

Dussindale Primary School Subject Progression Design Technology

Design Technology Intent: Dussindale Primary School celebrates the role of Design and Technology in children's education and our responsibility to give children the tools to become the future of innovation in our ever changing environment. We nurture children's curiosity and creativity through project-based learning with clear real life purposes and outcomes. We enable children to become critical thinkers when evaluating their own work and examples from the man-made world. The Design and technology scheme of work we use aims to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. We want our pupils to develop the confidence to take risks, through drafting design concepts, modelling, and testing and to be reflective learners who evaluate their work and the work of others. Through our scheme of work, we aim to build an awareness of the impact of design and technology on our lives and encourage pupils to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements. Our Design and technology scheme of work enables pupils to meet the end of key stage attainment targets in the National curriculum and the aims also align with those in the National curriculum. EYFS (Reception) units provide opportunities for pupils' to work towards the Development matters statements and the Early Learning Goals.

Design Technology Implementation: The Design and technology National curriculum outlines the three main stages of the design process: design, make and evaluate. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical, and technical understanding required for each strand. Cooking and nutrition* has a separate section, with a focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality. The National curriculum organises the Design and technology attainment targets under five subheadings or strands:

- **Design (D)**
- **Make (M)**
- **Evaluate (E)**
- **Technical knowledge (TK)**
- **Cooking and nutrition* (CN)**

Our Progression of skills document shows the skills and knowledge that are taught within each year group and how these skills develop to ensure that attainment targets are securely met by the end of each key stage. Using Kapow's Design and technology scheme, pupils respond to design briefs and scenarios that require consideration of the needs of others, developing their skills in four key areas:

- **Mechanisms**
- **Structures**
- **Textiles**
- **Food**

At Dussindale Primary School our pupils study three Design Technology units in each year group, one per term. These units include textiles, food/cooking nutrition in all year groups and mechanisms or structures, which are studied in a two-year cycle. Each of our key areas follows the design process (design, make and evaluate) and has a particular theme and focus from the technical knowledge or cooking and nutrition section of the curriculum. Our scheme is a

spiral curriculum, with key areas revisited again and again with increasing complexity, allowing pupils to revisit and build on their previous learning. End products and the making process are shared with other classes in the school through displays and sharing sessions as well as through school communication such as newsletters and social media. Where possible, pupils take products home to share with their families.

Lessons incorporate a range of teaching strategies from independent tasks, paired and group work including practical hands-on, computer-based and inventive tasks. This variety means that lessons are engaging and appeal to those with a variety of learning styles. Adaptive teaching guidance is available for every lesson to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Each unit builds a foundation of factual knowledge by encouraging recall of key facts and vocabulary.

We believe that strong subject knowledge is vital for staff to be able to deliver a highly effective and robust Design and technology curriculum. Each unit of lessons includes multiple teacher videos to develop subject knowledge and support ongoing CPD. This ensures that our teachers feel supported to deliver lessons of a high standard that ensure pupil progression.

Design Technology Impact: The impact of our chosen scheme is monitored through both formative and summative assessment opportunities. There are ways to assess pupils against the learning objectives for each lesson but we choose to focus on 2-3 learning objectives to assess during the unit. Furthermore, each Design Technology unit that is studied has a unit quiz and knowledge catcher which can be used at the start and/or end of the unit. As pupils progress through our units of study from EYFS to Year 6, they should leave school equipped with a range of skills to enable them to succeed in their secondary education and be innovative and resourceful members of society.

The expected impact of our scheme of work is that children will:

- Understand the functional and aesthetic properties of a range of materials and resources.
- Understand how to use and combine tools to carry out different processes for shaping, decorating, and manufacturing products.
- Build and apply a repertoire of skills, knowledge and understanding to produce high quality, innovative outcomes, including models and prototypes and products to fulfil the needs of users, clients, and scenarios.
- Understand and apply the principles of healthy eating, diets, and recipes, including key processes, food groups and cooking equipment.
- Have an appreciation for key individuals, inventions, and events in history and of today that impact our world.
- Recognise where our decisions can impact the wider world in terms of community, social and environmental issues.
- Self-evaluate and reflect on learning at different stages and identify areas to improve.
- Meet the end of key stage expectations outlined in the National curriculum for Design and technology

