

DT	DESIGN TECHNOLOGY— INTRODUCTION TO PRODUCT DESIGN	YEAR 7	TERM 1
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1. RESISTANT MATERIALS & PRODUCT DESIGN	2. DIFFERENT MACHINES IN THE WORKSHOP	3. USING HAND TOOLS IN THE WORKSHOP
<p>Resistant materials is the study of design and manufacture of products using a wide range of materials. In this subject you will be taught how to make products with creativity and originality, using a range of materials, processes and techniques.</p> <p>The term resistant materials also refers to materials that are grouped together because they show certain common characteristics.</p> <p>These materials are categorised as wood, metal, ceramics, plastics, a and glass.</p> <p>Manufacture means to make a product on a large scale using machinery.</p> <p>E.g. There are many different items of furniture that go through manufacture.</p> <p>Hazards are a risk or danger to yourself or to someone else. There are many hazards we need to think about when preparing, cutting and shaping materials. Hazards can be a danger to yourself or someone else, if actions are not taken to prevent them.</p> <p>A danger is an action that could cause harm or injury.</p>	<p>The word scale is used to refer to the size of a machine, product or object.</p> <p>Drill chuck is the term used for holding a drill on a spindle usually by means of adjustable jaws.</p> <p>The word adjustable means something can be changed to a desired setting.</p> <p>Band facer – A machine that sands woods using sand paper on a long belt.</p> <p>Pillar drill- A drill that is a free-standing machines that use a motor to rotate a drill bit with variable speed range.</p> <p>Scroll saw is a small electric or pedal-operated saw used to cut intricate curves in wood, metal, or other materials.</p> <p>Modelling is using a procedure, technique or system as an example for a person to follow or copy.</p> <p>Extraction is the action of removal, in other words taking something away using effort or force.</p> <p>In resistant materials and product design we use extraction units to remove dust and wood particles from the air.</p>	<p>Tenon Saw is a large backsaw used for making deep, accurate cuts in woods.</p> <p>Tri Square is a tool used to check and mark right angles in constructional work.</p> <p>Construction is the building or manufacture of a product, building or large scale structure.</p> <p>Coping saw is a saw with a very narrow blade stretched across a D-shaped frame, used for cutting curves in wood.</p> <p>Millimetres is a unit of measurement. There are 10mm in 1cm.</p> <p>Batch production is the term used to describe products that are made in specified groups or amounts, within a time frame.</p> <p>Clamp is the term used to describe the tool used to hold or fasten something in place.</p>
4. CREATING A PRODUCT IN THE WORKSHOP	5. DESIGN BRIEF	6. SOFTWOODS
<p>The word process is a series of actions or steps taken in order to achieve a particular end.</p> <p>Modify means to change or adapt something.</p> <p>Inspiration is the term used to describe the process of being mentally stimulated to feel or do something, particularly something creative.</p> <p>The term copyright means document, or creation is protected and cannot be copied by law.</p> <p>Contingency is the term used to describe additional time that is planned into the production of a product.</p> <p>To practice is to repeat an action multiple times until a level of skill is achieved. Mistakes can often be useful when learning how to</p>	<p>A task analysis is the investigation of a project and how that project will be completed. Looking closely at a theme and any requirements of a design brief.</p> <p>A design brief is a written description of what a new project is or what a product should do, what is needed to produce it, and how long it will take to complete.</p> <p>Target audience is the term used to describe the intended audience (group) that a particular project is aimed at.</p> <p>Component - A functional part or element of a larger whole, especially a part of a machine or vehicle. E.g. nut or bolt.</p>	<p>Softwoods are woods that are collected from a conifer tree. For example pine, fir or spruce. These are often used in DIY projects and professional joinery..</p> <p>Pliable is the term used to describe a product that can be bent easily or is flexible.</p> <p>Frequently is the term used to describe an event or action that happens often.</p> <p>Profession is the term used to describe a paid occupation involving a formal training and a qualification.</p>