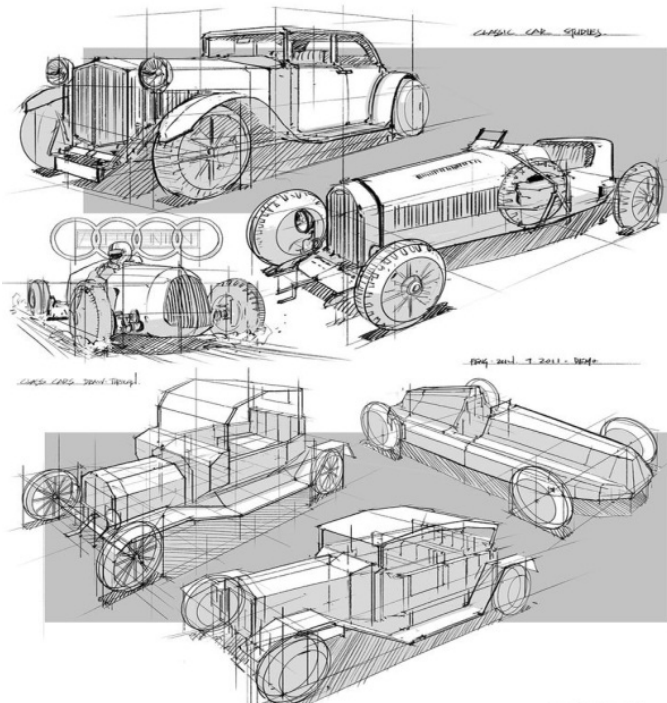




**Design out the box**

**Design Task / Task Dylunio:**

You will learn how to present designs using the following drawing techniques, sketching, crating, perspective drawings, isometric drawings and rendering techniques. You will use these techniques to complete a design brief using the skills that you have learnt.



**Presentation**

You are expected to **carry your folder in the A3 wallet provided. IT SHOULD NOT BE FOLDED** A pen should be used for all writing and a pencil should be used for design work. Designs are expected to be coloured in.

<b>TARGET</b>	
---------------	--

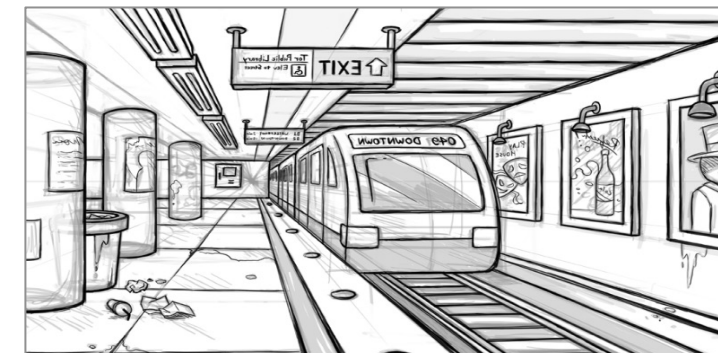
**Presentation**

You are expected to **carry your folder in the A3 wallet provided. IT SHOULD NOT BE FOLDED** A pen should be used for all writing and a pencil should be used for design work. Designs are expected to be coloured in.

**Learning Objectives / Nodau Dysgu:**

- You will learn how the crating technique can help when developing 3 dimensional images
- You will learn to draw in a variety of techniques such as isometric, one point and two point perspective
- You will learn how to enhance the presentation of your work with thick and thin lines
- You will learn how to add colour to a three dimensional drawing to give a sense of realism.
- You will develop a range of CAD 3D modelling skills
- You will design a detailed realistic model to convey your ideas to the client.

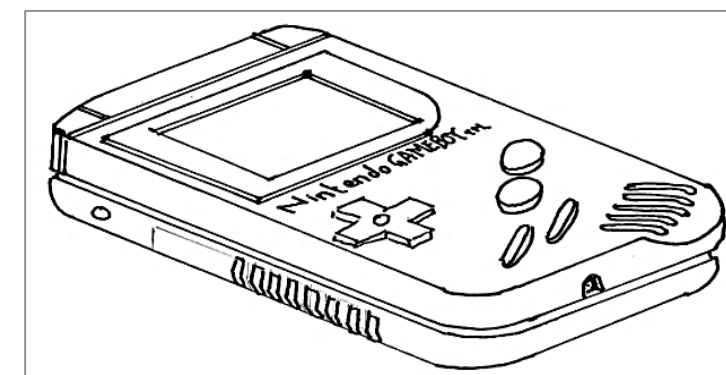
Drawing Technique	Interim Level	Level Awarded
One point perspective train		
One point perspective NYC		
One point perspective crating		
One point perspective phone/ camera		



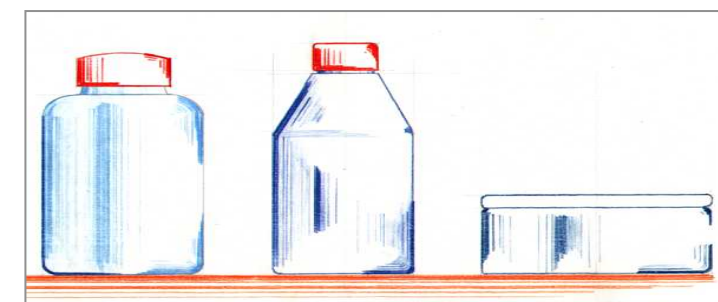
Drawing Technique	Interim Level	Level Awarded
Two point perspective NYC		
Two point perspective House		
Two point perspective luxury House		
Two point Crating		
Two point perspective phone/ camera		

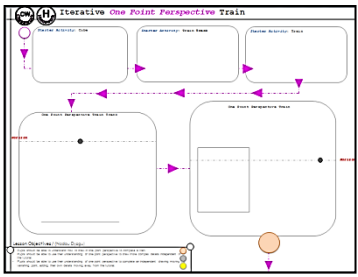
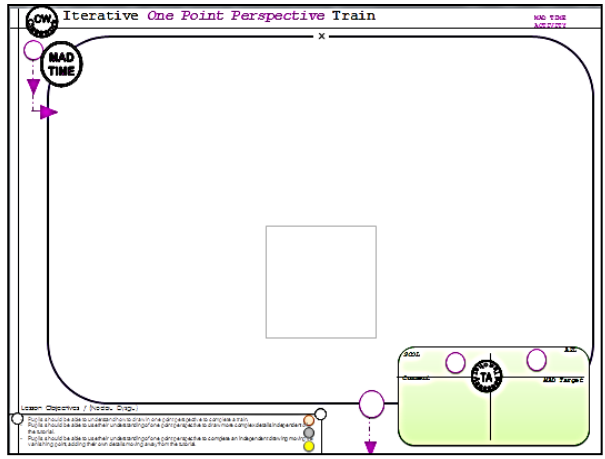
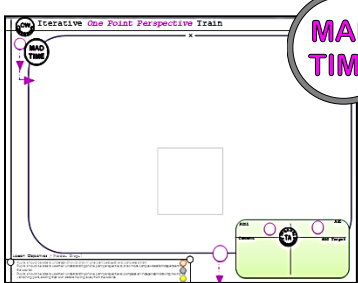

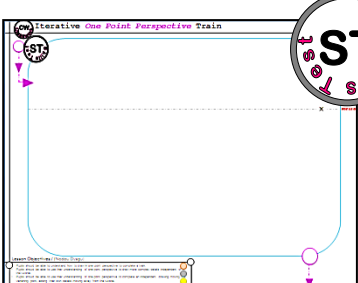
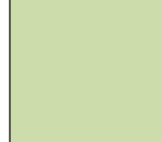
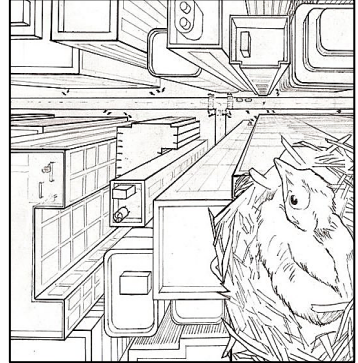
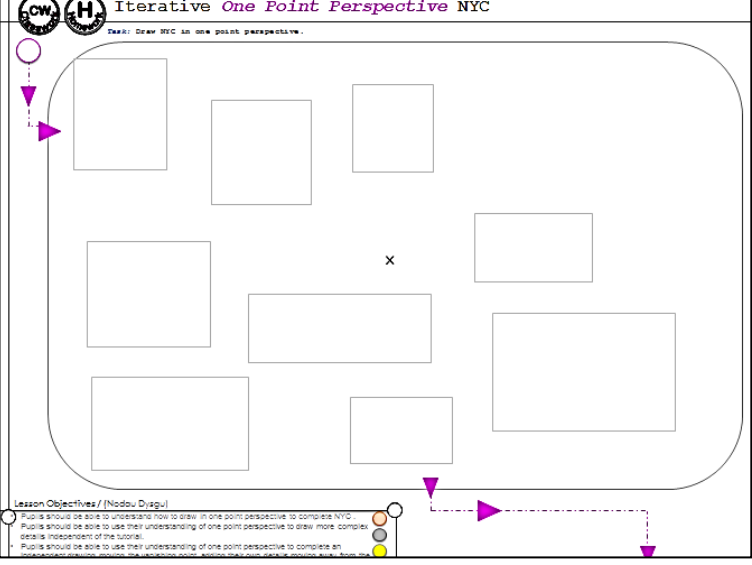


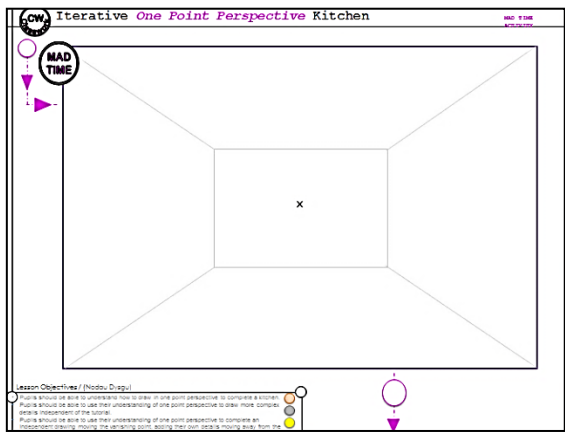
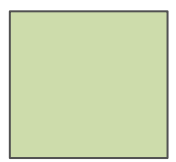
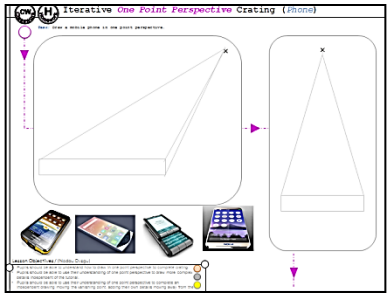
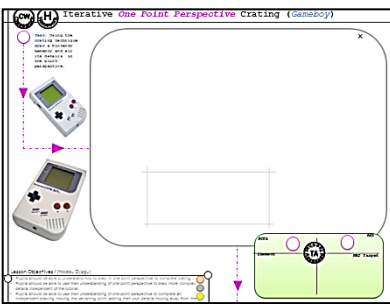
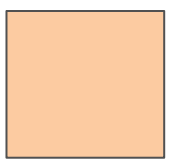

Drawing Technique	Interim Level	Level Awarded
Isometric crating		
Isometric phone		
Isometric camera		
Isometric kitchen		



