

## Year 6 Design Technology

Steps to knowing...							End Point statement
<p>Which products include gears and pulleys?</p> <p>What materials and components have been used in the products?</p> <p>What are the input, process and output of the systems?</p>	<p>How do gears and pulleys work?</p> <p>How can they work in combination?</p>	<p>How can I use pulleys to alter the direction and speed of rotation?</p> <p>AND/OR</p> <p>How does the size of the driver gear affect the speed of the follower gear?</p> <p>What effect does the number of teeth on the gear have?</p> <p>How can I make a working electrical circuit? (Link to Year 4 Science, DT in Y4/5)</p>	<p>What research can I carry out in order to create a design specification for my product?</p> <p>What knowledge and skills do I need to be able to design and make a good quality product?</p> <p>How can I record my ideas to explain to others how my design meets these criteria? (annotated sketches and prototypes)</p>	<p>How can I communicate my design decisions through detailed annotated drawings from different views/exploded diagrams.</p> <p>How can I plan the making of my product considering the skills, tools techniques and materials I will need?</p> <p>(Do I need to allocate jobs in a team?)</p>	<p>What techniques have I demonstrated to ensure that I have created a well finished product that matches the intended user and purpose (safe electrical circuit, gears and pulleys which work smoothly and successfully, well finished wood/metal etc)?</p> <p>What changes do I need to make if the product is not fulfilling my design specification?</p>	<p>How will I test the success of my product?</p> <p>Does my product meet the needs of the user? Does it fulfil its purpose? Is it innovative?</p>	<p>Mechanical systems - Design, make and evaluate a purposeful mechanical system using pulleys or gears. Explore combinations of gears and pulleys to create working moving models.</p>

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		How can I measure, mark, cut, shape and join materials securely?					
What are the features of successful products that combine shapes (consider functionality/user /purpose/components)?	Which designers have influenced fabrics and products significantly?	<p>What do I notice when I disassemble products?</p> <p>How have products been strengthened and stiffened?</p> <p>How have parts been joined?</p> <p>What fastenings are used and why?</p>	<p>What research can I carry out in order to create a design specification for my product?</p> <p>What knowledge and skills do I need to be able to design and make a good quality product?</p>	<p>How can I use annotated sketches/diagrams from different perspectives and CAD to share my plans and ideas?</p> <p>How can I use paper to create a 3D mock-up of the design I want to produce?</p> <p>How can I refine my design using CAD to develop patterns and design prints?</p>	<p>What techniques have I demonstrated to ensure that I have created a well finished product that matches the intended user and purpose (joining sides, tacking, starting and finishing stitches, fastening)?</p> <p>What changes do I need to make if the product is not fulfilling my design specification?</p>	<p>How will I test the success of my product?</p> <p>Does my product meet the needs of the user? Is it appealing and does it fulfil its purpose? Is it innovative?</p>	Textiles - Design, make and evaluate a purposeful product using joined fabric shapes. Develop stitches to include more than one type for joining and embellishment and include a means of fastening eg Velcro, ties and buttons.
What is meant by culture?	What are the key ingredients needed to make a	How do I measure out, cut, shape and	How can we make a design brief and design	How can I show a clear plan for the steps,	Can I select the utensils and equipment	Does my product meet the design	Food - Design, make and evaluate a food product which celebrates

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<p>How do particular products take into consideration personal/cultural preferences, a healthy diet and meet dietary needs?</p> <p>Do particular products use locally sourced, seasonal or organic ingredients?</p>	<p>particular product?</p> <p>Where and how have they been produced?</p> <p><i>Include the work of a renowned chef who promotes culture.</i></p>	<p>combine ingredients? <i>e.g. knead, beat, rub and mix ingredients.</i></p> <p>How can I follow a recipe effectively and safely, including the use of a heat source?</p>	<p>specification for the purpose and user that celebrates culture?</p> <p>How can I show a range of innovative ideas that celebrate culture and that will meet the design specification, including annotated sketches?</p>	<p>ingredients, utensils and equipment needed?</p>	<p>correctly and measure and prepare the ingredients to make my product?</p>	<p>brief and design specification?</p> <p>How can I include the views of others?</p> <p>Is there anything I might do differently next time?</p>	<p>culture. Demonstrate knowledge of how to use utensils (including heat sources) to prepare and cook food.</p> <p>Understand about the source of different food products.</p> <p>e.g. pasties, scones</p>
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Vocabulary
mechanical system, electrical system, pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, motor circuit, switch, circuit
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