Progression of Skills -FOOD

Subject Discipline	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
PRODUCTS	SOUP	SMOOTHIES	HEALTHY WRAP	SEASONAL TART	ADAPTING A RECIPE	HEALTHY BOLOGNESE	MAKING A DISH AS PART OF A MEAL
DESIGN (D)	<ul style="list-style-type: none"> • Designing a soup recipe as a class. • Designing soup packaging. 	Designing smoothie carton packaging by-hand or on ICT software.	Designing a healthy wrap based on a food combination which work well together.	*Creating a healthy and nutritious recipe for a savoury tart using seasonal ingredients, considering the taste, texture, smell and appearance of the dish.	Designing a biscuit within a given budget, drawing upon previous taste testing judgements.	<ul style="list-style-type: none"> • Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients. • Writing an amended method for a recipe to incorporate the relevant changes to ingredients. • Designing appealing packaging to reflect a recipe 	* Writing a recipe, explaining the key steps, method and ingredients. Including facts and drawings from research undertaken.
MAKE (M)	<p>Chopping plasticine safely.</p> <ul style="list-style-type: none"> • Chopping vegetables with support. 	<ul style="list-style-type: none"> • Chopping fruit and vegetables safely to make a smoothie. 	*Slicing food safely using the bridge or claw grip. • Constructing a wrap that meets a design brief.	<ul style="list-style-type: none"> • Knowing how to prepare themselves and a work space to cook safely in, learning the basic rules to avoid food contamination. • Following the instructions within a recipe. 	<ul style="list-style-type: none"> *Following a baking recipe, from start to finish, including the preparation of ingredients. • Cooking safely, following basic hygiene rules. • Adapting a recipe to improve it or change it to meet new criteria (e.g. from savoury to sweet). 	<ul style="list-style-type: none"> *Cutting and preparing vegetables safely. • Using equipment safely, including knives, hot pans and hobs. • Knowing how to avoid cross-contamination. • Following a step by step method carefully to make a recipe. 	<ul style="list-style-type: none"> *Following a recipe, including using the correct quantities of each ingredient. • Adapting a recipe based on research. • Working to a given timescale. • Working safely and hygienically with independence.

