

DT: Design, Make and Evaluate Skills Progression

KS1		LKS2		UKS2	
Design					
Think of own ideas for design. Use pictures and words to plan. Design a product for myself, following design criteria. Work in a range of contexts (imaginary, home, school, wider community, story based)	Think of own ideas and plan what to do next. Describe designs using pictures, diagrams, models, mock-ups, words and ICT. Design a product for myself and others, following design criteria. Work confidently in a range of contexts (imaginary, home, school, wider community, story-based)	Create a design that meets a range of requirements. Consider the equipment and tools needed when planning. Describe a design using an accurately labelled diagram, and in words.	Generate more than one idea for how to create a product. Gather information to help design a successful product (i.e. by asking others' views). Produce a detailed plan with labelled diagrams, a written explanation and step-by-step guide. Suggest improvements to develop and refine a planned idea.	Generate a range of ideas after collating relevant information (i.e. users’ views). Produce a detailed plan, with step-by-step instructions, cross sectional diagrams and prototypes. Suggest alternative plans, considering the positive aspects and drawbacks of each.	Use a range of information to inform a design (i.e. market research using surveys, interviews, questionnaires or web based resources). Produce a detailed plan, with cross-sectional diagrams and computer-generated designs). Work within constraints, refining and justifying plans as necessary
Make					
Explain what is being made and why. Select appropriate tools and equipment for the purpose.	Explain what is being made and why the audience will like it. Choose appropriate tools and equipment, describing and explaining why they are being used.	Use a range of tools and equipment accurately. Measure, mark out, assemble and join materials and components with some accuracy.	Use a range of tools and equipment with accuracy. Measure, mark out, join, assemble materials and components with accuracy.	Use a range of tools and equipment expertly. Consider the aesthetic qualities and functionality of my work when making.	Use a range of tools and equipment precisely. Consider the aesthetic qualities and functionality of my product as making it, refining details as necessary.

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Evaluate					
Talk about own and pre-existing products, saying what is good or bad about them. Say whether their product does what it is meant to (fits the design brief) and how it could be improved	Describe how their own and pre-existing products work, evaluating what went well and what could be done differently. Suggest what went well and what would be done differently when evaluating their own product.	Evaluate own and pre-existing products. Suggest what could be changed to improve a design, beginning to link this to the design brief.	Evaluate the appearance and usability of own and pre-existing products. Explain how the original design could be improved, considering the appearance and usability and linking this to the design brief.	Evaluate the appearance and function of a product (own and pre-existing) against the original criteria, saying whether it is fit for purpose. Suggest improvements that could be made, considering materials and methods that have been used.	Evaluate the appearance and test the function of a product (own and pre-existing) against the original criteria, saying whether it is fit for purpose. Suggest improvements that could be made, considering materials, methods, sustainability of the product and how much a product costs to make.
Technical Knowledge					
Build structures, exploring how they can be made stronger, stiffer and more stable Know about movement of simple mechanisms such as levers, sliders, wheels and axels.	Explore and use mechanisms (for example, levers, sliders, wheels and axles) in their products.	Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Know about movement of simple mechanisms such as levers and linkages.	Understand and use mechanical systems in their products (for example gears, pulleys, cams, levers and linkages) Understand and use electrical systems in their products (for example, incorporating buzzers and motors)	Understand how mechanical systems such as cams pulleys or gears create movement.	Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors) Apply their understanding of computing to program, monitor and control their products.
Food and nutrition					
Know how to peel, cut, grate, mix and mould foods (with close supervision) To understand where food comes from.	Use the basic principles of a healthy and varied diet to prepare dishes	Know how to peel, cut, grate, mix, mould and begin to cook foods (using toasters and microwaves with supervision).	To understand and apply the principles of a healthy and varied diet.	Cut, mix, mould and use hobs to heat mainly savoury food, with appropriate supervision.	Cut, mix, mould and use hobs to heat mainly savoury food, developing independence with this as appropriate. To understand and apply the principles of a healthy and varied diet. Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

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