrams and cross-sectional-diagrams to communicate ideas | |
| **Make** | Experiment and build with a range of construction resources, find out about the properties and functions of different construction materials  Make models using different construction materials, e.g. construction kits, reclaimed materials, experiment with different ways to build, construct and join resources | Select materials from a limited range  Explain what they are making  Name the tools they are using | Discuss their work as it progresses  Select and name the tools needed to work the materials  Explain which materials they are using and why | Select from a range of tools for cutting, shaping, joining and finishing  Use tools with accuracy  Select from materials according to their functional properties  Use appropriate finishing techniques | |  |  | | --- | --- | | Prepare pattern pieces as templates for their design  Select from techniques for different parts of the process | • | | Develop one idea in depth  Select from and use a wide range of tools  Cut accurately and safely to a marked line   |  | | --- | | Select from and use a wide range of materials | | |  | | --- | | Make prototypes  Use researched information to inform decisions  Produced detailed lists of ingredients/components/materials and tools  Refine their product – review and rework/improve | |

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| **Evaluate** | |  | | --- | | Talk about what they like/dislike about their models/constructions, say why and how they would change them | | |  | | --- | | Explore existing products and investigate how they have been made (including teacher-made examples)  Talk about their design as they develop and identify good and bad points  Say what they like and do not like about items they have made and attempt to say why | | |  | | --- | | Decide how existing products do/do not achieve their purpose  Discuss how closely their finished product meets their own design criteria | | |  | | --- | | Investigate similar products to the one to be made to give starting points for a design  Research needs of user  Decide which design idea to develop  Consider and explain how the finished product could be improved  Discuss how well the finished product meets the user’s design criteria  Investigate key events and individuals in Design and Technology | | |  | | --- | | Draw/sketch existing products in order to analyse and understand how products are made  • Identify the strengths and weaknesses of their design ideas in relation to purpose/user  • Consider and explain how the finished product could be improved  • Investigate key events and individuals in Design and Technology | | |  | | --- | | . | | Research and evaluate existing products  Consider user and purpose  Consider and explain how the finished product could be improved related to design criteria  Investigate key events and individuals in Design and Technology | | Identify the strengths and weaknesses of their design ideas  Report using correct technical vocabulary  Discuss how well the finished product meets the design criteria having tested on/discussed outcomes with the user  Understand how key people have influenced design in a variety of contexts |
| **Technical Knowledge** |  | |  | | --- | | Start to use technical vocabulary  Join materials in a variety of ways  Know some ways of making structures stronger  Show how to stiffen some materials  Know how to make a simple structure more stable | | Cut out shapes which have been created by drawing round a template  Attach wheels to a chassis using an axle  Decorate using a variety of techniques | |  | | --- | | Use an increasingly appropriate technical vocabulary for tools materials and their properties  Understand seam allowance Prototype a product  Sew on buttons and make loops  Strengthen frames with diagonal struts  Use linkages to make movement larger or more varied | | Measure and mark square section, strip and dowel accurately to 1cm  Use electrical systems, such as switches, bulbs and buzzers Incorporate a circuit into a model  Use ICT to control products | |  | | --- | | Use the correct vocabulary appropriate to the project  Join materials using appropriate methods  Create 3D textile projects using pattern pieces  Understand pattern layout with textiles |   Use mechanical systems such  as cams, pulleys and gears | Cut strip wood, dowel, square section wood accurately to 1cm  Stiffen and reinforce complex structures  Build frameworks to support mechanisms  Use electrical systems, such as motors and switches  Program, monitor and control using ICT |
| **Cooking and Nutrition** | |  | | --- | | Use tools and equipment linked to food preparation  Handle and use equipment appropriately and safely | | Group familiar food products e.g.  fruit and vegetables  Cut and chop a range of ingredients  Work safely and hygienically  Know about the need for a variety of foods in a diet | Cut, peel, grate, chop a range of ingredients  Work safely and hygienically  Know about the *Eatwell Plate*  Understand where food comes from | Follow instructions/recipes  Join and combine a range of ingredients  Begin to understand the food groups on the *Eatwell Plate* | Make healthy eating choices – use the *Eatwell Plate*  Understand seasonality  Know where and how ingredients are reared and caught  Prepare and cook using different cooking techniques | Join and combine a widening range of ingredients  Select and prepare foods for a particular purpose  Know where and how ingredients are grown and processed | Understand and apply the principles of a healthy and varied diet.  Choose ingredients to support healthy eating choices when designing their food products Prepare and cook a variety of mostly savoury dishes using a range of cooking techniques |