<p><u>EVALUATE</u> <u>(EV)</u></p>	<p>*Tasting the soup and giving opinions.</p> <ul style="list-style-type: none"> • Describing some of the following when tasting food: look, feel, smell and taste. • Choosing their favourite packaging design and explaining why. 	<ul style="list-style-type: none"> • Tasting and evaluating different food combinations. • Describing appearance, smell and taste. • Suggesting information to be included on packaging. 	<ul style="list-style-type: none"> • Describing the taste, texture and smell of fruit and vegetables. • Taste testing food combinations and final products. • Describing the information that should be included on a label. • Evaluating which grip was most effective. 	<p>*Establishing and using design criteria to help test and review dishes.</p> <ul style="list-style-type: none"> • Describing the benefits of seasonal fruits and vegetables and the impact on the environment. • Suggesting points for improvement when making a seasonal tart. 	<ul style="list-style-type: none"> •Evaluating a recipe, considering: taste, smell, texture and appearance. • Describing the impact of the budget on the selection of ingredients. • Evaluating and comparing a range of food products. • Suggesting modifications to a recipe (e.g. This biscuit has too many raisins, and it is falling apart, so next time I will use less raisins). 	<ul style="list-style-type: none"> • Identifying the nutritional differences between different products and recipes. • Identifying and describing healthy benefits of food groups. 	<p>*Evaluating a recipe, considering: taste, smell, texture and origin of the food group. • Taste testing and scoring final products.</p> <ul style="list-style-type: none"> • Suggesting and writing up points of improvements when scoring others' dishes, and when evaluating their own throughout the planning, preparation and cooking process. • Evaluating health and safety in production to minimise cross contamination.
<p><u>TECHNICAL KNOWLEDGE</u> <u>(TK)</u></p> <p><u>COOKING AND NUTRITION</u> <u>(CN)</u></p>	<ul style="list-style-type: none"> • To know that soup is ingredients (usually vegetables and liquid) blended together. • To know that vegetables are grown. • To recognise and name some common vegetables. • To know that different vegetables taste different. • To know that eating vegetables is good for us. • To discuss why different packages might be used for different foods 	<p>*Understanding the difference between fruits and vegetables.</p> <ul style="list-style-type: none"> • To understand that some foods typically known as vegetables are actually fruits (e.g. cucumber). • To know that a blender is a machine which mixes ingredients together into a smooth liquid. • To know that a fruit has seeds and a vegetable does not. • To know that fruits grow on trees or vines. • To know that vegetables can grow either above or below ground. 	<ul style="list-style-type: none"> • To know that 'diet' means the food and drink that a person or animal usually eats. • To understand what makes a balanced diet. • To know where to find the nutritional information on packaging. • To know that the five main food groups are: Carbohydrates, fruits and vegetables, protein, dairy and foods high in fat and sugar. • To understand that I should eat a range of different foods from each food group, and roughly how much of 	<p>*To know that not all fruits and vegetables can be grown in the UK.</p> <ul style="list-style-type: none"> • To know that climate affects food growth. • To know that vegetables and fruit grow in certain seasons. • To know that cooking instructions are known as a 'recipe'. • To know that imported food is food which has been brought into the country. • To know that exported food is food which has been sent to another country.. • To understand that imported foods travel from far away and this can negatively impact 	<ul style="list-style-type: none"> • To know that the amount of an ingredient in a recipe is known as the 'quantity.' • To know that it is important to use oven gloves when removing hot food from an oven. • To know the following cooking techniques: sieving, creaming, rubbing method, cooling. •To understand the importance of budgeting while planning ingredients for biscuits 	<ul style="list-style-type: none"> • To understand where meat comes from - learning that beef is from cattle and how beef is reared and processed, including key welfare issues. • To know that I can adapt a recipe to make it healthier by substituting ingredients. • To know that I can use a nutritional calculator to see how healthy a food option is. • To understand that 'cross-contamination' means bacteria and germs have been passed onto ready-to-eat foods and it happens when these foods mix with raw meat or unclean objects. 	<p>*To know that 'flavour' is how a food or drink tastes.</p> <ul style="list-style-type: none"> • To know that many countries have 'national dishes' which are recipes associated with that country. • To know that 'processed food' means food that has been put through multiple changes in a factory. • To understand that it is important to wash fruit and vegetables before eating to remove any dirt and insecticides. • To understand what happens to a certain food before it appears on the supermarket shelf (Farm to Fork).

		<ul style="list-style-type: none">• To know that vegetables can come from different parts of the plant (e.g. roots: potatoes, leaves: lettuce, fruit: cucumber).	<p>each food group.</p> <ul style="list-style-type: none">• To know that nutrients are substances in food that all living things need to make energy, grow and develop.• To know that 'ingredients' means the items in a mixture or recipe.• To know that I should only have a maximum of five teaspoons of sugar a day to stay healthy.• To know that many food and drinks we do not expect to contain sugar do; we call these 'hidden sugars'.	<p>the environment.</p> <ul style="list-style-type: none">• To know that each fruit and vegetable gives us nutritional benefits because they contain vitamins, minerals and fibre.• To understand that vitamins, minerals and fibre are important for energy, growth and maintaining health.• To know safety rules for using, storing and cleaning a knife safely.• To know that similar coloured fruits and vegetables often have similar nutritional benefits.			
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Progression of Skills -TEXTILES

