

1. RESISTANT MATERIALS & PRODUCT DESIGN	2. DIFFERENT MACHINES IN THE WORKSHOP	3. USING HAND TOOLS IN THE WORKSHOP
<p><b>Resistant materials</b> 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 <b>resistant materials</b> also refers to materials that are grouped together because they show certain common <b>characteristics</b>.</p> <p>These materials are categorised as wood, metal, ceramics, plastics, a and glass.</p> <p><b>Manufacture</b> 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><b>Hazards</b> 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 <b>danger</b> to yourself or someone else, if actions are not taken to prevent them.</p> <p>A <b>danger</b> is an action that could cause harm or injury.</p>	<p>The word <b>scale</b> is used to refer to the size of a machine, product or object.</p> <p>Drill <b>chuck</b> is the term used for holding a drill on a spindle usually by means of <b>adjustable</b> jaws.</p> <p>The word <b>adjustable</b> means something can be changed to a desired setting.</p> <p><b>Band facer</b> – A machine that sands woods using sand paper on a long belt.</p> <p><b>Pillar drill</b>- A drill that is a free-standing machines that use a motor to rotate a drill bit with variable speed range.</p> <p><b>Scroll saw</b> is a small electric or pedal-operated saw used to cut intricate curves in wood, metal, or other materials.</p> <p><b>Modelling</b> is using a procedure, technique or system as an example for a person to follow or copy.</p> <p><b>Extraction</b> is the action of removal, in other words taking something away using effort or force.</p>	<p><b>Tenon Saw</b> is a large backsaw used for making deep, <b>accurate</b> cuts in woods.</p> <p><b>Tri Square</b> is a tool used to check and mark right angles in constructional work.</p> <p><b>Construction</b> is the building or manufacture of a product, building or large scale structure.</p> <p><b>Coping saw</b> 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><b>Batch production</b> is the term used to describe products that are made in specified groups or amounts, within a time frame.</p> <p><b>Clamp</b> is the term used to describe the tool used holds or fastens something in place.</p>
4. CREATING A PRODUCT IN THE WORKSHOP	5. DESIGN BRIEF	6. SOFTWOODS
<p>The word <b>process</b> is a series of actions or steps taken in order to achieve a particular end.</p> <p><b>Modify</b> means to change or adapt something.</p> <p><b>Inspiration</b> is the term used to describe the process of being mentally stimulated to feel or do something, particularly something creative.</p> <p>The term <b>copyright</b> means document, or creation is protected and cannot be copied by law.</p> <p><b>Contingency</b> is the term used to describe additional time that is planned into the production of a product.</p> <p>To <b>practice</b> is to repeat an action multiple times until a level of skill is achieved. Mistakes can often be useful when learning how to master a skill.</p>	<p><b>A task analysis</b> 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 <b>design brief</b> 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><b>Target audience</b> is the term used to describe the intended audience (group) that a particular project is aimed at.</p> <p><b>Component</b> - A functional part or element of a larger whole, especially a part of a machine or vehicle. E.g. nut or bolt.</p>	<p><b>Softwoods</b> 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><b>Pliable</b> is the term used to describe a product that can be bent easily or is flexible.</p> <p><b>Frequently</b> is the term used to describe an event or action that happens often.</p> <p><b>Profession</b> is the term used to describe a paid occupation involving a formal training and a qualification.</p>