

Design Technology Progression Map - Burnley St Peter's CE Primary School

Year 6	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 Use and understand why we use CAD	Make prototypes Use researched information to inform decisions Produce detailed lists of ingredients / components / materials and tools Refine their product - review and rework/improve	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	Use the correct vocabulary appropriate to the project Join materials using appropriate methods Create 3D textile products using pattern pieces Understand pattern layout with textiles Program, monitor and control using ICT	Understand & apply the principles of a healthy & 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
Year 5	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	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	Research and evaluate existing products Consider user and purpose Consider and explain how the finished product could be improved related to design criteria	Use the correct vocabulary appropriate to the project Cut strip wood, dowel, square section wood accurately to 1mm Build frameworks to support mechanisms Stiffen and reinforce complex structures Use mechanical systems (cams) Use linkages to make movement larger or more varied	Join and combine a widening range of ingredients Select and prepare foods for a particular purpose Understand seasonality
Year 4	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	Prepare pattern pieces as templates for their design Select from techniques for different parts of the process	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	Use an increasingly appropriate technical vocabulary for tools materials and their properties Prototype a product Incorporate a circuit into a model Use electrical systems such as switches bulbs and buzzers Use mechanical systems (pneumatics)	Make healthy eating choices - use the Eatwell plate Know where and how ingredients are grown, reared caught and processed Cook using different cooking techniques

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Year 3	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	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.	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	Use an increasingly appropriate technical vocabulary for tools materials and their properties Understand seam allowance Sew on buttons and make loops Develop and use knowledge of how to construct strong, stiff shell structures Develop and use knowledge of nets of cubes, cuboids and other more complex 3d shapes.	Follow instructions/recipes Join and combine a range of ingredients. Begin to understand the food groups on the Eatwell Plate.
Year 2	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	Discuss their work as it progresses Select and name the tools needed to work the materials Explain which materials they are using and why	Decide how existing products do/do not achieve their purpose Discuss how closely their finished product meets their own design criteria.	Use appropriate technical vocabulary Join materials in a variety of ways Decorate using a variety of techniques Show how to stiffen some materials Attach wheels to a chassis using an axle	Cut, peel, grate, chop a range of ingredients Work safely and hygienically Know about the Eatwell Plate. Understand where food comes from.
Year 1	Use pictures & 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	Select materials from a limited range Explain what they are making Name the tools they are using	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	Use appropriate technical vocabulary Know some ways of making structures stronger Know how to make a simple structure more stable Know some different ways of making things move in a 2D plane Cut out shapes which have been created by drawing round a template	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
EYFS	talk about their ideas, choose resources, tools and techniques with a purpose in mind.	Make models and props using different construction materials e.g. construction kits, reclaimed materials. Manipulate, control and explore a range of tools and equipment for different purposes.	Say what they like and do not like about items they have made	Use tools and equipment safely. Experiment with different ways to build, construct and join resources	Use tools and equipment linked to food preparation/Safety - handle and use equipment appropriately and safely.
	Design	Make	Evaluate	Technical knowledge	Cooking and Nutrition

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