Subject Discipline	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
PRODUCTS	BOOKMARKS	PUPPETS	POUCH	EGYPTIAN COLLARS	FASTENINGS	STUFFED TOYS	WAISTCOAT
DESIGN (D)	<ul style="list-style-type: none"> * Discussing what a good design needs * Designing a simple pattern with paper. • Designing a bookmark *Choosing from available materials. 	<ul style="list-style-type: none"> • Using a template to create a design for a puppet. 	<ul style="list-style-type: none"> *Designing a pouch. 	<ul style="list-style-type: none"> • Designing and making a template from an existing cushion and applying individual design criteria 	<ul style="list-style-type: none"> • Writing design criteria for a product, articulating decisions made. • Designing a personalised book sleeve. 	<ul style="list-style-type: none"> • Designing a stuffed toy, considering the main component shapes required and creating an appropriate template. • Considering the proportions of individual components 	<ul style="list-style-type: none"> • Designing a waistcoat in accordance to a specification linked to set of design criteria. • Annotating designs, to explain their decisions.
MAKE (M)	<ul style="list-style-type: none"> • Developing fine motor/cutting skills with scissors. • Exploring fine motor/threading and weaving (under, over technique) with a variety of materials. • Using a prepared needle and wool to practise threading 	<ul style="list-style-type: none"> *Cutting fabric neatly with scissors. • Using joining methods to decorate a puppet. • Sequencing steps for construction. 	<ul style="list-style-type: none"> *Selecting and cutting fabrics for sewing. • Decorating a pouch using fabric glue or running stitch. • Threading a needle. • Sewing running stitch, with evenly spaced, neat, even stitches to join fabric. • Neatly pinning and cutting fabric using a template. 	<ul style="list-style-type: none"> *Following design criteria to create an Egyptian collar. • Selecting and cutting fabrics with ease using fabric scissors. • Threading needles with greater independence. • Tying knots with greater independence. • Sewing cross stitch to join fabric and decorating fabric using appliqué. • Embellishing the collars based on design ideas 	<ul style="list-style-type: none"> • Making and testing a paper template with accuracy and in keeping with the design criteria. • Measuring, marking and cutting fabric using a paper template. • Selecting a stitch style to join fabric. • Working neatly by sewing small, straight stitches. • Incorporating a fastening to a design. 	<ul style="list-style-type: none"> • Creating a 3D stuffed toy from a 2D design. • Measuring, marking and cutting fabric accurately and independently . • Creating strong and secure blanket stitches when joining fabric. • Threading needles independently. • Using appliqué to attach pieces of fabric decoration. Sewing blanket stitch to join fabric and applying blanket stitch so the spaces between the stitches are even and regular. 	<ul style="list-style-type: none"> • Using a template when cutting fabric to ensure they achieve the correct shape. *Using pins effectively to secure a template to fabric without creases or bulges. • Marking and cutting fabric accurately, in accordance with their design. • Sewing a strong running stitch, making small, neat stitches and following the edge. * Tying strong knots. • Decorating a waistcoat, attaching features (such as

							<p>appliqué) using thread.</p> <ul style="list-style-type: none"> • Finishing the waistcoat with a secure fastening (such as buttons). • Learning different decorative stitches. • Sewing accurately with evenly spaced, neat stitches.
<p>EVALUATE (EV)</p>	<ul style="list-style-type: none"> • Reflecting on a finished product and comparing it to their design. 	<ul style="list-style-type: none"> • Reflecting on a finished product, explaining likes and dislikes. 	<ul style="list-style-type: none"> *Troubleshooting scenarios posed by the teacher. • Evaluating the quality of the stitching on others' work. • Discussing as a class, the success of their stitching against the success criteria. • Identifying aspects of their peers' work that they particularly like and why. 	<ul style="list-style-type: none"> • Evaluating an end product and thinking of other ways in which to create similar items. 	<ul style="list-style-type: none"> • Testing and evaluating an end product against the original design criteria. • Deciding how many of the criteria should be met for the product to be considered successful. • Suggesting modifications for improvement. • Articulating the advantages and disadvantages of different fastening types. 	<ul style="list-style-type: none"> • Testing and evaluating an end product and giving points for further improvements. 	<ul style="list-style-type: none"> • Reflecting on their work continually throughout the design, make and evaluate process.