Drawing Technique	Interim Level	Level Awarded
Textures		
Renders		
Thick/thin line		

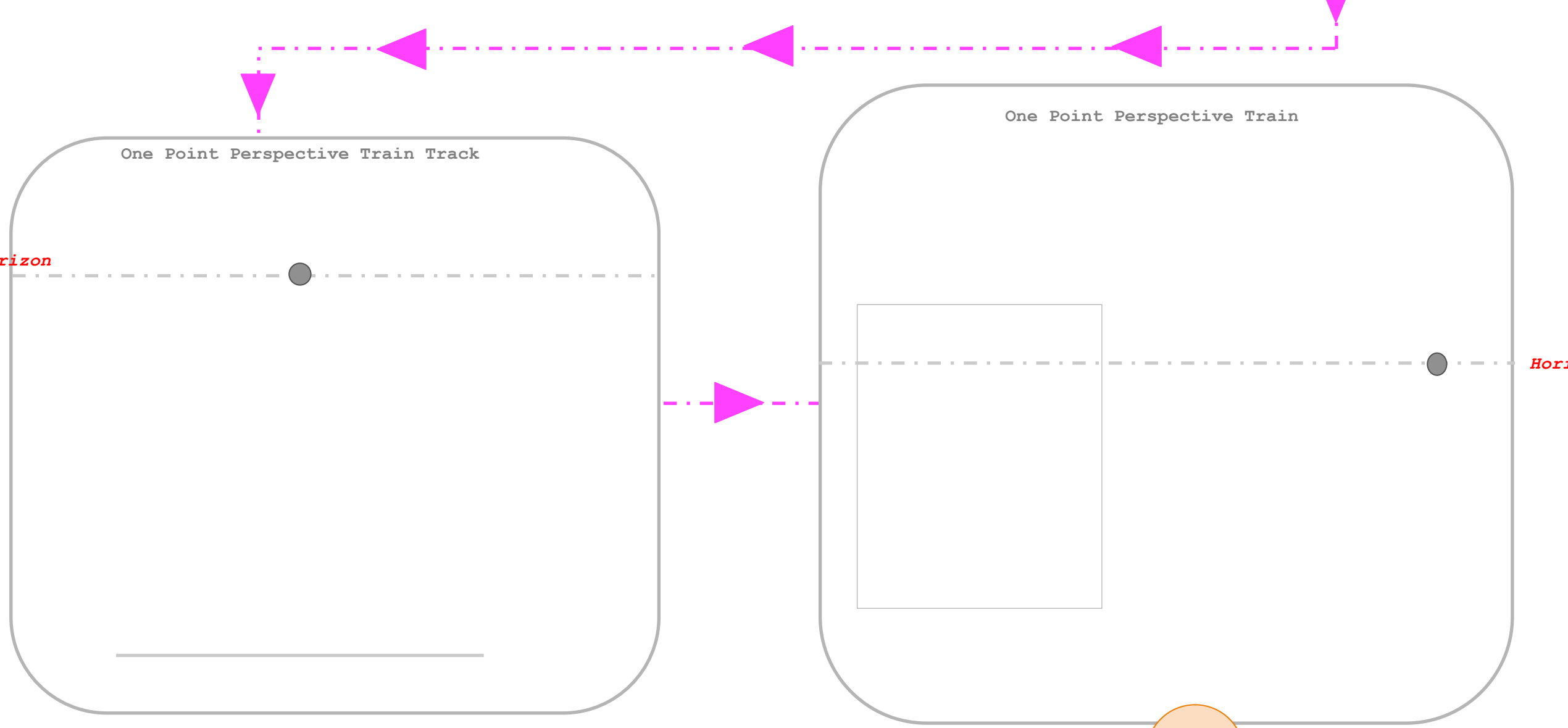
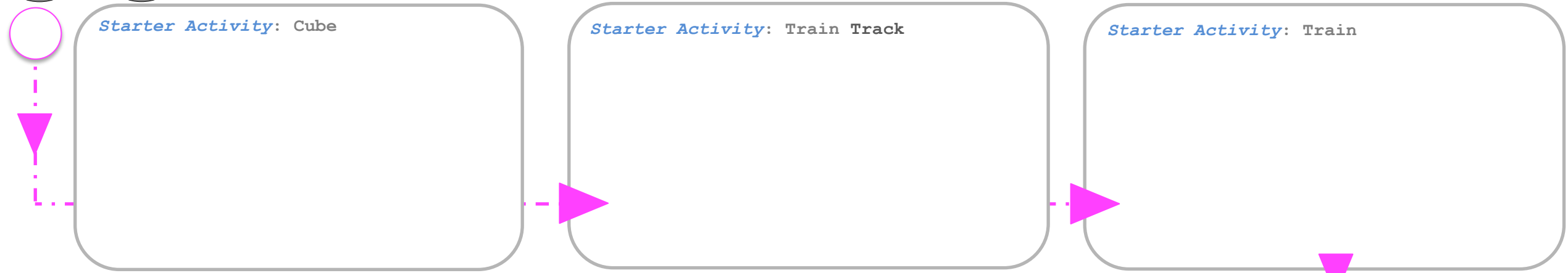


Subject:		Year	Term	Topic
KS4 Graphics Skills		10	Term 1	PRODDUCT DESIGN ENGINEERING
<p><b>Skills, Knowledge and Understanding to be developed:</b></p> <p><b>Skills</b> = This project allows students to develop a wide range of communication skills. Students will develop new technical drawing skills as well as literacy and numeracy skills throughout their design folder.</p> <p><b>Knowledge</b> = As students research information that will inform their designs they will present their findings using appropriate technical language and 3D graphical drawing and modelling skills taught.</p> <p><b>Understanding</b> = Students will understand how to apply the crating technique to help when developing 3 dimensional objects. Students will understand how to present ideas in isometric, one point and two point perspective. They will understand how to enhance the presentation of their work with thick and thin lines. They will understand how to render a three dimensional drawing using textures and shading to give a sense of realism.</p>		<p><b>Key Terms/Words:</b></p> <p>One Point Perspective, Two Point Perspective, Rendering, Graphics, Modelling, Isometric, Sketching, Shading, Thick and Thin Lines, Shadows, Crating, Modelling.</p>		
Learning outcomes and success criteria:		Assessment	Homework	
<p><b>Week 1: Starter Activity:</b> In the three boxes students to draw the following a cube, a train track, a train!</p> <p>Students should complete the <b>one point perspective drawing</b> of the train track followed by the train. They will then be able to use these skills to draw a one point perspective train add their own details following the rules and techniques that they have learnt.</p>		 <p>Parallel projection, mathematical shapes, vertical, horizontal, one point perspective, rendering, graphics, vanishing point, horizon</p>	<p><b>Homework:</b> Students should complete the one point perspective drawing of a train and all its details using the skills that they have learnt.</p> 	
Assessment Week	<p><b>Week 1</b> Students should complete the <b>one point perspective</b> drawing of a train and all its details using the skills they have learnt. Details could include train station, bridges, houses on the side of the track, different shaped train. <i>Students can use the departmental website and the graphics tutorials to assist. The link is shown below.</i></p> <p><a href="http://www.designoutthebox.com/graphicshome.html">http://www.designoutthebox.com/graphicshome.html</a></p>	 <p><b>Showing Characteristics of Grade</b></p> 		
Skills Test	<p><b>Week 2:</b> Students should complete skills test <b>one point perspective</b> drawing of a train and all its details using the skills they have learnt.</p> <p>In the case of this drawing the vanishing point has been moved and the drawing gives students an opportunity to explore their own design ideas and show the skills they have learnt.</p>	 <p><b>Test Outcome</b></p> 		
<p><b>Week 2: Starter Activity:</b> Students to complete the <b>one point perspective</b> blocks activity by turning the squares into 3D. <b>Students will finish the back of the blocks by sliding the ruler backwards and parallel to the front lines.</b></p> <p>Students should complete the one point perspective drawing of NYC using the starter activity technique. They should use their skills to add their own details such as windows, rooftops and roads. <i>Students can use the departmental website and the graphics tutorials to assist. The link is shown below.</i></p> <p><a href="http://www.designoutthebox.com/graphicshome.html">http://www.designoutthebox.com/graphicshome.html</a></p>		 <p>Parallel projection, mathematical shapes, vertical, horizontal, one point perspective, rendering, graphics, vanishing point, horizon</p>	<p><b>Homework:</b> Students should complete the one point perspective drawing of NYC and all its details using the skills that they have learnt.</p> 	

Learning outcomes and success criteria:		Assessment	Homework
<p><b>Week 3: Starter Activity:</b> In the two boxes students are to draw the following a kitchen and room of their choice .</p> <p>Students watch the step by step guide on how to draw kitchen view in <b>one point perspective</b>, demo on the board and using the grid. Students complete their own design on blank page. Emphasise the need for very light pencil lines as a lot will be rubbed out. They can darken them in later. <b>Students should complete for homework.</b></p>		<p>Parallel projection, mathematical shapes, vertical, horizontal, one point perspective, rendering, graphics, vanishing point, horizon</p>	<p><b>Homework:</b> Students should complete the one point perspective drawing of a kitchen and all its details using the skills that they have learnt.</p> 
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Skills Test</b></p>	<p><b>Week 3:</b> Students should complete skills test one point perspective drawing of a room of their choice and all its details using the skills they have learnt.</p> <p>In the case of this drawing the students can research <b>one point perspective rooms</b> and the drawing gives students an opportunity to explore their own design ideas and show the skills they have learnt.</p>	<p><b>Test Outcome</b></p> 	
	<p><b>Week 4: Starter Activity:</b> In the three boxes students to draw the one point perspective letters L, T and H!</p> <p>Demonstration on how to apply the <b>crating technique</b> and how to lay out a 3D drawing. Students complete their own name in <b>one point perspective</b>. Emphasise the need for very light pencil lines as a lot will be erased. They can darken the main lines in later.</p> <p>Students then draw a crate for the given wooden shapes. The crate should be drawn out a using a ruler and very light pencil lines. They then complete the shape inside the crate using skills learnt.</p>	<p>Parallel projection, mathematical shapes, vertical, horizontal, one point perspective, rendering, graphics, vanishing point, horizon, crating, layout, freehand</p>	<p><b>Homework:</b> Students draw a crate for a mobile phone and add details. The crate should be drawn out a using a ruler and very light pencil lines. They can darken the main lines later.</p> <p>Students then complete the shape inside the crate freehand to give a more organic feel.</p> <p>Students to complete a game boy drawing using the same technique</p>  
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Assessment Week</b></p>	<p><b>Week 4:</b> Students should complete the <b>one point perspective</b> drawing of a camera and all its details using the <b>crating technique</b> that they have learnt. Details could include finger grips, screen, camera lense, flash, menu buttons etc. <b>Students can use the departmental website and the graphics tutorials to assist. The link is shown below.</b></p> <p><a href="http://www.designoutthebox.com/graphicshome.html">http://www.designoutthebox.com/graphicshome.html</a></p>	<p><b>Showing Characteristics of Grade</b></p> 	
<p style="text-align: center;"><b>ONE POINT PERSPECTIVE SUBMISSION</b></p>		<p><b>Showing Characteristics of Grade</b></p> 	<p style="text-align: center;"><b>One point perspective catch up.</b></p>

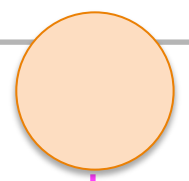
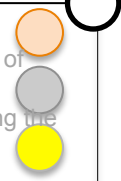
**Skills Test**

**MAD TIME**



### Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to draw in one point perspective to complete a train.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the tutorial.



