

Progression in DT 2019 20

	KS1 Year 1 Year 2	LKS2 Year 3 Year 4	UKS2 Year 5 Year 6
	<p>Y1, Autumn 2 – Kings and Queens Y1, Summer 2 – Weather Y2, Autumn 2 – Frozen Y2, Spring – Africa</p>	<p>Y3, Spring – Ancient Egyptians Y3, Summer 2, Our Journey from Prehistoric Britain to the Iron Age Y4, Spring 1 – Local Area Study</p>	<p>Y5, Autumn 2 – Solution Revolution Y5, Spring – Ancient Greece Y5, Summer 1 – Turning Garbage into Gold Year 6, Spring – Fact or Fantasy?</p>
Designing			
	<ol style="list-style-type: none"> 1. Draw on their own experience to help generate ideas 2. State what products they are designing and making and describe what their products are for 3. Use a simple design criterion to help develop their ideas 4. Communicate ideas by talking and drawing 5. Model ideas by exploring materials and making mock-ups 6. Work in a wider range of contexts 7. Explore the intended user group, considering their requirements. 	<ol style="list-style-type: none"> 1. Generate ideas for an item based on the needs of the user, clarifying these through discussion 2. Identify a purpose and establish a criterion for a successful product 3. Plan the order of their work before starting 4. Develop and communicate design proposals by modelling ideas 5. Begin to evaluate similar products and identify criteria that can be used for their own designs 6. Make labelled drawings from different views showing specific features 7. Develop a clear idea of what is to be done, planning how to use 	<ol style="list-style-type: none"> 1. Use the results of investigations, information sources, including ICT when developing design ideas. 2. Model their ideas using prototypes 3. Generate innovative ideas, drawing on research 4. Make design decisions taking account of constraints such as time, resources and cost. 5. Plan how to use materials, equipment and processes in the most effective way 6. Use exploded diagrams to develop and communicate their ideas. 7. Know how to reinforce and strengthen a 3D framework

	<ul style="list-style-type: none"> 8. Explain how they will make their products suitable for their intended users 9. Use knowledge of existing products to come up with ideas 10. Communicate ideas using annotated drawings 	<p>materials, equipment and processes and suggesting alternative methods of making if the first attempts fail</p>	<ul style="list-style-type: none"> 8. Develop a design specification 9. Indicate the design features of their products which will appeal to intended users 10. Explain how particular parts of their product work.
<p>Making (incl technical knowledge)</p>			
	<ul style="list-style-type: none"> 1. Select from a choice of equipment, explaining their choices 2. With help, measure, mark out, cut and shape materials and components 3. Know about the simple working characteristics of materials and components 4. Know how freestanding structures can be made stronger, stiffer and more stable. 5. With help, assemble, join and combine materials and components 6. Use simple finishing techniques to improve the appearance of their product 	<ul style="list-style-type: none"> 1. Select tools and techniques for making their product 2. Use a wider range of materials and components than in KS1, including electrical components 3. Know how simple electrical circuits and components can be used to create functional products 4. Explain their choice of materials and components according to functional properties or aesthetic qualities 5. Think about their ideas as they make progress and be willing to change things if this helps them improve their work. 6. Measure, mark out, cut and shape materials and components with some accuracy 	<ul style="list-style-type: none"> 1. Select appropriate materials, tools and techniques 2. Use a wider range of materials and components than in LKS2, including textiles, food ingredients and mechanical components. 3. Know how mechanical systems such as cams or pulleys or gears create movement 4. Measure and mark out accurately 5. Use skills in using different tools and equipment safely and accurately 6. Weight and measure accurately (time, dry ingredients, liquids) 7. Cut and join with accuracy to ensure a good quality finish to the product 8. Demonstrate resourcefulness when tackling practical problems

	<p>7. Begin to select a range of materials and components according to their characteristics</p> <p>8. Measure, mark out and cut with improving accuracy</p> <p>9. Assemble, join and combine materials in order to make a product.</p> <p>10. Choose and use appropriate finishing techniques</p> <p>11. Follow procedures for safety and hygiene</p> 	<p>7. Assemble, join and combine materials and components with some accuracy.</p> <p>8. Apply a range of finishing techniques, including those from art and design with some accuracy</p> <p>9. Follow procedures for safety and hygiene</p> <p>10. Explain their choice of tools and equipment in relation to the skills and techniques they will be using</p> <p>11. Select materials and components suitable for the task</p> <p>12. Order the main stages of making</p> <p>13. Join and combine materials and components accurately in temporary and permanent ways</p> <p>14. Apply a range of finishing techniques, including those from art and design, with some accuracy</p> <p>15. Demonstrate resourcefulness when tackling practical problem</p> <p>16. Follow procedures for safety and hygiene</p>	<p>9. Follow procedures for safety and hygiene</p> <p>10. Select appropriate tools, materials, components and techniques.</p> <p>11. Know how to reinforce and strengthen a 3D framework</p> <p>12. Assemble components making working models.</p> <p>13. Use tools safely and accurately</p> <p>14. Construct products using permanent joining techniques</p> <p>15. Make modifications as they go along</p> <p>16. Achieve a quality product using techniques that involved several steps</p>
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Evaluating

1. Evaluate existing products by exploring what products are for and how products work
2. Evaluate their product by discussing how well it works in relation to the purpose
3. Suggest how their products could be improved by asking questions about what they have made and how they have gone about it
4. Evaluate existing products discussing what they like and dislike about products
5. Evaluate their product against a design criterion
6. Evaluate their product as they are developed, identifying strengths and possible changes they might make.

1. Know about significant inventors/designers/manufacturers who have developed ground breaking practice in game design
2. Investigate and analyse existing products to identify:
3. -What materials have been chosen
4. -What methods of construction have been used
5. -How well products meet user needs and wants
6. Evaluate their product against their original design criteria
7. Consider the views of others, including intended users, to improve their work
8. Know about significant inventors/designers who have developed ground breaking practice in set design/animation
9. Refer to their design criteria as they design and make
10. Identify the strengths and areas for development in their ideas and products

1. Know about significant inventors, engineers and manufacturers who have developed ground breaking practice in transport, public health and the use of waste materials.
2. Investigate and analyse how well products have been designed, materials chosen, how well products achieve their purposes and meet user needs
3. Investigate and analyse how much products cost to make and how innovative products are
4. Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make
5. Evaluate their products identifying the strengths and areas for development having carried out appropriate tests
6. Investigate and analyse existing products focusing on how sustainable the materials in products are and what impact products have beyond their intended purposes
7. Critically evaluate the quality of design, manufacture and fitness for purpose of their products

			<p>against their original design specification</p>
<p>Cooking and nutrition (shown by phase)</p>			
	<ol style="list-style-type: none"> 1. Know that all food comes from plants or animals 2. Know that food must be farmed, grown elsewhere or caught 3. Know that food can be sorted into 5 groups 4. Know that everyone should eat at least 5 portions of fruit and vegetables every day 5. How to use techniques such as cutting, peeling and grating 6. How to prepare simple dishes safely and hygienically, without using a heat source 	<ol style="list-style-type: none"> 1. Know that food is grown, reared and caught in the UK, Europe and the wider world 2. Know that to be active and healthy, food and drink are needed to provide energy for the body 3. Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in the eat well plate 4. How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. 5. Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. 	<ol style="list-style-type: none"> 1. Know that food can be processed into ingredients that can be eaten or used in cooking 2. Know that seasons may affect the food available 3. Know that different food and drink contain different substances – nutrients, water and fiber – that are needed for health 4. How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. 5. Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.