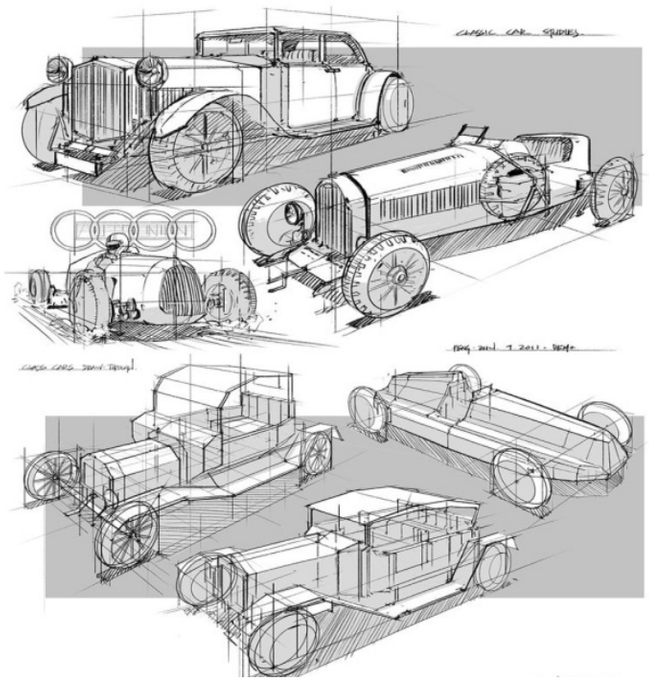
Design out the box

Name / Enw: _____ Form / Dosbarth: _____

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.

TARGET	_____

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.

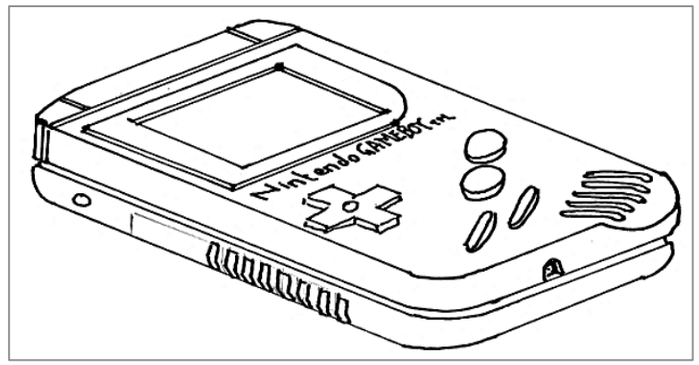
Learning Objectives / *Nodau Dysgu*:

- 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.

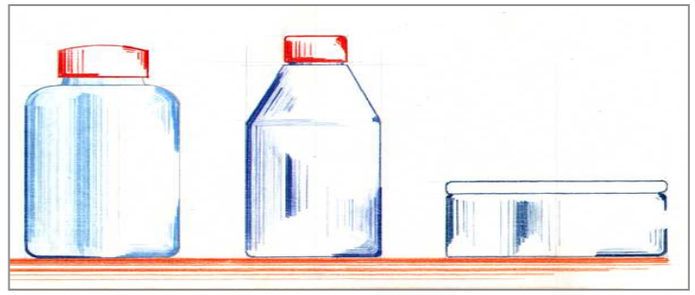
Drawing Technique	Interim Level	Level Awarded
One point perspective train		
One point perspective NYC		
One point perspective crating		
One point perspective phone/ camera		