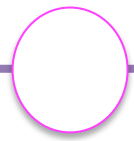
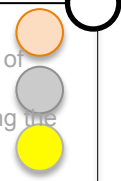
MAD  
TIME

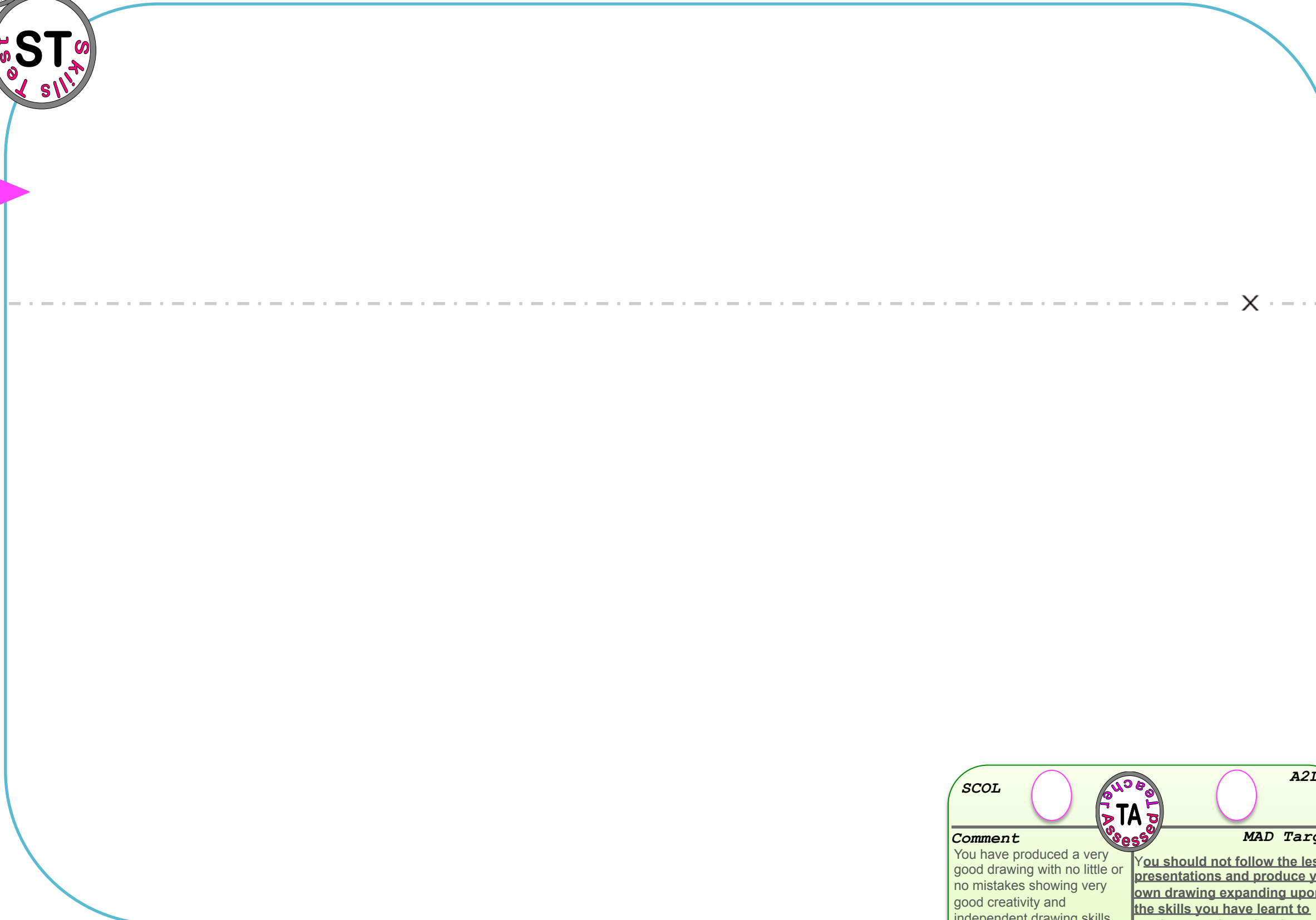


SCOL		A2L
Comment	TA Teacher Assessed	MAD Target

Lesson Objectives / (Nodau Dysgu)

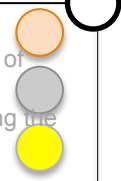
- Pupils should be able to understand how to draw in one point perspective to complete a train.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the tutorial.





Lesson Objectives / (Nodau Dysgu)

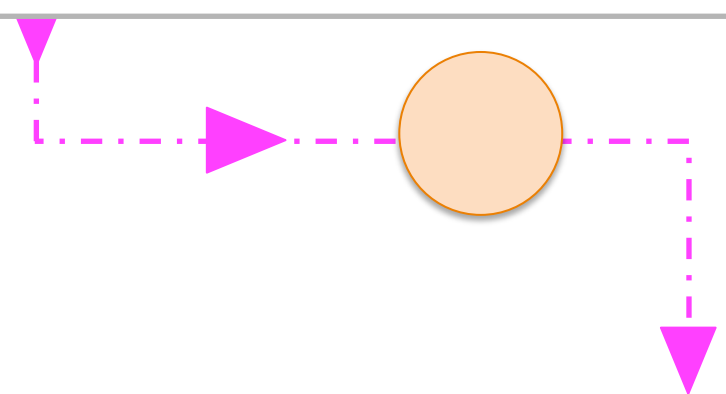
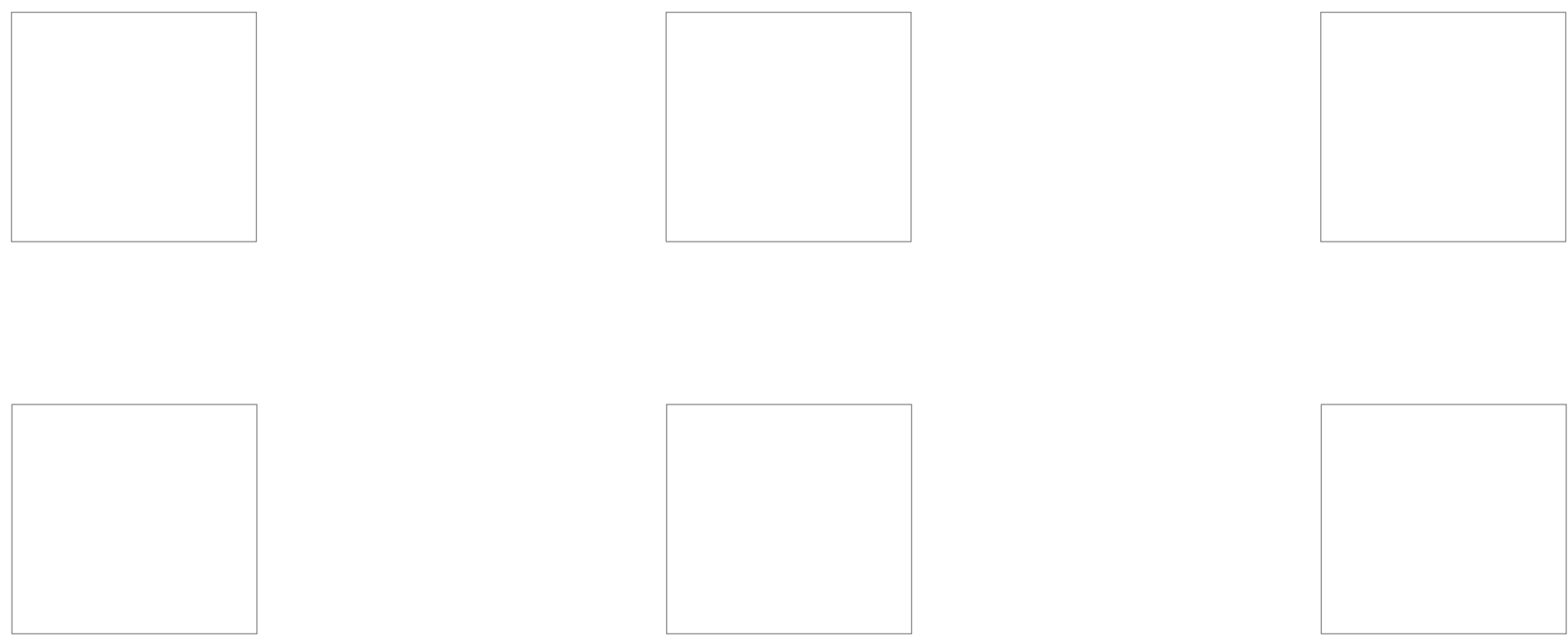
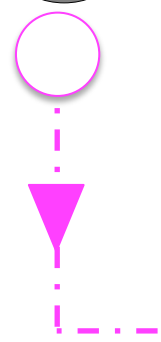
- Pupils should be able to understand how to draw in one point perspective to complete a train.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the tutorial.



SCOL				A2L
<b>Comment</b>			<b>MAD Target</b>	
You have produced a very good drawing with no little or no mistakes showing very good creativity and independent drawing skills that have been added after the tutorial. <b>Most lines have been drawn lightly and correctly.</b> Well done			<b>You should not follow the lesson presentations and produce your own drawing expanding upon the skills you have learnt to produce a unique drawing.</b> <i>Complete another train drawing in which the vanishing point has been moved.</i>	



Starter Activity: Different length cubes



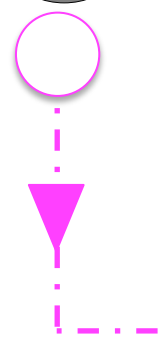
Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to draw in one point perspective to complete NYC .
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the

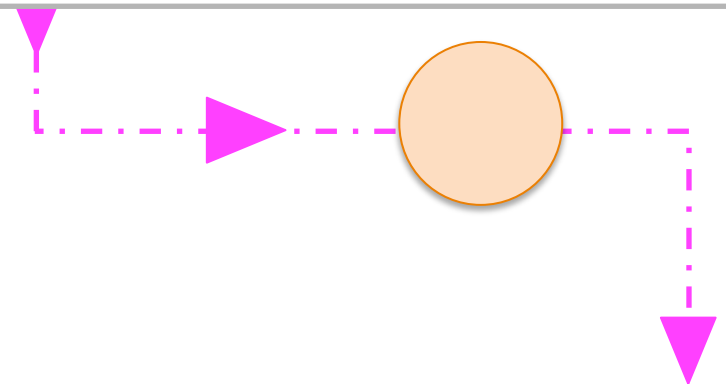
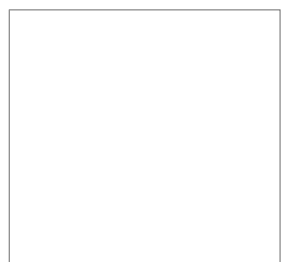
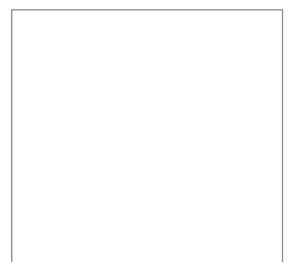
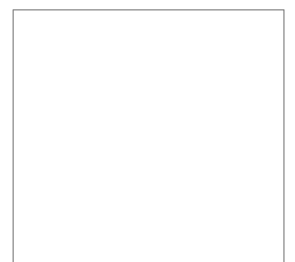




Starter Activity: Different length cubes



Horizon



Lesson Objectives / (Nodau Dysgu)

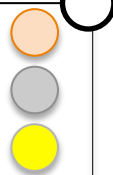
- Pupils should be able to understand how to draw in one point perspective to complete NYC .
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the



Task: Draw NYC in one point perspective.

