

# Drawing techniques

## Project Outline

In this unit, you will further consolidate your 3D drawing & design communication skills.

## Project Context

There is a variety of different drawing techniques that are used in different situations and careers. It is essential that the right technique is selected and drawn with accuracy to effectively communicate an idea/design.

### Learning Objectives of cycle:

- Students will understand how drawing techniques are used for varying purposes throughout the designing cycle.
- Students will identify how to attain higher marks in both the NEA and the examination.
- Students will be able to apply techniques and skills to own design development and communication of ideas.
- Students will develop the ability to respond to examination style questions on design & make principles.



Why learn how to draw?

You are learning how to draw:

- To ensure that you are able to communicate a design idea
- To develop your own personal drawing skills in preparation for what is required at GCSE level and beyond
- To express your creative side

Week	Content	Completed?	
		Y / N	EFFORT
1&2	<p>Lesson 1</p> <ul style="list-style-type: none"> <li>• Introduction to Design Communication</li> <li>• The design process: NEA &amp; Examination links</li> <li>• Freehand sketching</li> <li>• Examination Question</li> </ul> <p><i>Homework 1: freehand sketch three products in the home—watch the videos and improve your skills.</i></p> <p><i>Challenge: Develop the design of your product by re-sketching it with modifications e.g. change the form; or modify a handle for example.</i></p> <p><i>Further Challenge: Watch this more advanced sketching technique video - have a go at rendering and adding colour blocking</i></p> <p>Lesson 2</p> <ul style="list-style-type: none"> <li>• One point perspective consolidation</li> <li>• Rendering—3 tone technique</li> </ul> <p>Lesson 3</p> <ul style="list-style-type: none"> <li>• Homework review—peer WWW &amp; EBI</li> <li>• Two point perspective consolidation</li> </ul>		

WWW	EBI
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Week	Content	Completed?	
		Y / N	EFFORT
1&2	<p>Lesson 4</p> <ul style="list-style-type: none"> <li>• Isometric foundations &amp; consolidation: cubes &amp; stereo</li> <li>• Isometric plans and elevations</li> </ul> <p><i>Homework 2: complete the worksheet on plans &amp; elevations</i></p> <p><i>Challenge: try converting the drawings you have done in isometric into orthographic projections.</i></p> <p><i>Further Challenge: Describe the difference between FIRST Angle &amp; THIRD Angle</i></p> <p><i>orthographic Projection: draw their symbols and label.</i></p> <p>Lesson 5</p> <ul style="list-style-type: none"> <li>• Homework Review—self assess &amp; amend</li> <li>• Isometric drawing of products: curves and ellipses</li> <li>• Redesigning mobile phone to suit needs of a target market.</li> </ul>		
3&4	<p>Lesson 6</p> <ul style="list-style-type: none"> <li>• Letter writing challenge starter</li> <li>• Legoman challenges—progress through the levels</li> </ul> <p>Lesson 7</p> <ul style="list-style-type: none"> <li>• Continue Legoman challenge</li> <li>• Evaluations and progress review</li> </ul> <p><i>Homework 3: Draw a range of objects in your home in isometric. Use a ruler for straight lines.</i></p> <p><i>Aim to draw a minimum of 3 objects.</i></p> <p><i>Challenge: Render the objects using an appropriate technique.</i></p> <p><i>Further Challenge: Evidence more than one rendering technique.</i></p> <p>Lesson 8</p> <ul style="list-style-type: none"> <li>• Orthographic Projection: three challenge Levels</li> <li>• Analysis of examination style question</li> </ul> <p>Lesson 9</p> <ul style="list-style-type: none"> <li>• Homework review</li> <li>• Orthographic continued: wooden blocks</li> </ul> <p><i>Homework 4: 3rd angle examination practice question</i></p> <p><i>Challenge: Draw your TV remote control in orthographic</i></p> <p><i>Further Challenge: Create your own isometric drawing question as practice for the exam</i></p> <p>Lesson 10</p> <ul style="list-style-type: none"> <li>• Exploded diagrams: exercises</li> <li>• Examination style question</li> </ul>		