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		

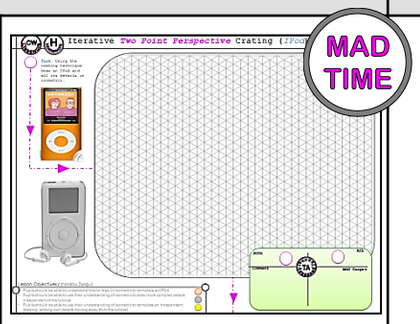
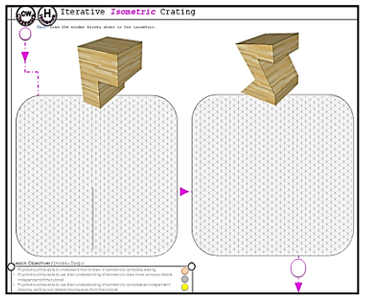
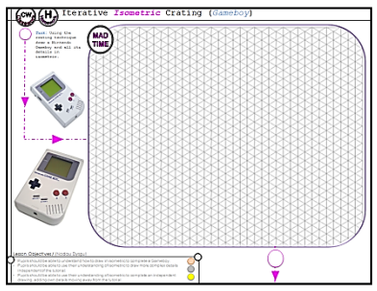
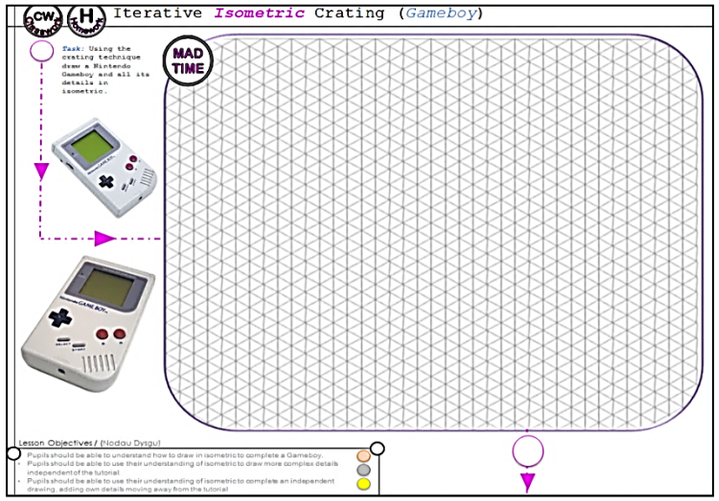
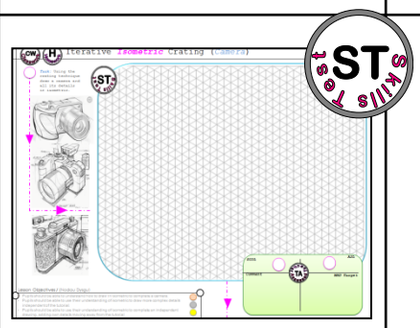
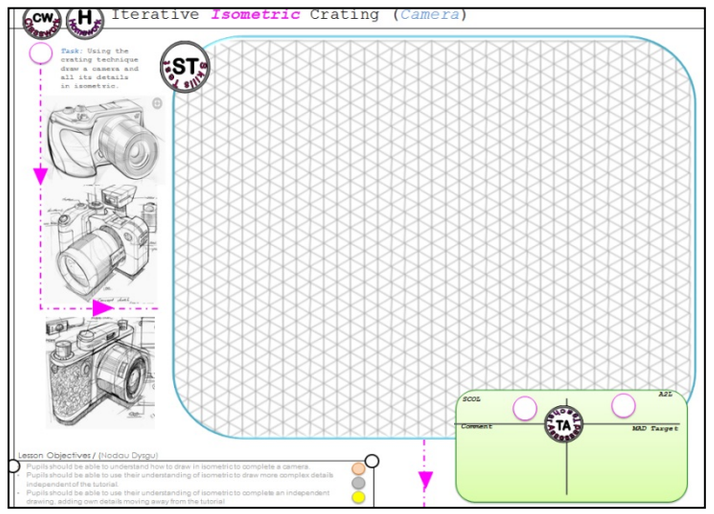
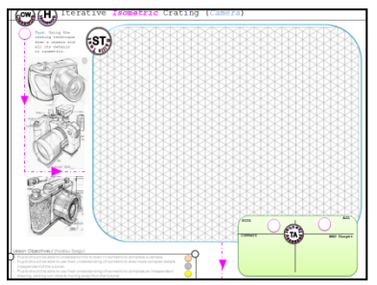
Drawing Technique	Interim Level	Level Awarded
Isometric crating		
Isometric phone		
Isometric camera		
Isometric kitchen		



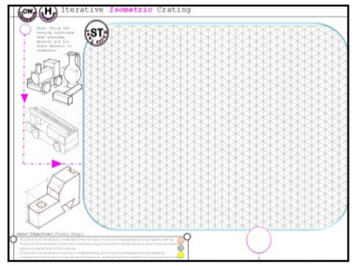
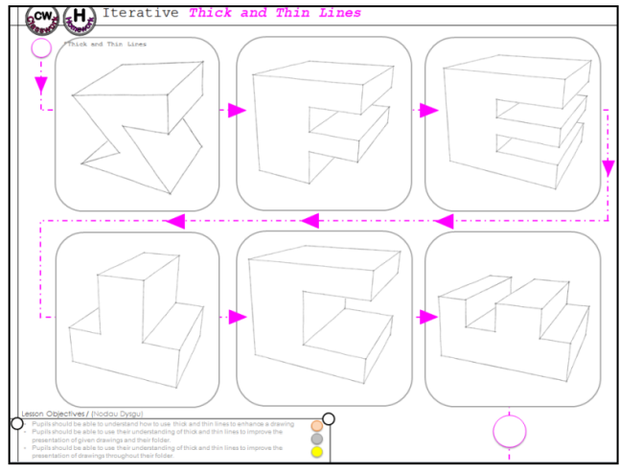
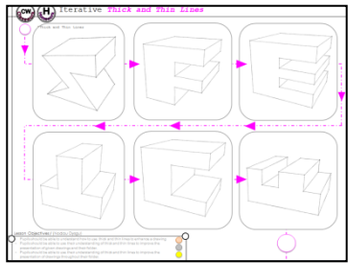
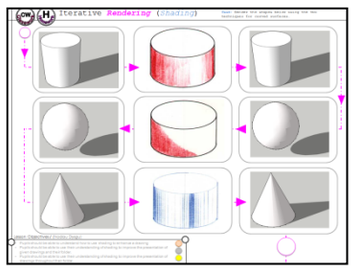
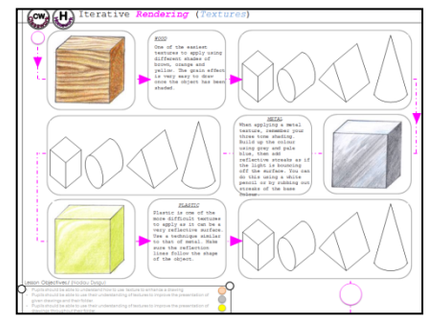
Drawing Technique	Interim Level	Level Awarded
Textures		
Renders		
Thick/thin line		