<p><u>TECHNICAL KNOWLEDGE (TK)</u></p> <p><u>TEXTILES</u></p>	<ul style="list-style-type: none"> • To know that a design is a way of planning our idea before we start. • To know that threading is putting one material through an object. 	<ul style="list-style-type: none"> • To know that 'joining technique' means connecting two pieces of material together. • To know that there are various temporary methods of joining fabric by using staples, glue or pins. • To understand that different techniques for joining materials can be used for different purposes. • To understand that a template (or fabric pattern) is used to cut out the same shape multiple times. • To know that drawing a design idea is useful to see how an idea will look. 	<ul style="list-style-type: none"> • To know that sewing is a method of joining fabric. • To know that different stitches can be used when sewing. • To understand the importance of tying a knot after sewing the final stitch. • To know that a thimble can be used to protect my fingers when sewing. 	<ul style="list-style-type: none"> •To know that applique is a way of mending or decorating a textile by applying smaller pieces of fabric to larger pieces. •To know that when two edges of fabric have been joined together it is called a seam. •To know that it is important to leave space on the fabric for the seam. •To understand that some products are turned inside out after sewing so the stitching is hidden. 	<ul style="list-style-type: none"> • To know that a fastening is something which holds two pieces of material together for example a zipper, toggle, button, press stud and velcro. • To know that different fastening types are useful for different purposes. • To know that creating a mock up (prototype) of their design is useful for checking ideas and proportions. 	<ul style="list-style-type: none"> • To know that blanket stitch is useful to reinforce the edges of a fabric material or join two pieces of fabric. • To understand that it is easier to finish simpler designs to a high standard. • To know that soft toys are often made by creating appendages separately and then attaching them to the main body. • To know that small, neat stitches which are pulled taut are important to ensure that the soft toy is strong and holds the stuffing securely. 	<ul style="list-style-type: none"> • To understand that it is important to design clothing with the client/ target customer in mind. • To know that using a template (or clothing pattern) helps to accurately mark out a design on fabric. • To understand the importance of consistently sized stitches.
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Progression of Skills -STRUCTURES AND MECHANISMS

Subject Discipline/ YEAR	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
AREA OF STUDY	STRUCTURES JUNK MODELLING	MECHANISMS WHEELS AND AXLES	STRUCTURES BABY BEAR'S CHAIR	MECHANISMS PNEUMATIC TOYS	STRUCTURES PAVILIONS	MECHANISMS POP UP BOOKS	STRUCTURES PLAYGROUNDS
DESIGN (D)	<ul style="list-style-type: none"> • Making verbal plans and material choices. • Developing a junk model. 	<ul style="list-style-type: none"> • Designing a vehicle that includes wheels, axles and axle holders, that when combined, will allow the wheels to move. *Creating clearly labelled drawings that illustrate movement. 	<ul style="list-style-type: none"> • Generating and communicating ideas using sketching and modelling. • Learning about different types of structures, found in the natural world and in everyday objects. 	<ul style="list-style-type: none"> • Designing a toy which uses a pneumatic system. • Developing design criteria from a design brief. • Generating ideas using thumbnail sketches and exploded diagrams. • Learning that different types of drawings are used in design to explain ideas clearly 	<ul style="list-style-type: none"> • Designing a stable pavilion structure that is aesthetically pleasing and selecting materials to create a desired effect. • Building frame structures designed to support weight. 	<ul style="list-style-type: none"> • Designing a pop-up book which uses a mixture of structures and mechanisms. • Naming each mechanism, input and output accurately. • Storyboarding ideas for a book. 	<ul style="list-style-type: none"> • Designing a playground featuring a variety of different structures, giving careful consideration to how the structures will be used, considering effective and ineffective designs.
MAKE (M)	<ul style="list-style-type: none"> • Improving fine motor/scissor skills with a variety of materials. • Joining materials in a variety of ways (temporary and permanent). • Joining different materials together. • Describing their junk model, and how they intend to put it together. 	<ul style="list-style-type: none"> • Adapting mechanisms, when: <ul style="list-style-type: none"> • they do not work as they should. • to fit their vehicle design. • to improve how they work after testing their vehicle. 	<ul style="list-style-type: none"> • Making a structure according to design criteria. • Creating joints and structures from paper/card and tape. • Building a strong and stiff structure by folding paper. 	<ul style="list-style-type: none"> • Creating a pneumatic system to create a desired motion. • Building secure housing for a pneumatic system. • Using syringes and balloons to create different types of pneumatic systems to make a functional and appealing pneumatic toy. • Selecting materials 	<ul style="list-style-type: none"> • Creating a range of different shaped frame structures. • Making a variety of free standing frame structures of different shapes and sizes. • Selecting appropriate materials to build a strong structure and cladding. • Reinforcing corners to strengthen a structure. • Creating a design in 	<ul style="list-style-type: none"> • Following a design brief to make a pop up book, neatly and with focus on accuracy. • Making mechanisms and/or structures using sliders, pivots and folds to produce movement. • Using layers and spacers to hide the workings of mechanical parts for an aesthetically pleasing result. 	<ul style="list-style-type: none"> • Building a range of play apparatus structures drawing upon new and prior knowledge of structures. • Measuring, marking and cutting wood to create a range of structures. • Using a range of materials to reinforce and add decoration to structures.