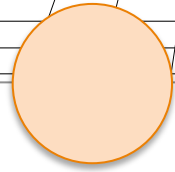
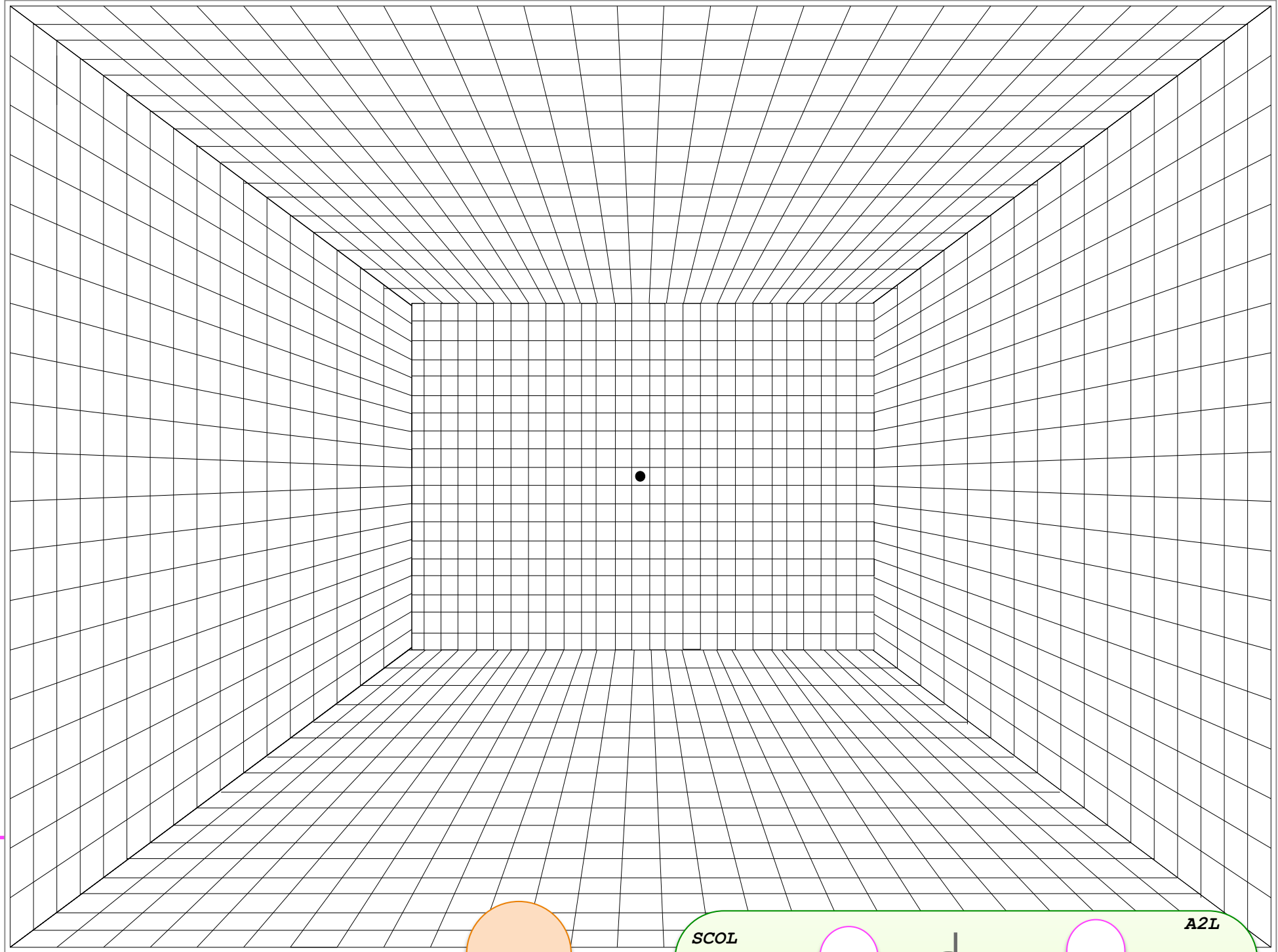
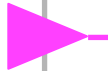
Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to draw in one point perspective to complete NYC .
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the





Starter Activity: Kitchen



SCOL A2L

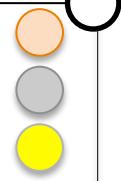
---

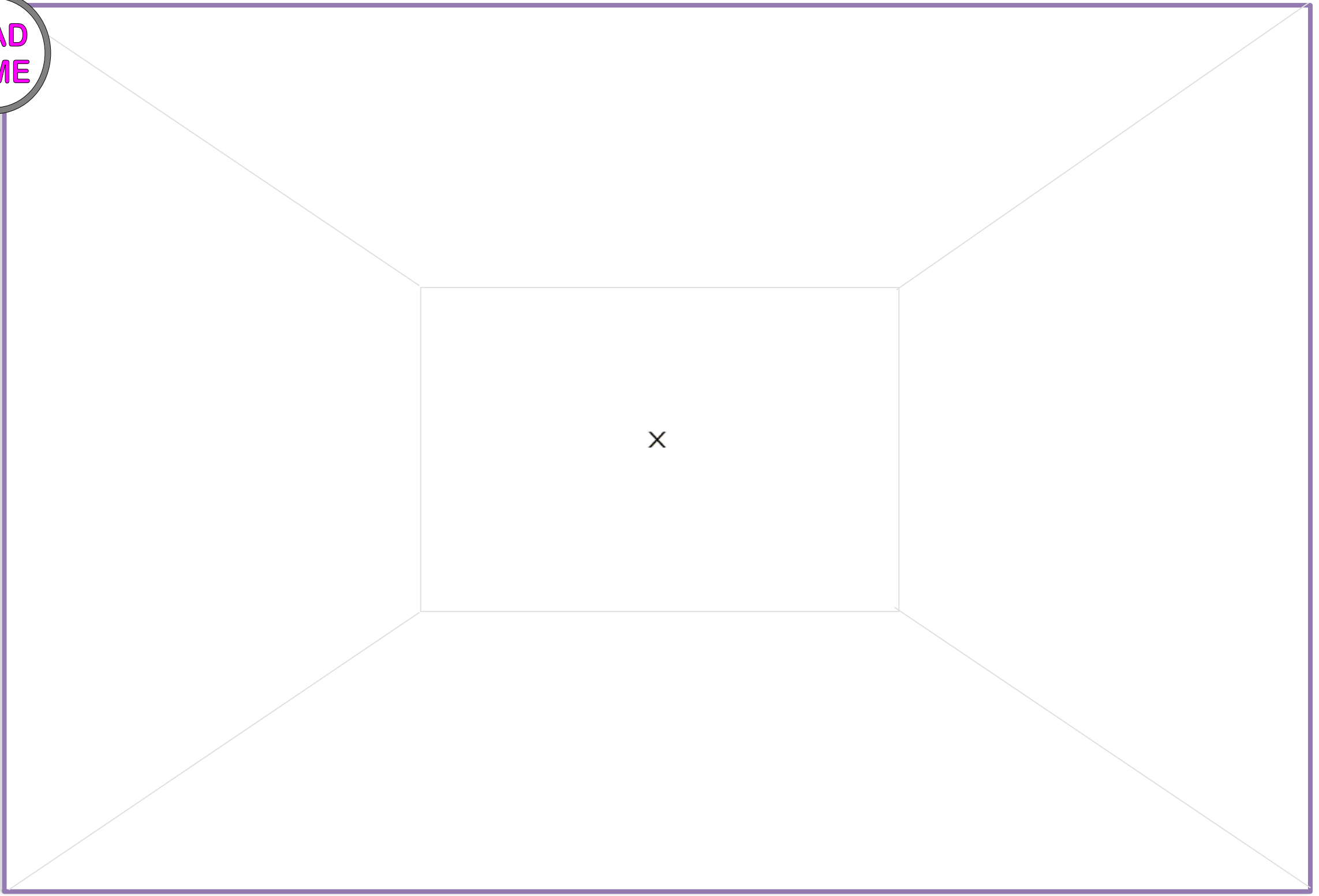
Comment MAD Target

**TA**  
Teacher Assessed

Lesson Objectives / (Nodau Dysgu)

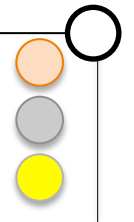
- Pupils should be able to understand how to draw in one point perspective to complete a kitchen.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the

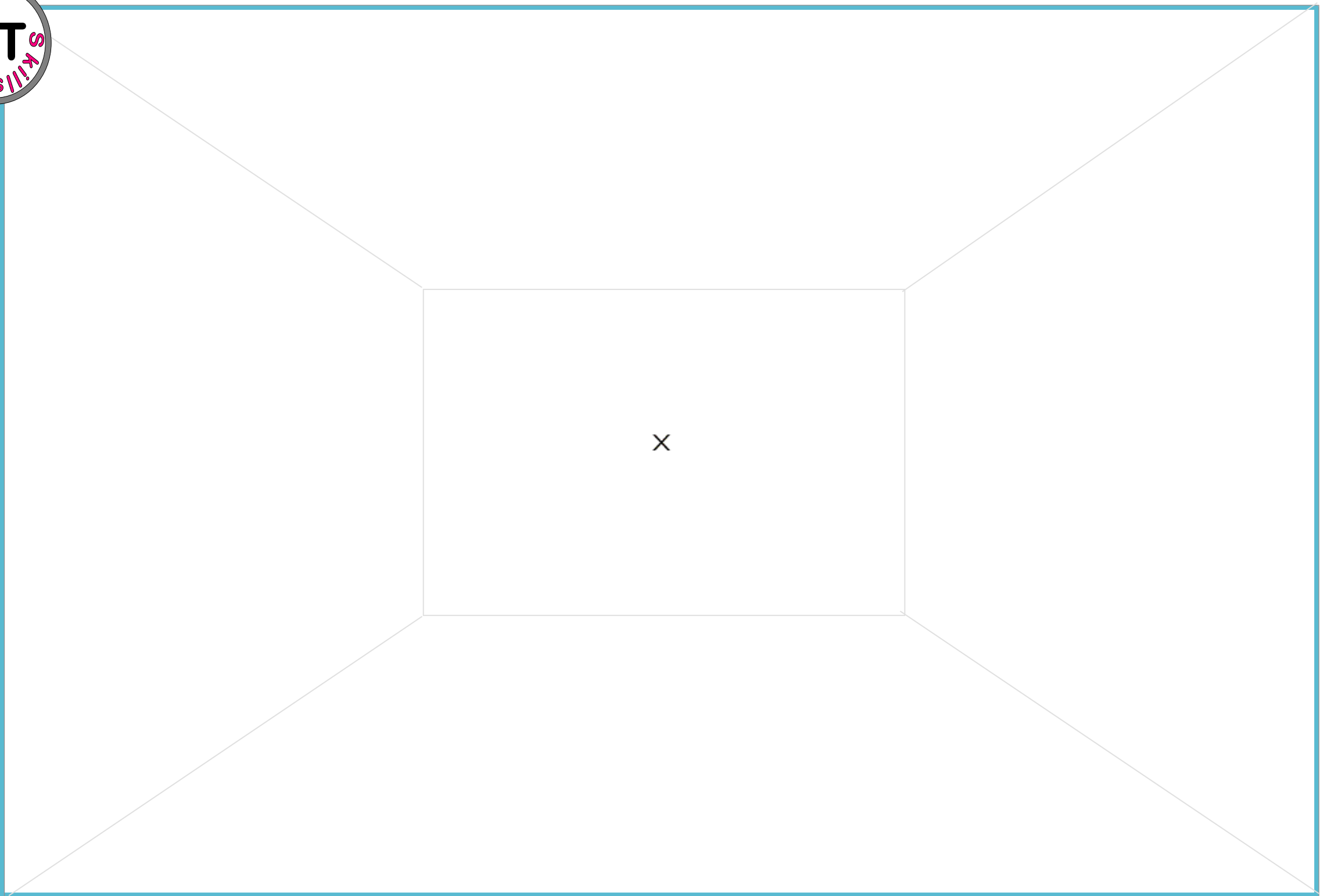
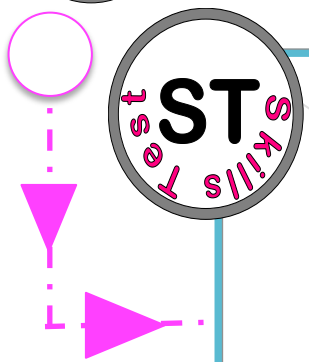