KS4 Graphics Learning Plan: Isometric

	Learning outcomes and success criteria:		Assessment	Homework
Assessment Week	**Week 10:** Students draw a ***isometric*** crate for a MP3 music player and add details. The crate should be drawn out using a ruler and very light pencil lines. They can darken the main lines in later. Students can then complete the shape inside the crate freehand to give a more organic feel. http://www.designoutthebox.com/graphicshome.html		***Showing Characteristics of Grade***	***Homework:*** Students should complete the isometric drawings of the shapes using the crating skills that they have learnt. 
	Week 11: Students draw a ***isometric*** crate for a Nintendo Gameboy and add details. The crate should be drawn out using a ruler and very light pencil lines. They can darken the main lines in later. Students can then complete the shape inside the crate freehand to give a more organic feel. http://www.designoutthebox.com/graphicshome.html		Use of 30/60 degree set squares, 30 degree angle drawings ***(Isometric),*** parallel projection, mathematical shapes, vertical, horizontal, two point perspective, rendering, graphics, vanishing point, horizon, crating, layout, freehand	***Homework:*** Students should complete the isometric drawing for a Nintendo Gameboy and add details. using the crating skills that they have learnt. 
	Week 11: Students draw a ***isometric*** crate for a Nintendo Gameboy and add details. The crate should be drawn out using a ruler and very light pencil lines. They can darken the main lines in later. Students can then complete the shape inside the crate freehand to give a more organic feel. http://www.designoutthebox.com/graphicshome.html		Use of 30/60 degree set squares, 30 degree angle drawings ***(Isometric),*** parallel projection, mathematical shapes, vertical, horizontal, two point perspective, rendering, graphics, vanishing point, horizon, crating, layout, freehand	
Skills Test	**Week 12:** Students should complete the ***isometric*** drawing of a camera and all its details using the ***crating technique*** that they have learnt. Details could include finger grips, screen, camera lense, flash, menu buttons etc. *Students can use the departmental website and the graphics tutorials to assist. The link is shown below.* http://www.designoutthebox.com/graphicshome.html		***Test Outcome***	***Homework:*** Students should complete the isometric drawing for a camera and add details. using the crating skills that they have learnt. 
	Week 12: Students should complete the ***isometric*** drawing of a camera and all its details using the ***crating technique*** that they have learnt. Details could include finger grips, screen, camera lense, flash, menu buttons etc. *Students can use the departmental website and the graphics tutorials to assist. The link is shown below.* http://www.designoutthebox.com/graphicshome.html		Use of 30/60 degree set squares, 30 degree angle drawings ***(Isometric),*** parallel projection, mathematical shapes, vertical, horizontal, two point perspective, rendering, graphics, vanishing point, horizon, crating, layout, freehand	

KS4 Graphics Learning Plan: Isometric

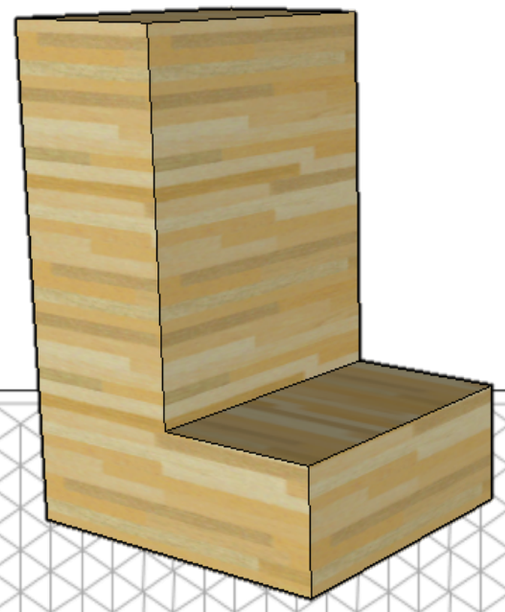
Learning outcomes and success criteria:		Assessment	Homework
Week 13: Week 12: Students should complete the ***isometric*** drawing of products of their own choice and all their details using the ***crating technique*** that they have learnt. *Students can use the departmental website and the graphics tutorials to assist. The link is shown below.* http://www.designoutthebox.com/graphicshome.html		Use of 30/60 degree set squares, 30 degree angle drawings ***(Isometric),*** parallel projection, mathematical shapes, vertical, horizontal, two point perspective, rendering, graphics, vanishing point, horizon, crating, layout, freehand	***Homework:*** Students should complete the thick thin line technique using the skills that they have learnt. 
Week 13: Students watch the step by step guide on how to draw using ***thick, thin line technique***, demo on the board and using the spider climbing over the shapes. Students complete their own on the blank shapes. Students will need to use the reverse side of the ruler to avoid smudges. ***Students should complete for homework.***		Use of 30/60 degree set squares, 30 degree angle drawings ***(Isometric),*** parallel projection, mathematical shapes, vertical, horizontal, two point perspective, rendering, graphics, vanishing point, horizon, crating, layout, freehand	
ISOMETRIC SUBMISSION		***Showing Characteristics of Grade***	***Isometric catch up.***
Week 14: Students watch the step by step guide on how to draw using ***shading technique***, demo on the board. Students complete their own on the blank shapes. Students watch the step by step guide on how to draw using ***textures technique***, demo on the board. Students complete their own wood, plastic, metal textures. ***Students should complete for homework.***		Use of 30/60 degree set squares, 30 degree angle drawings ***(Isometric),*** parallel projection, mathematical shapes, vertical, horizontal, two point perspective, rendering, graphics, vanishing point, horizon, crating, layout, freehand.	***Homework:*** Students should complete the textures technique using the skills that they have learnt. 
RENDERING SUBMISSION		***Showing Characteristics of Grade***	***Missing Design Portfolio Work Catch up***
END OF TERM			