Week	Content	Completed?	
		Y/N	EFFORT
5&6	<p>Lesson 11</p> <ul style="list-style-type: none"> <li>• Homework 5 review: orthographic recap</li> <li>• Exploded diagrams—uses and function</li> <li>• Sectional views</li> <li>• Examination Questions</li> </ul> <p>Lesson 12</p> <ul style="list-style-type: none"> <li>• Drawing skills—maths starter test</li> <li>• Identification of strengths &amp; weaknesses: student led le drawing practise</li> <li>• Design Strategies—introduction</li> </ul> <p><i>Homework 5: Design Strategies &amp; Fixation examination questions (flipped learning)</i>  <i>Challenge: Find out information on the further types of Design Strategies: collaboration; user centered design; iterative design. Visit: <a href="http://technologystudent.com/despro_flash/NEW_GCSE3.html">http://technologystudent.com/despro_flash/NEW_GCSE3.html</a></i>  <i>Further Challenge: Present your extra research like the revision cards shown .</i></p> <p>Lesson 13</p> <ul style="list-style-type: none"> <li>• Design Strategies &amp; Design Fixation.</li> <li>• Command words</li> </ul> <p>Lesson 14</p> <ul style="list-style-type: none"> <li>• Command words starter</li> <li>• Ergonomics &amp; anthropometrics</li> <li>• Re-design challenges</li> </ul> <p><i>Homework 6: Revision planning for test</i>  <i>Challenge: Create revision cards for each drawing technique which include the rules &amp; a diagram/sketch</i>  <i>Further Challenge: Write your own questions to practice responding to - what do you think will come up on the test?</i></p> <p>Lesson 15</p> <ul style="list-style-type: none"> <li>• Drawing skills—End of Cycle Test</li> </ul>		

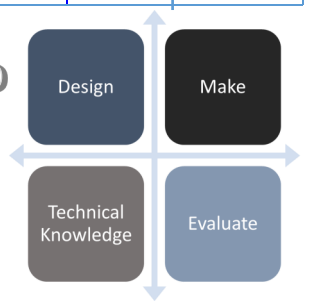


## LEARNING TOOLS

Tick when you think you are able to define the meaning of the keyword

KEYWORDS	Formal drawing	Working	Two-Dimensional	Three-Dimensional
Accuracy	Technical			

Challenge!



What areas of the four key concepts for Design & Technology have you worked in during this cycle?

Circle your response

Challenge!

Can you add more keywords you have covered?



<b>My Expected Grade</b>				
<b>Teacher Assessed Grade (circle)</b>				
SBE	BE	E	AE	SAE
<b>Comment:</b>				

Grade		Knowledge	
		Prior	Post
<b>8 - 9</b>	<p>I can...</p> <ul style="list-style-type: none"> <li>Identify and explain the rules of all of the Technical drawing techniques</li> <li>Draw in 3D accurately with a good degree of skill to communicate my ideas</li> <li>Use a range of rendering techniques such as three tone; line shading &amp; radial shading to add colour to my design ideas</li> <li>Present my design work creatively showing understanding of layout techniques such as colour blocking and movement arrows</li> <li>Fully explain and give examples of all of the design strategies</li> <li>Explain with confidence multiple AQA command words</li> <li>Analyse examination style questions and plan my responses effectively taking account of the keywords and marks available</li> </ul>		
<b>6 - 7</b>	<p>I can...</p> <ul style="list-style-type: none"> <li>Identify and explain several Technical drawing techniques</li> <li>Draw in 3D with some level of skill to communicate my ideas</li> <li>Use the three tone rendering technique when adding colour to my design work</li> <li>Present my design work effectively using at least one layout technique</li> <li>Identify and describe at least three of the design strategies</li> <li>Identify and explain at least 4 of the AQA command words</li> <li>Analyse examination style questions and respond effectively</li> </ul>		
<b>4 - 5</b>	<p>I can...</p> <ul style="list-style-type: none"> <li>Recognise several Technical drawing techniques</li> <li>Draw in 3D to communicate my ideas</li> <li>Add colour effectively to my design ideas</li> <li>Present my design work in a way that clearly communicates my thinking</li> <li>Explain what a design strategy is</li> <li>List at least 4 AQA command words</li> <li>Respond to examination style questions</li> </ul>		