Lesson Objectives / (Nodau Dysgu)

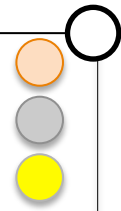
- Pupils should be able to understand how to draw in one point perspective to complete a kitchen.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the

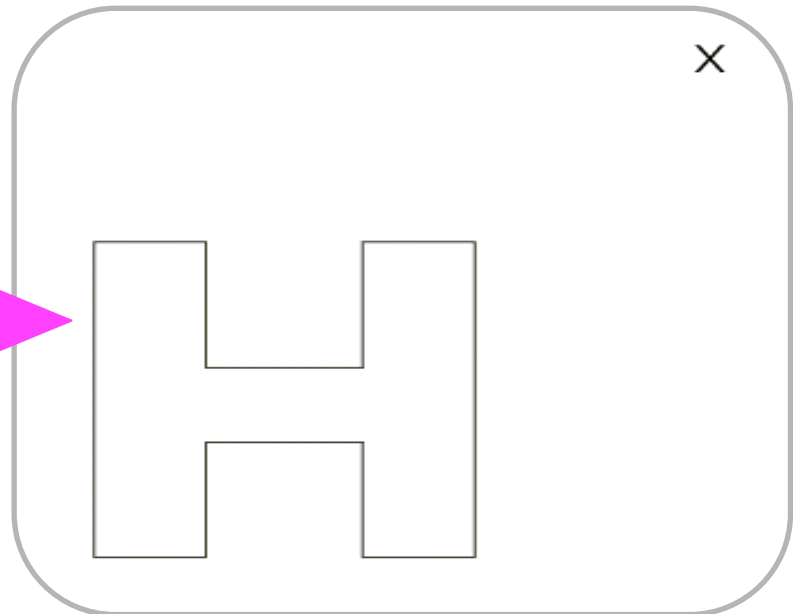
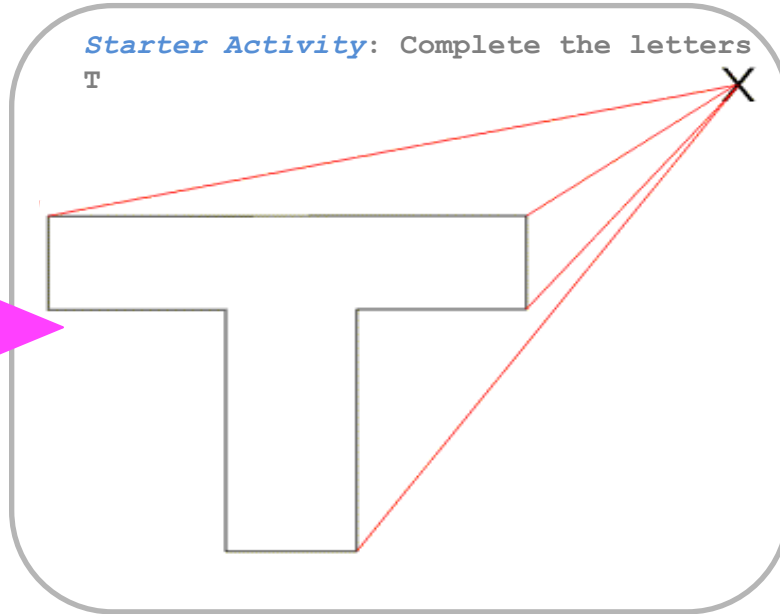
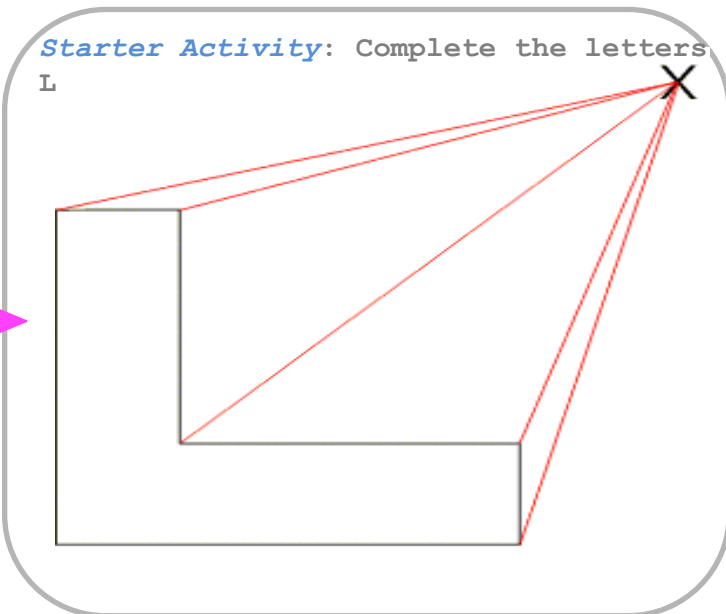




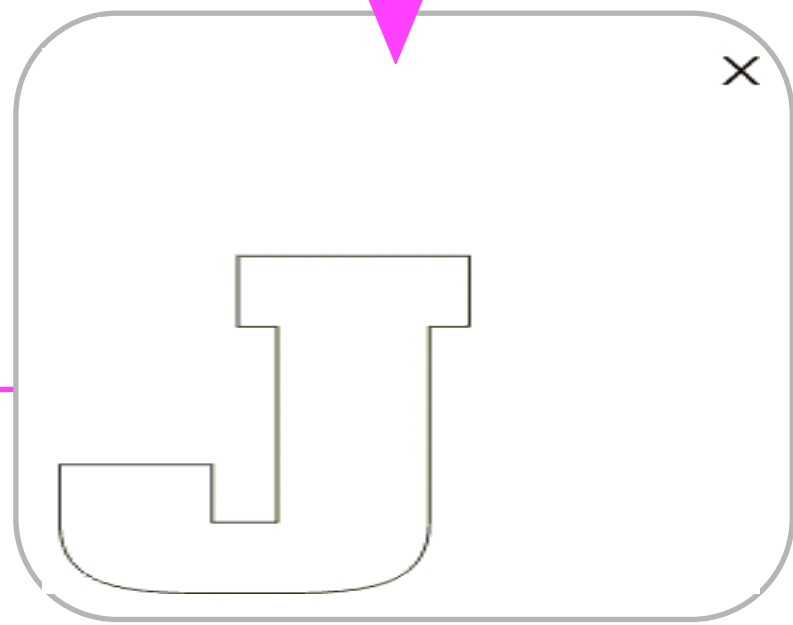
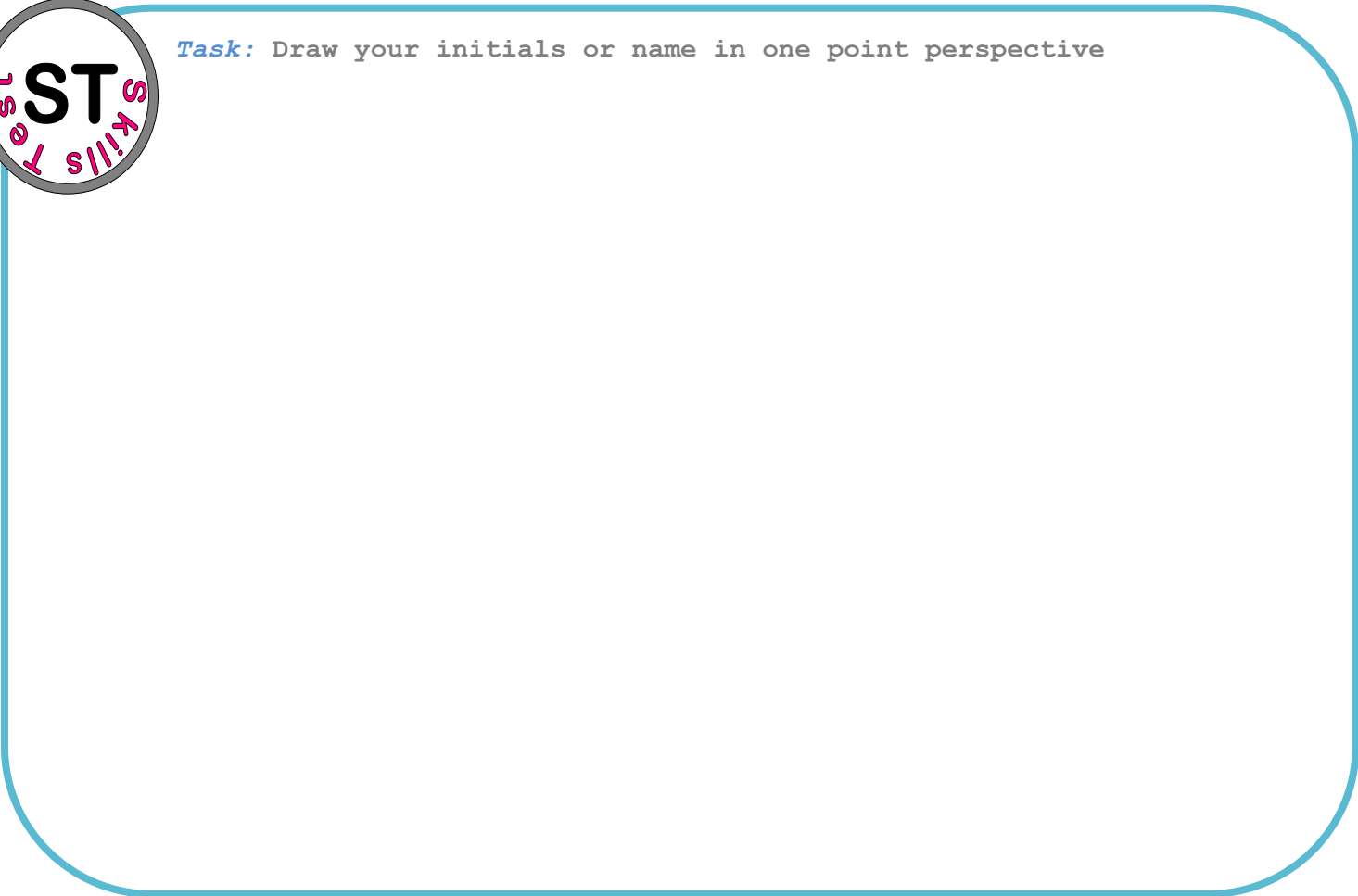
Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to draw in one point perspective to complete a room.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the