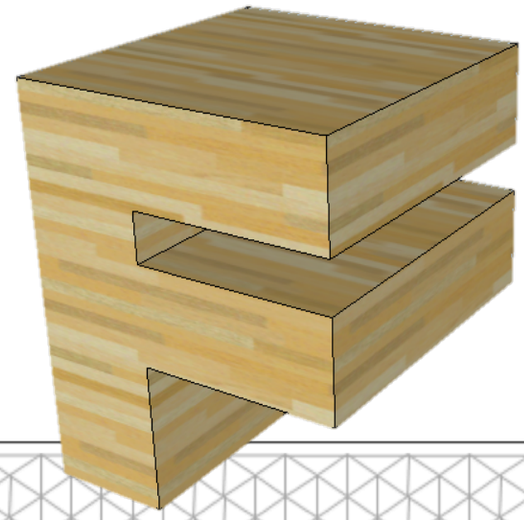
Iterative *Isometric* Crating

CW Classwork

H Homework

Task: Draw the wooden blocks shown in two isometric.



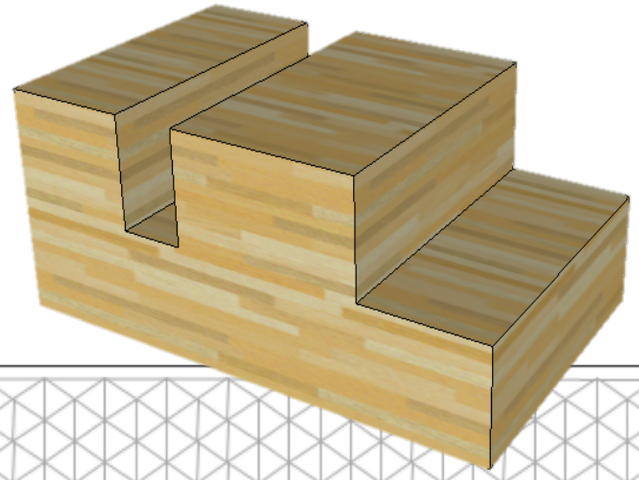


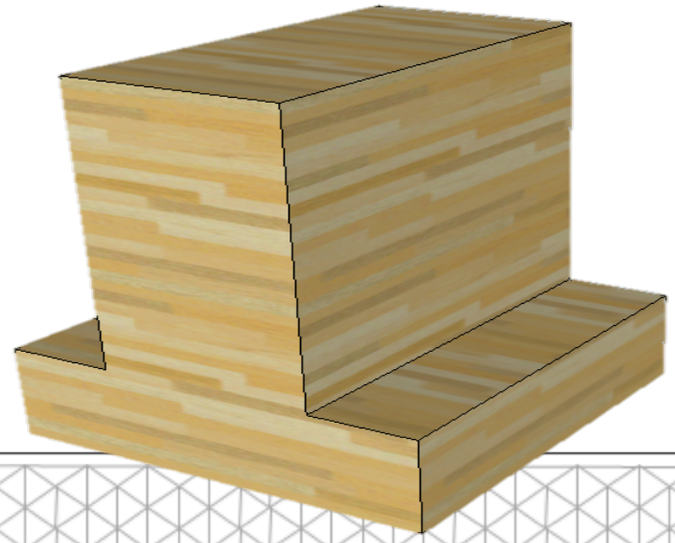
Lesson Objectives / (Nodau Dysgu)

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

Iterative *Isometric* Crating

Task: Draw the wooden blocks shown in two isometric.



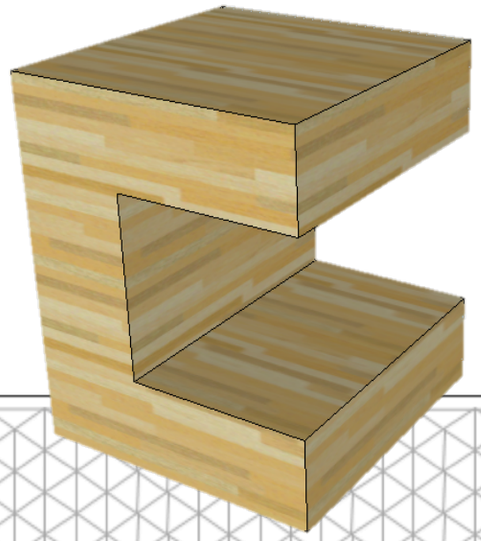


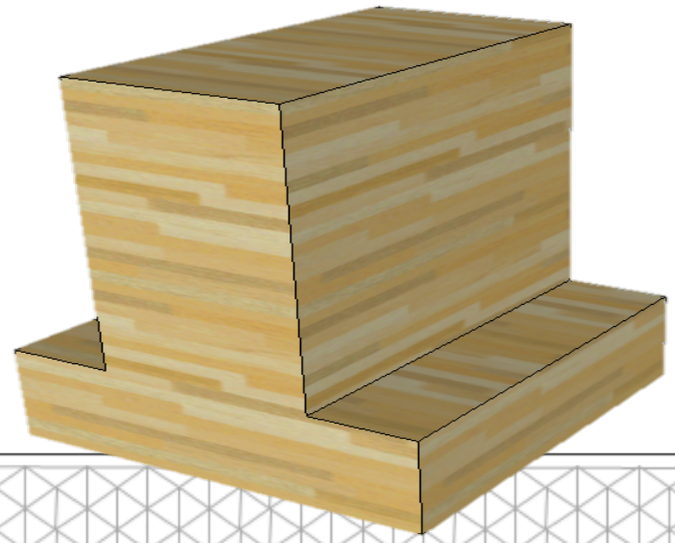
Lesson Objectives / (Nodau Dysgu)

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

Iterative *Isometric* Crating

Task: Draw the wooden blocks shown in two isometric.



