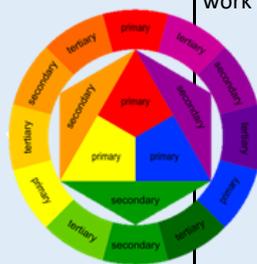


1. TASK ANALYSIS	2. SMART MATERIALS	2. SMART MATERIALS
<p>Task Analysis – Is the investigation of a project and how that project will be completed. Looking closely at a theme and any requirements of a design brief.</p> <p>Design Brief - A written description of what a new project is, what a product should do, what is needed to produce it, and how long it will take.</p> <p>Target audience – This is the intended audience (group) that a particular project is aimed at.</p> <p>Specification - A design specification is a detailed document providing a list of points regarding a product or process. For example, the design specification could include required dimensions.</p> <p>Textiles Techniques – These are ways that a product could be decorated to meet the needs of the target audience. For example the children's coat could include an animal print, or be a bright colour.</p> <p>Component - A functional part or element of a larger whole, especially a part of a machine or vehicle. Eg. Zip or button</p>	<p>properties - A thing or things belonging to someone; possessions collectively. In DT properties refers to the characteristics of a product.</p> <p>A smart fabric describes a material that senses and responds to external stimulus or a change in an environment, that change must be reversed when the stimulus is also removed or changed.</p> <p>External means outside of something. Stimulus is something that causes a reaction.</p> <p>Sometimes the term 'intelligent' or 'interactive' is used which is a reference to the fact that smart materials appear to 'think' for themselves.</p> <p>Examples of a stimulus:</p> <ul style="list-style-type: none"> - Heat - Light/ darkness - Pressure - Moisture - PH level - Electricity - Magnetic Field <p>These cause the change in the environment.</p>	<p><i>The objects response to the stimulus could be;</i></p> <ul style="list-style-type: none"> - Change in colour - Change in shape. - Change in texture - Change in size - Change in position <p>These are the effect that can happen due to changes in the environment.</p> <p>We need smart materials because they can;</p> <ul style="list-style-type: none"> • Increased functionality • Increased properties • Increased value <p>When a design is inspired by nature it is called biomimicry. Materials 'mimic' the animals action.</p> <p>Some animals inspire the development of smart materials.</p> <p>This could be because they change colour, shape or shape.</p>
3. ARTIST RESEARCH	4. INITIAL DRAWINGS	5 AND 6. E-TEXTILES
<p>Complex - consisting of many different and connected parts.</p> <p>Artist - Is a person who produces paintings or drawings as a profession or hobby.</p> <p>When describing artist work both art textiles and fashion it is important to use the correct colour terminology.</p> <p>Natural colours - Browns, Cream, beige</p> <p>Warm colours - Reds, Pink, yellow (<i>Think of summer</i>)</p> <p>Cold colours – Blues, Greys (<i>Think of winter</i>)</p> <p>Monochrome – Black and White</p> <p>Contrasting – Colours that are opposite sides of the colour wheel</p> <p>Harmonising – Colours that go well together and are calming.</p> 	<p>Designers use a range of sources to inspire their products. Before a product can be made designers must create a design.</p> <p>Inspiration – Inspiration is the process of being mentally stimulated to do or feel something, especially to do something creative.</p> <p>To collect ideas for a project designers often research a theme and draw from this. This is called the initial design process. Designers often use a range of media.</p> <p>Media - Medium refers to the materials that are used to create a work of art. The plural of medium is media.</p> <p>Tone is used to create depth within a picture by giving the impression of light on a flat surface.</p> <p>Using different amounts of pressure on a pencil will allow you to achieve different shades of tone.</p> <p>Light pressure = Light shade Harder pressure = Darker shade</p>	<p>E-Textiles is a process of including electronics within a textiles product. Eg. Lights with a jumper.</p> <p>When creating this within a product an electrical circuit must be made. This is made by stitching with conductive thread to allow the current to pass from the battery to the LED light. Stitches serve a purpose when using conductive thread.</p> <p>If there is a break in the stitching the electrical current will not continue. Resulting in an unsuccessful circuit.</p> <p>The equipment you would use for sewing is a needle, thread, fabric and scissors. The hole in the needle where you insert the thread is called the eye of the needle.</p> <p>You should always use an arm's length of thread to stop unwanted knots being made.</p> <p>Running stitch is the stitch you would use to join fabrics together. The stitch goes in and out of the fabric. You start at the back (wrong side) of the fabric.</p>