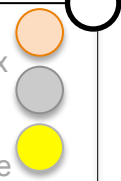
*Task: Draw your initials or name in one point perspective*



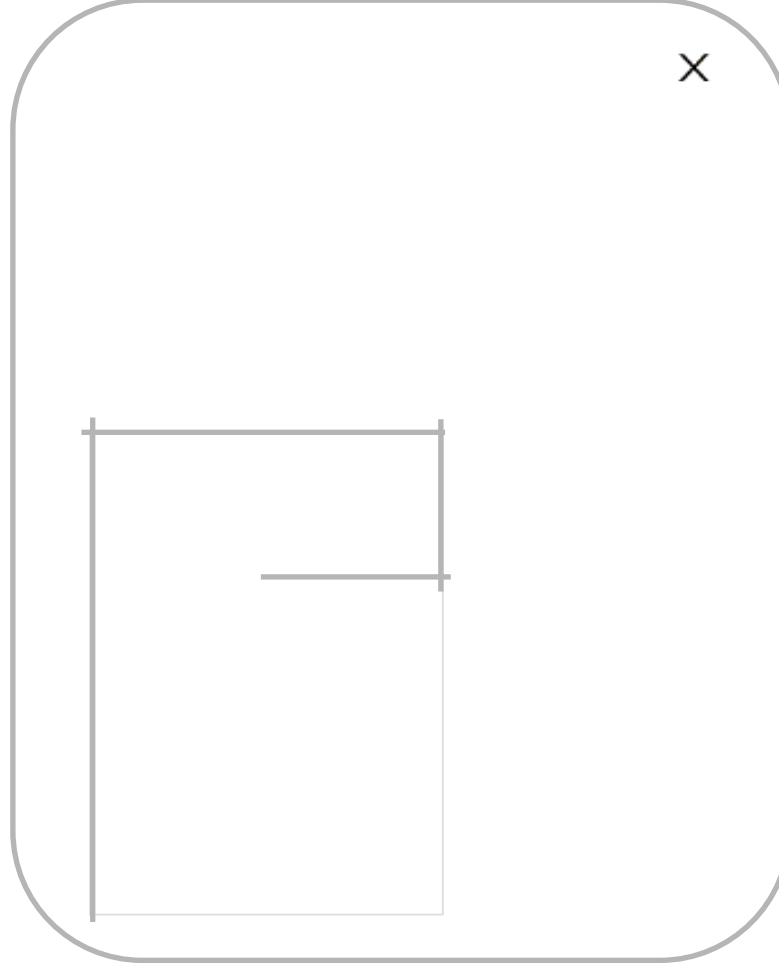
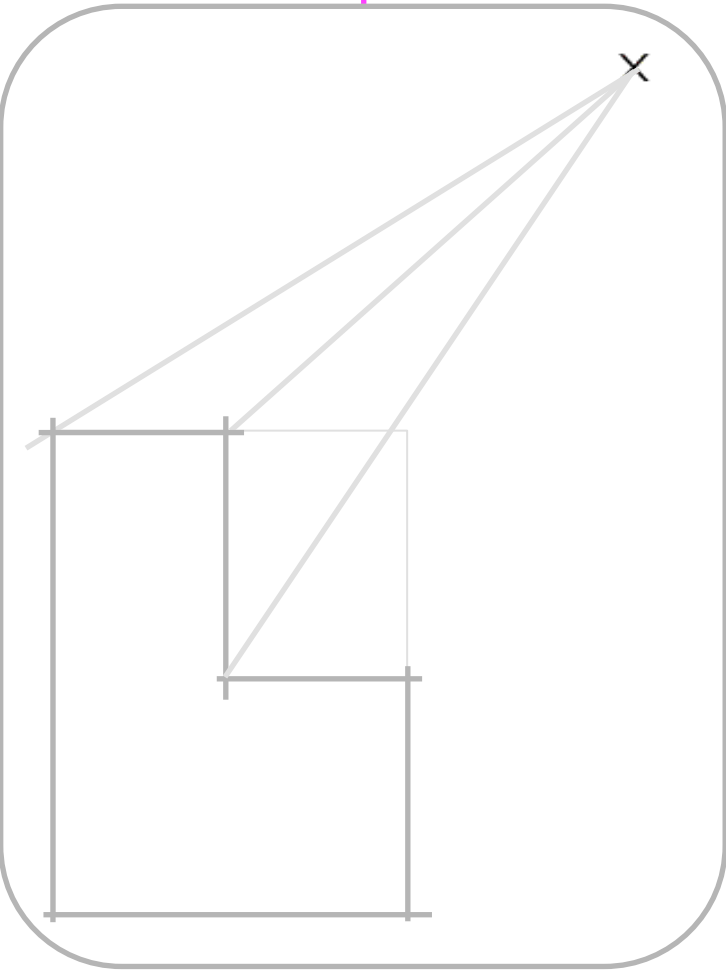
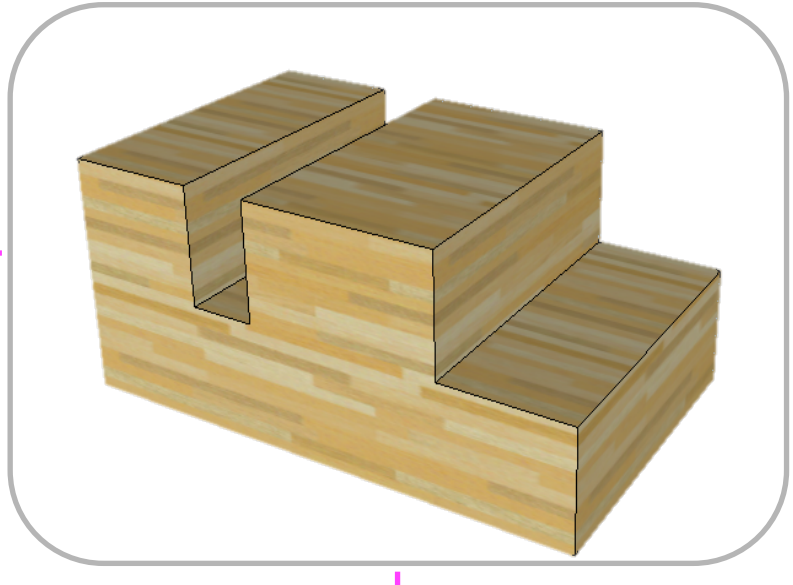
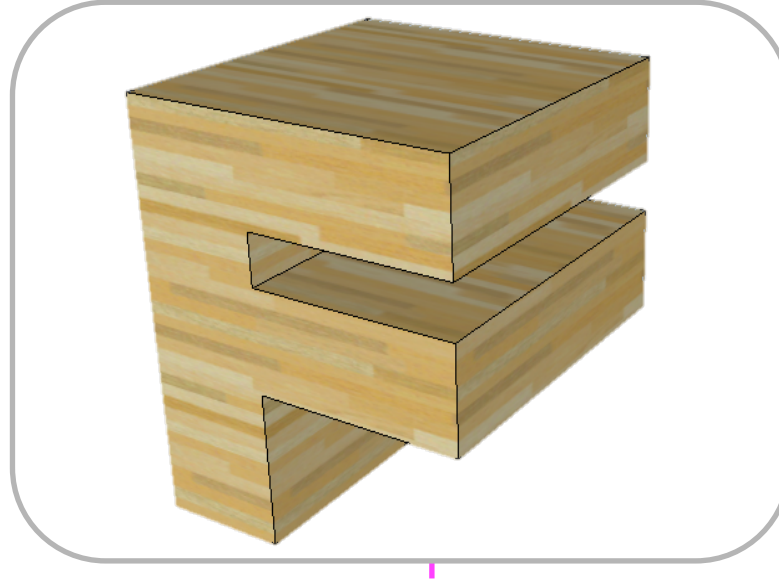
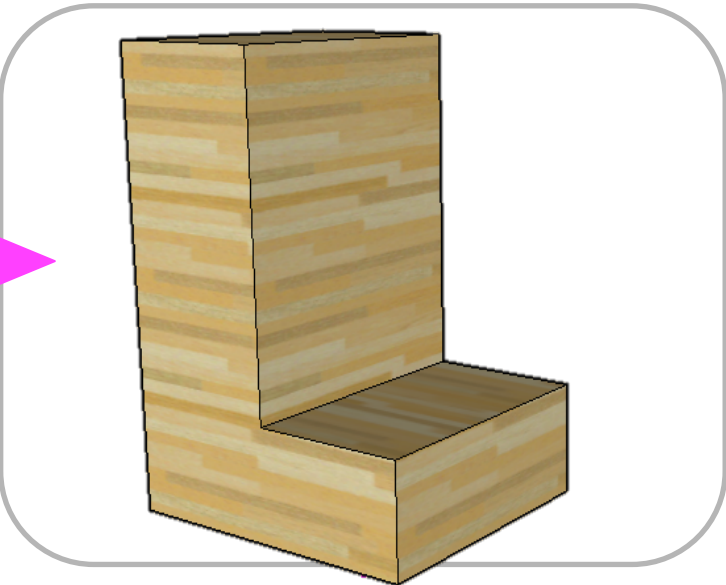
SCOL		A2L
Comment	TA	MAD Target

Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to draw in one point perspective to complete crating.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the

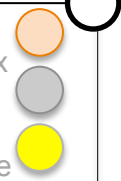


*Task:* Draw the wooden blocks shown in one point perspective.