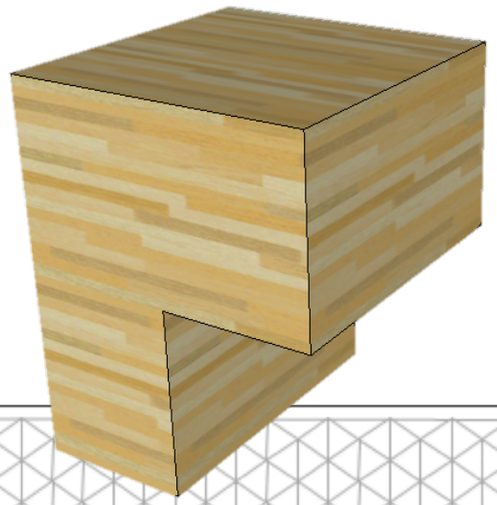


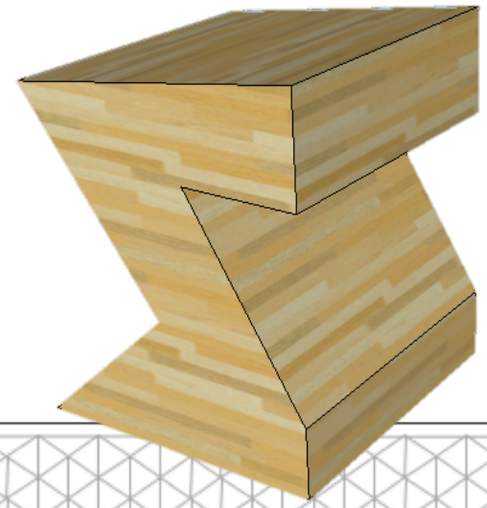
Lesson Objectives / (Nodau Dysgu)

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

Iterative *Isometric* Crating

Task: Draw the wooden blocks shown in two isometric.





Lesson Objectives / (Nodau Dysgu)

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

Iterative ***Two Point Perspective*** Crating (*IPod*)

CW Classwork

H Homework

Task: Using the crating technique draw an IPod and all its details in isometric.

SCOL

A2L

Comment

MAD Target

TA Assessed teacher

Lesson Objectives / (Nodau Dysgu)

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

Iterative ***Isometric*** Crating (*Gameboy*)

CW Classwork

H Homework

Task: Using the crating technique draw a Nintendo Gameboy and all its details in isometric.

MAD TIME

Lesson Objectives / (Nodau Dysgu)

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

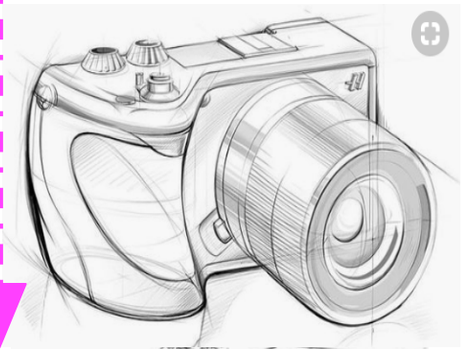
Iterative ***Isometric*** Crating (*Camera*)

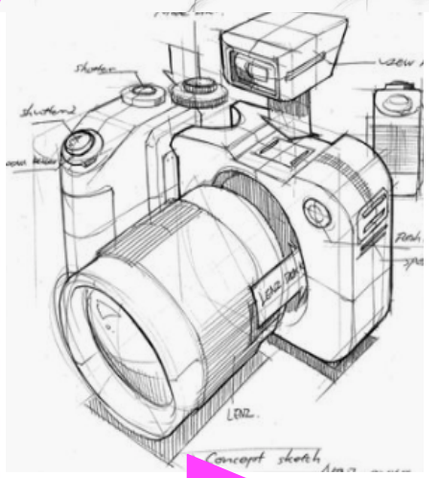
CW Classwork

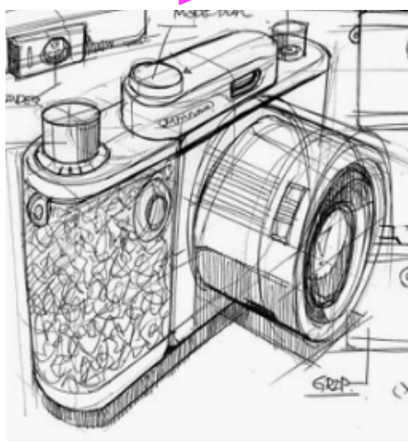
H Homework

ST Skills Test

Task: Using the crating technique draw a camera and all its details in isometric.