				<p>due to their functional and aesthetic characteristics.</p> <ul style="list-style-type: none"> Manipulating materials to create different effects by cutting, creasing, folding and weaving. 	<p>accordance with a plan.</p> <ul style="list-style-type: none"> Learning to create different textural effects with materials. 		
EVALUATE (EV)	<ul style="list-style-type: none"> Giving a verbal evaluation of their own and others' junk models with adult support. Checking to see if their model matches their plan. Considering what they would do differently if they were to do it again. Describing their favourite and least favourite part of their model. 	<ul style="list-style-type: none"> Testing wheel and axle mechanisms, identifying what stops the wheels from turning, and recognising that a wheel needs an axle in order to move. 	<ul style="list-style-type: none"> Exploring the features of structures. Comparing the stability of different shapes. Testing the strength of your own structures. Identifying the weakest part of a structure. Evaluating the strength, stiffness and stability of one's own structure. 	<ul style="list-style-type: none"> Using the views of others to improve designs. Testing and modifying the outcome, suggesting improvements. Understanding the purpose of exploded-diagrams through the eyes of a designer and their client. 	<ul style="list-style-type: none"> Evaluating structures made by the class. Describing what characteristics of a design and construction made it the most effective. Considering effective and ineffective designs. 	<ul style="list-style-type: none"> Evaluating the work of others and receiving feedback on their own work. Suggesting points for improvement. 	<ul style="list-style-type: none"> Improving a design plan based on peer evaluation. Testing and adapting a design to improve it as it is developed. Identifying what makes a successful structure.
TECHNICAL KNOWLEDGE (TK)	<ul style="list-style-type: none"> To know there are a range of different materials that can be used to make a model and that they are all slightly different. Making simple suggestions to fix their junk model. 	<ul style="list-style-type: none"> To know that a mechanism is the parts of an object that move together. To know that a slider mechanism moves an object from side to side. To know that a slider mechanism has a slider, slots, guides and an object. To know that bridges and guides are bits of card that purposefully restrict the movement of the slider. To know that in Design and technology we call a plan a 	<ul style="list-style-type: none"> To know that shapes and structures with wide, flat bases or legs are the most stable. To understand that the shape of a structure affects its strength. To know that materials can be manipulated to improve strength and stiffness. To know that a 	<ul style="list-style-type: none"> To understand how pneumatic systems work. To understand that pneumatic systems can be used as part of a mechanism To know that pneumatic systems operate by drawing in, releasing and compressing air. To understand how sketches, drawings and 	<ul style="list-style-type: none"> To understand what a frame structure is. To know that a 'free-standing' structure is one which can stand on its own. To know that a pavilion is a decorative building or structure for leisure activities. To know that cladding can be applied to structures for different effects. To know that aesthetics 	<ul style="list-style-type: none"> To know that mechanisms control movement. To understand that mechanisms can be used to change one kind of motion into another. To understand how to use sliders, pivots and folds to create paper-based mechanisms To know that a design brief is a description of what I am going to design 	<ul style="list-style-type: none"> To know that structures can be strengthened by manipulating materials and shapes. To understand what a 'footprint plan' is. To understand that in the real world, design can impact users in positive and negative ways. To know that a prototype is a cheap model to test a design idea

		'design'.	<p>structure is something which has been formed or made from parts. • To know that a 'stable' structure is one which is firmly fixed and unlikely to change or move.</p> <ul style="list-style-type: none">• To know that a 'strong' structure is one which does not break easily.• To know that a 'stiff' structure or material is one which does not bend easily.• To know that natural structures are those found in nature.• To know that man-made structures are those made by people.	<p>diagrams can be used to communicate design ideas.</p> <ul style="list-style-type: none">• To know that exploded-diagrams are used to show how different parts of a product fit together.• To know that thumbnail sketches are small drawings to get ideas down on paper quickly.	<p>are how a product looks.</p> <ul style="list-style-type: none">• To know that a product's function means its purpose.• To understand that the target audience means the person or group of people a product is designed for.• To know that architects consider light, shadow and patterns when designing.	<p>and make.</p> <ul style="list-style-type: none">• To know that designers often want to hide mechanisms to make a product more aesthetically pleasing.	
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