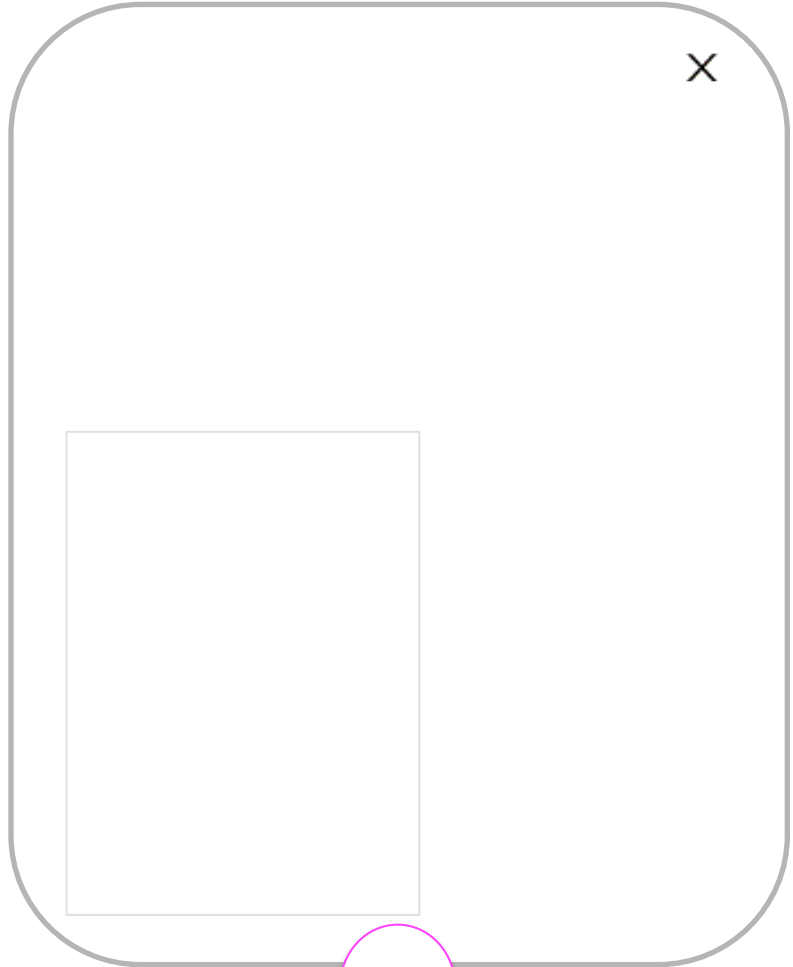
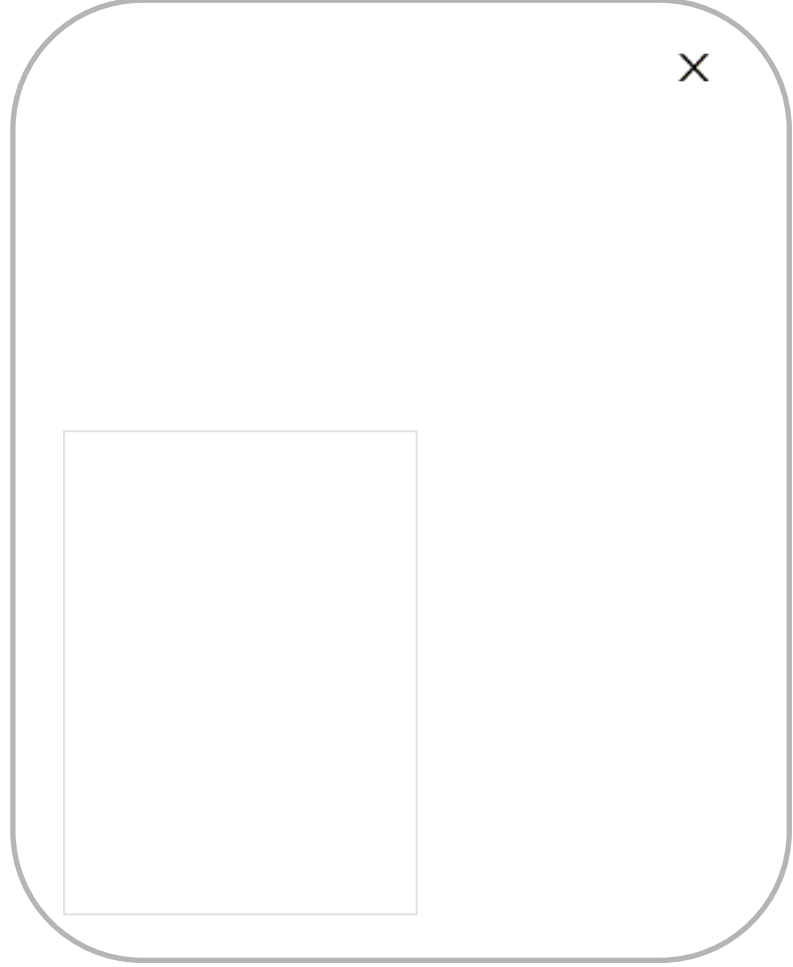
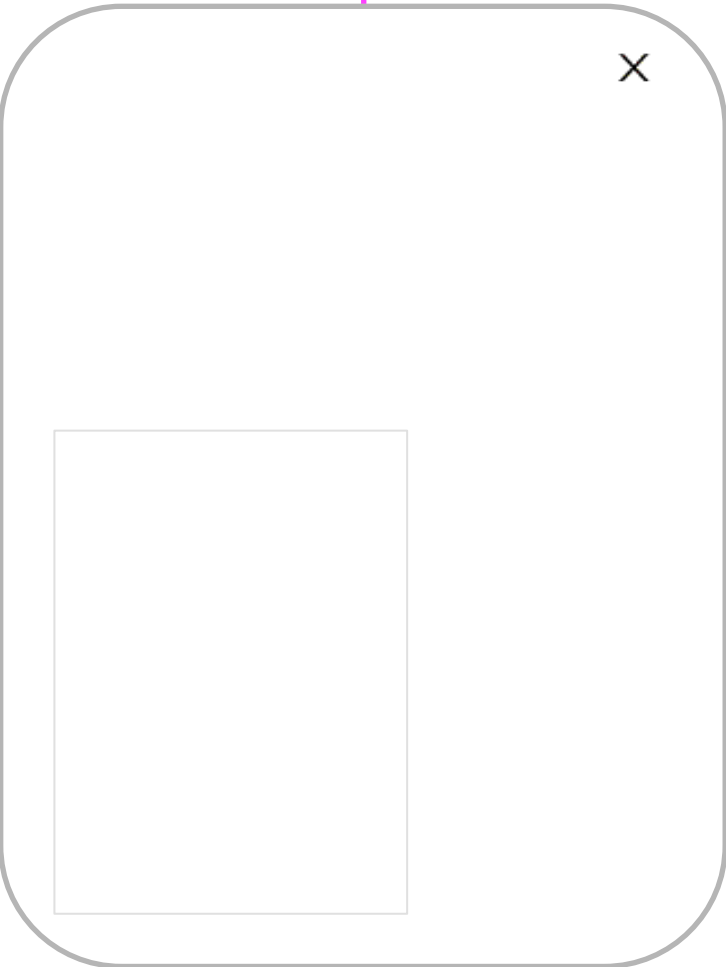
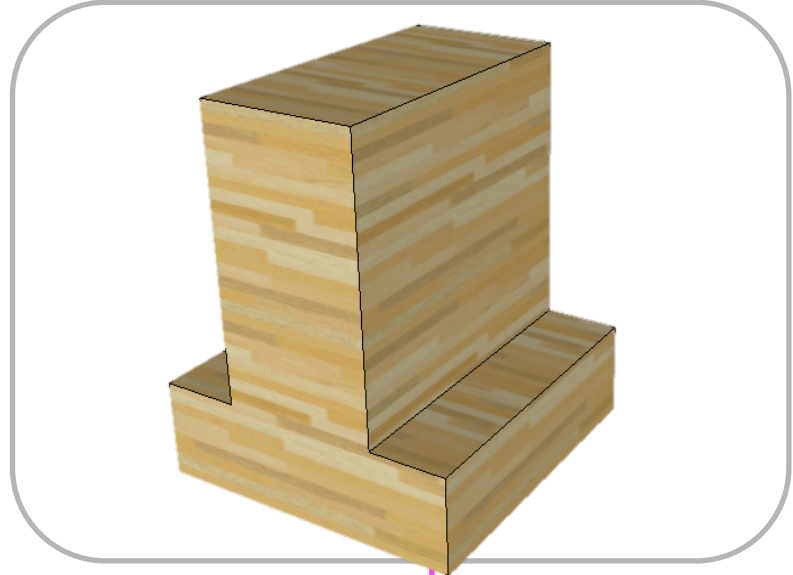
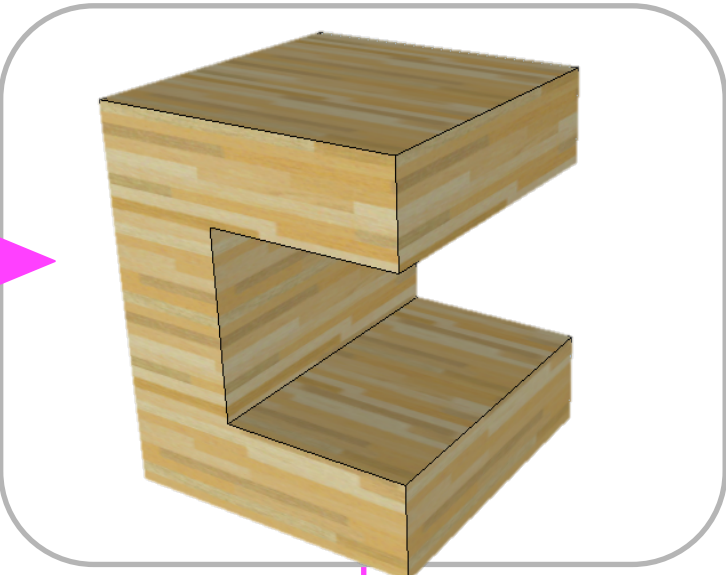


### Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to draw in one point perspective to complete crating.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the

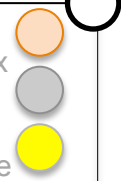


*Task:* Draw the wooden blocks shown in one point perspective.