SCOL

A2L

Comment

MAD Target

TA Assessed teacher

Lesson Objectives / (Nodau Dysgu)

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

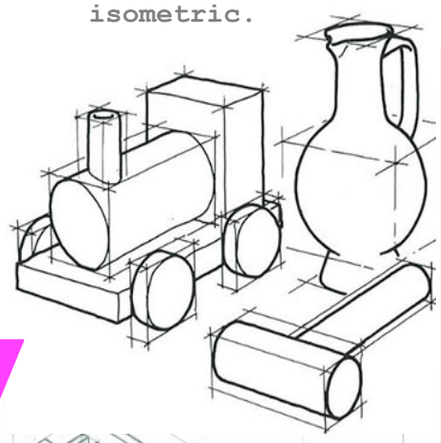
Iterative *Isometric* Crating

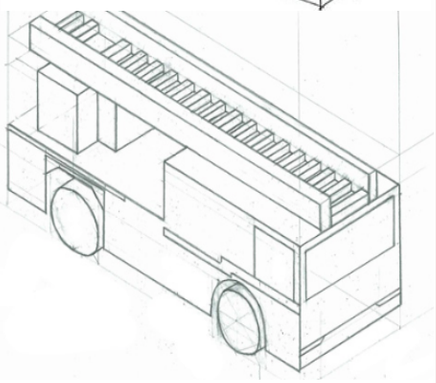
CW Classwork

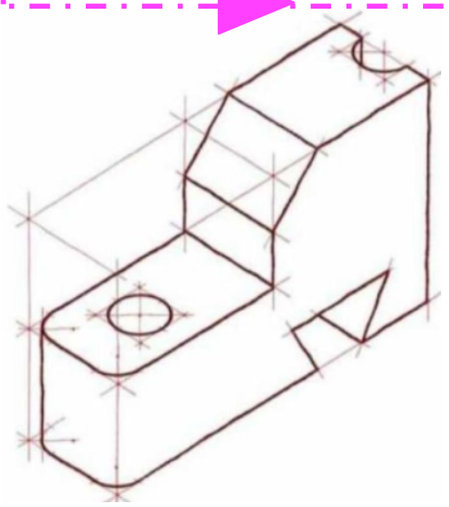
H Homework

ST Skills Test

Task: Using the crating technique draw everyday objects and all their details in isometric.





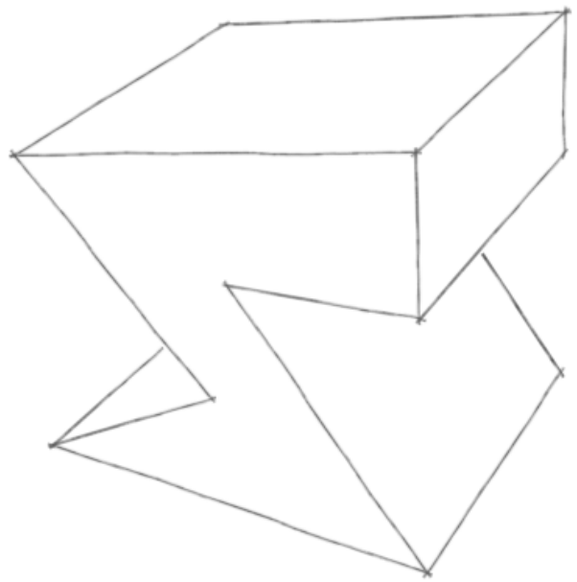


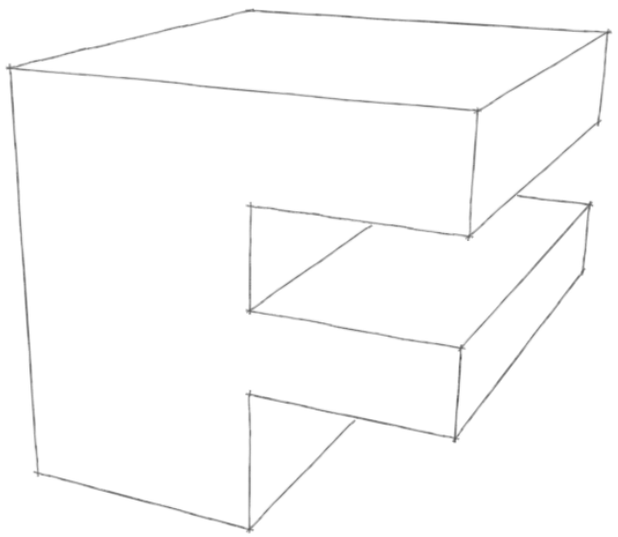
Lesson Objectives / (Nodau Dysgu)

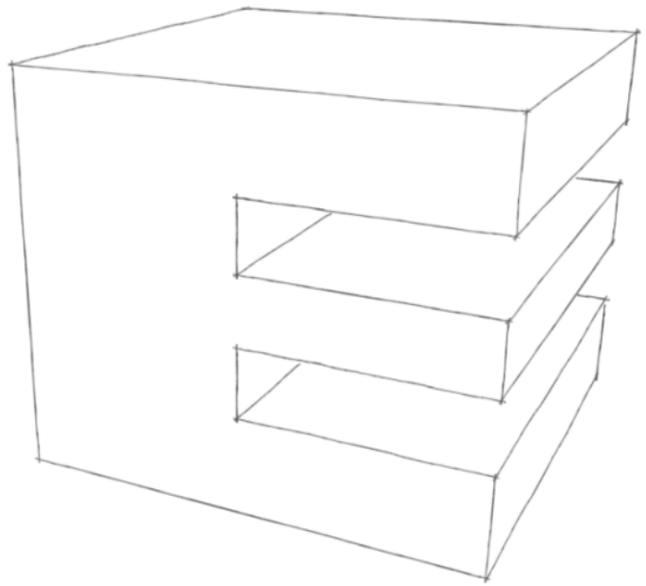
- Pupils should be able to understand how to draw in one point perspective to complete crating.
- Pupils should be able to use their understanding of one point perspective to draw more complex details independent of the tutorial.
- Pupils should be able to use their understanding of one point perspective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