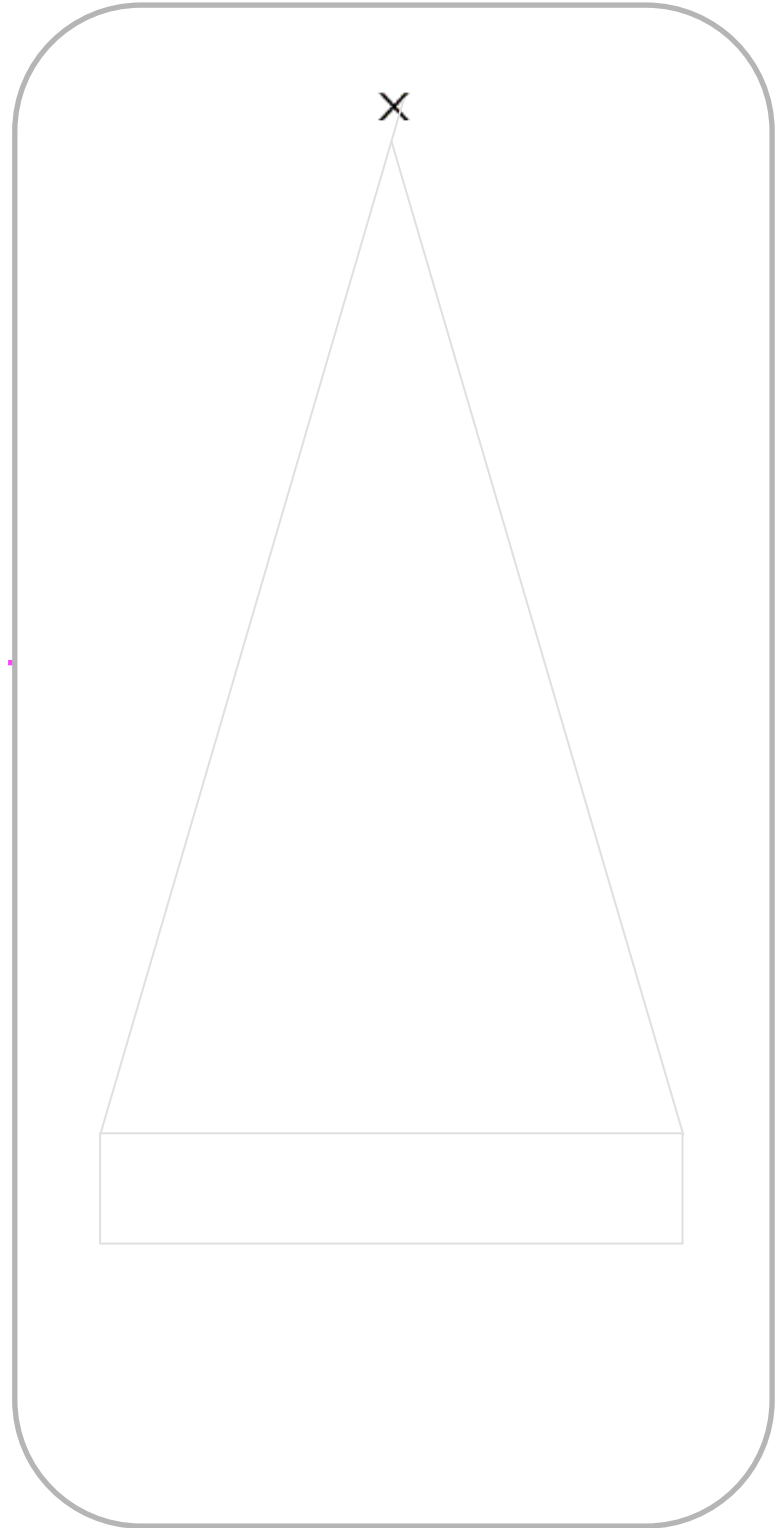
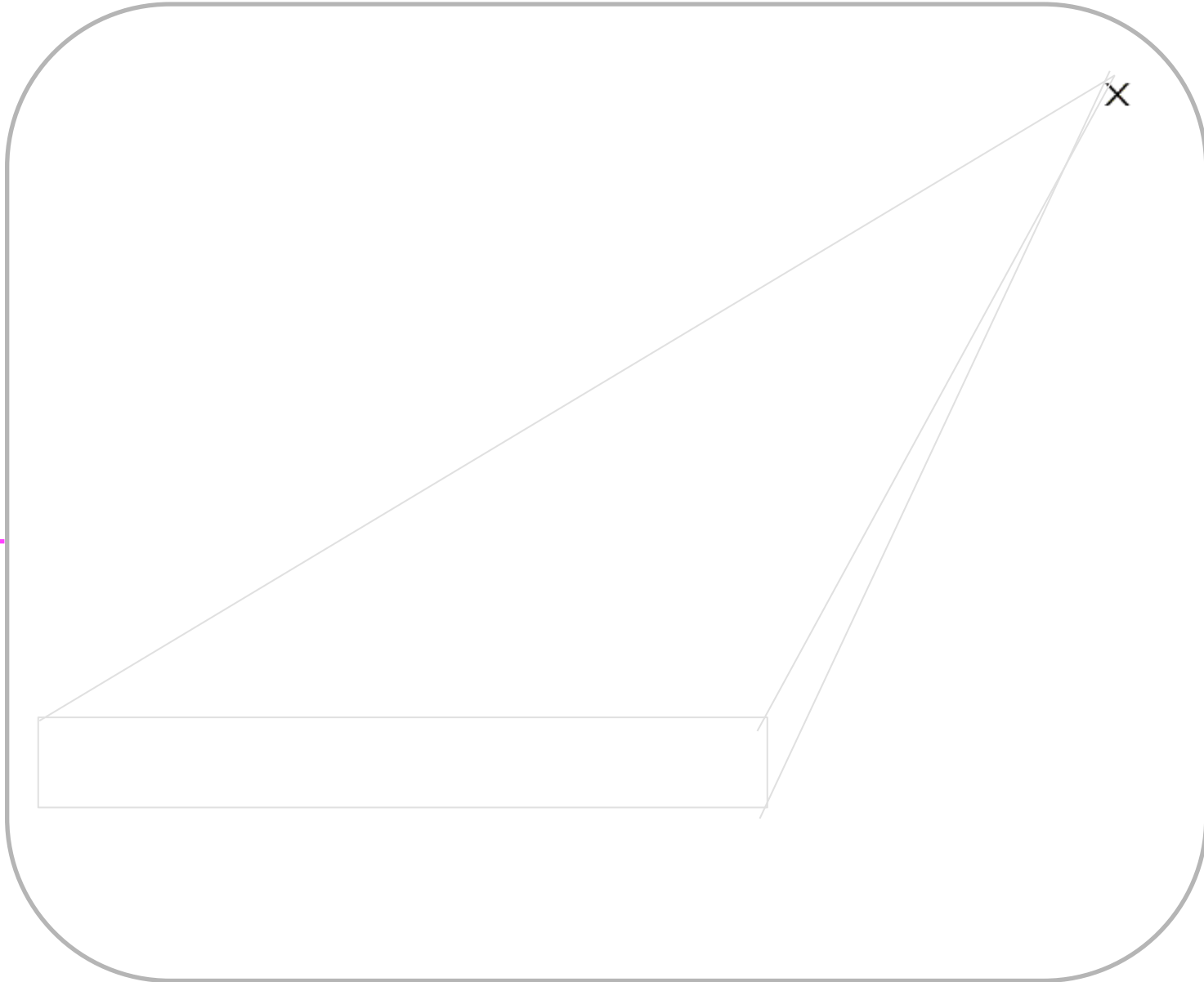
### Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to draw in one point perspective to complete crating.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the





Task: Draw a mobile phone in one point perspective.



Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to draw in one point perspective to complete crating.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the



**Task:** Using the crating technique draw a Nintendo Gameboy and all its details in one point perspective.

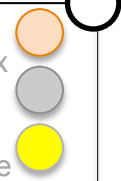


X

<i>SCOL</i>	○	<i>A2L</i>
<i>Comment</i>		<i>MAD Target</i>

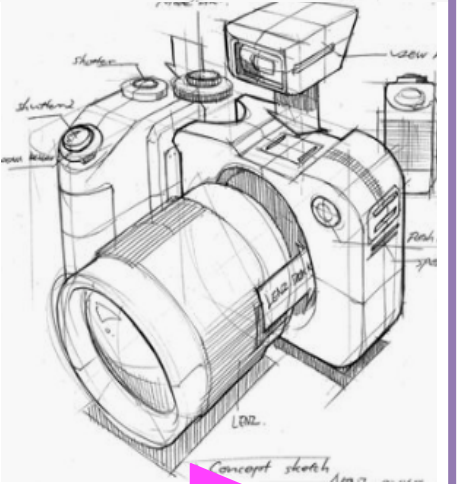
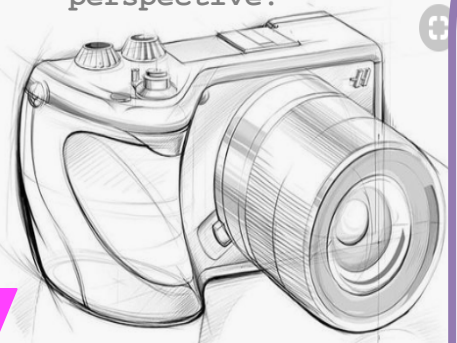
Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to draw in one point perspective to complete crating.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the



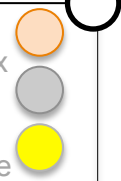
MAD TIME

Task: Using the crating technique draw a camera and all its details in one point perspective.



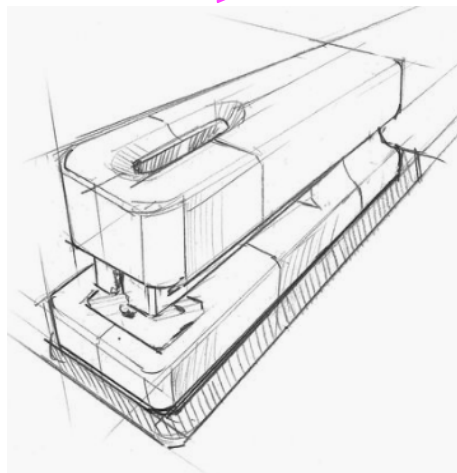
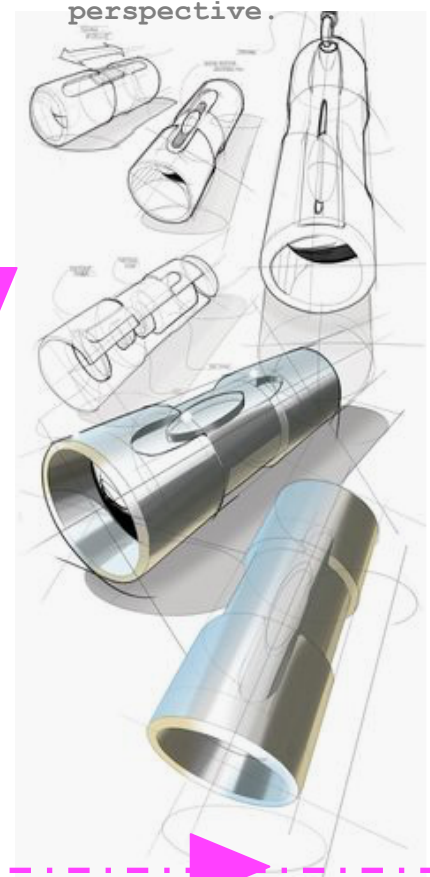
Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to draw in one point perspective to complete crating.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the



Test Skills

*Task:* Using the crating technique draw everyday objects and all their details in one point perspective.



Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to draw in one point perspective to complete crating.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the

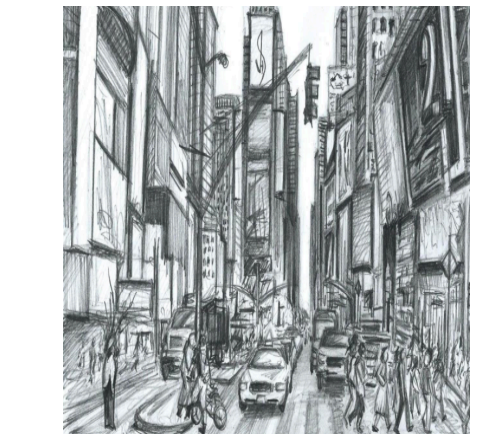
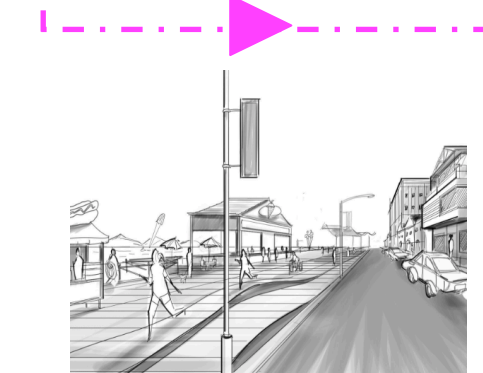


CW  
Classwork

H  
Homework

# Iterative *One Point Perspective* Street

ST  
Skills  
Test



A large blue rounded rectangle containing a dashed horizontal line representing the horizon. A small 'x' is positioned above the line. A pink dashed line with arrows connects the four images on the left to the large rectangle.

## Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to draw in one point perspective to complete crating.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective to complete an independent drawing moving the vanishing point, adding their own details moving away from the