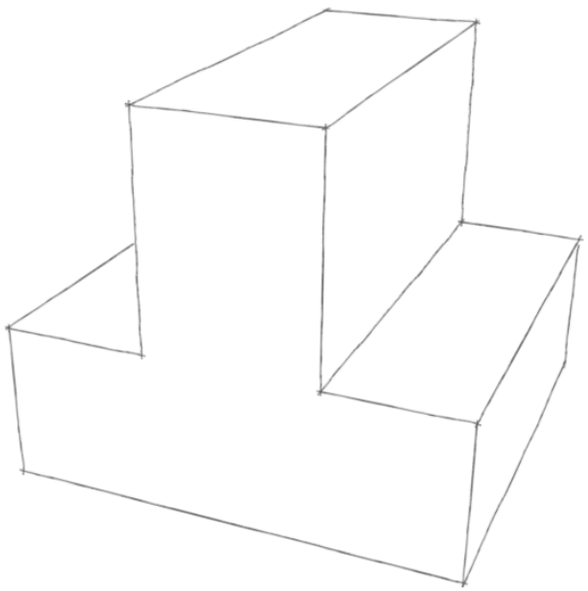
Iterative *Thick and Thin Lines*

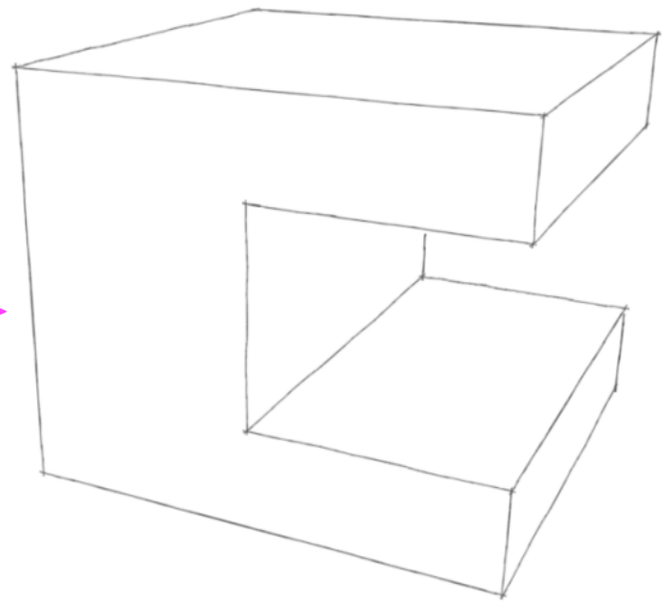
Thick and Thin Lines

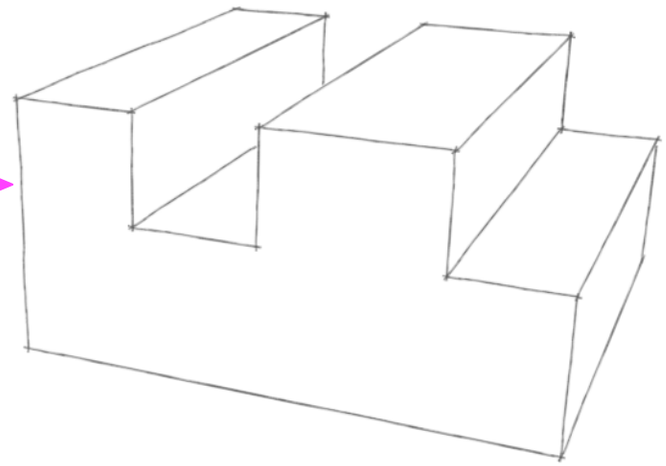












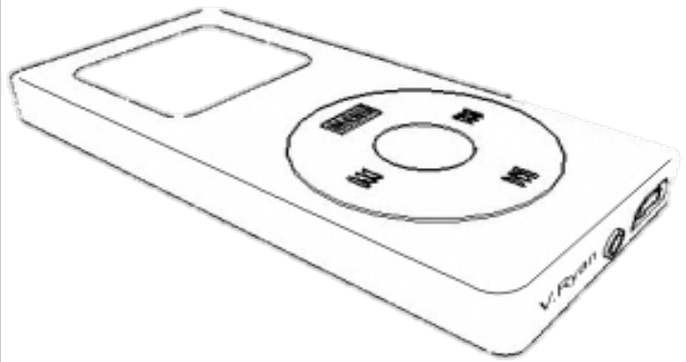
Lesson Objectives / (Nodau Dysgu)

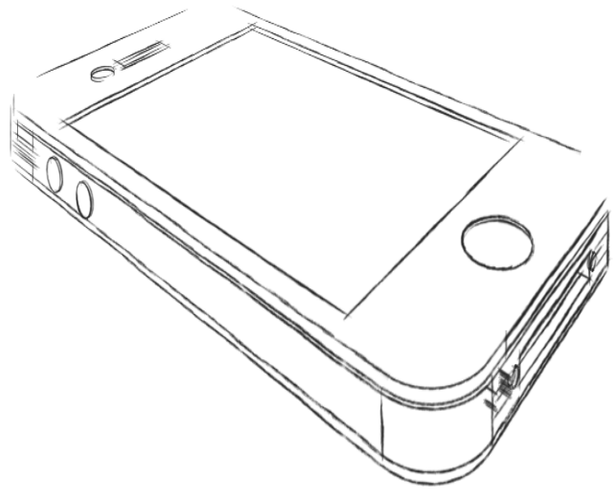
- Pupils should be able to understand how to use thick and thin lines to enhance a drawing
- Pupils should be able to use their understanding of thick and thin lines to improve the presentation of given drawings and their folder.
- Pupils should be able to use their understanding of thick and thin lines to improve the presentation of drawings throughout their folder.

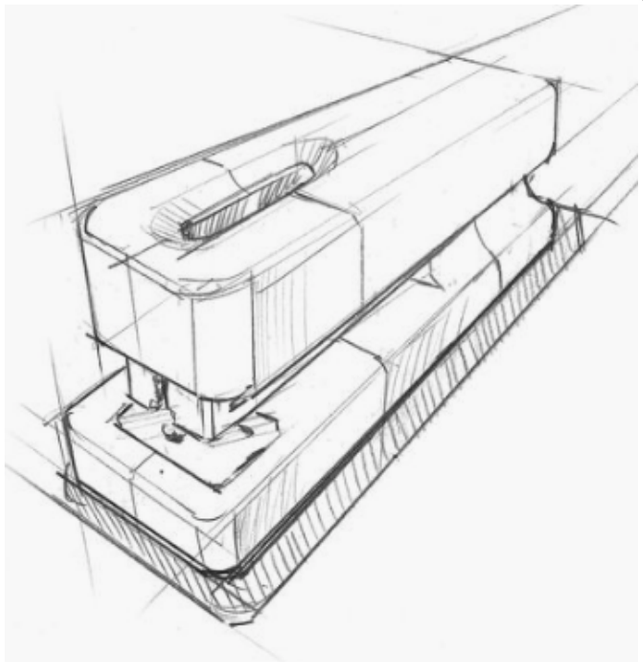
CW Classwork H Homework

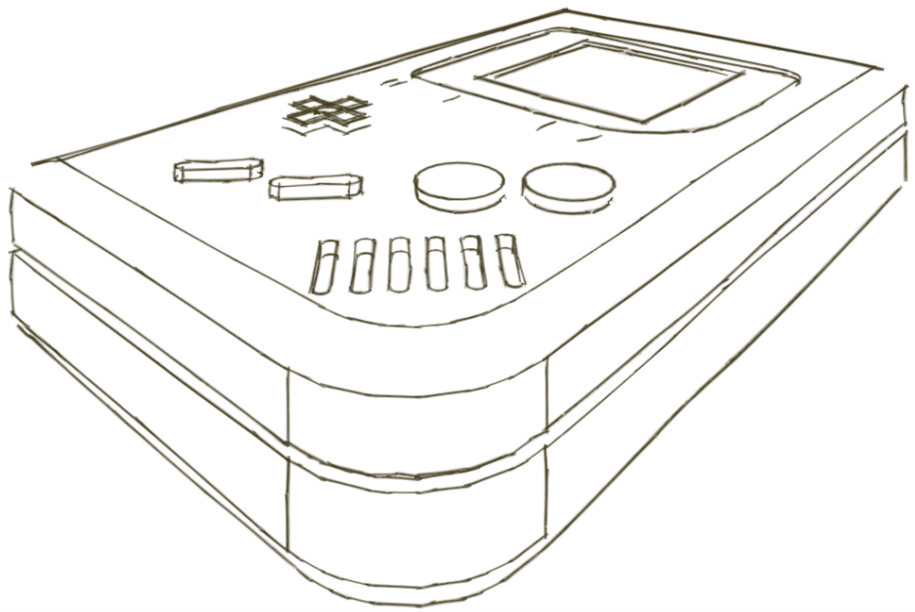
Iterative *Thick and Thin Lines*

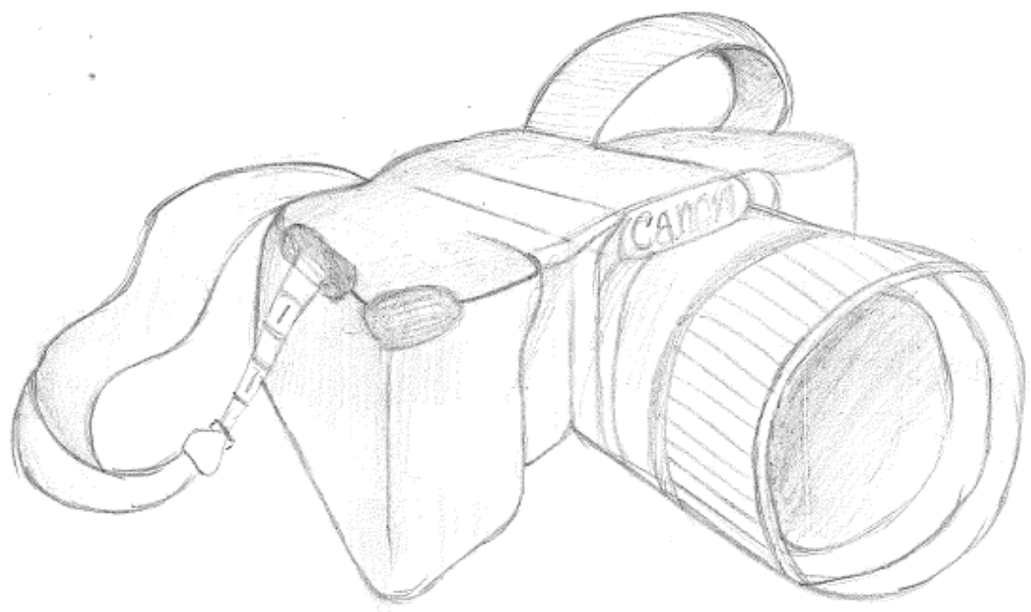
Thick and Thin Lines











Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to use thick and thin lines to enhance a drawing
- Pupils should be able to use their understanding of thick and thin lines to improve the presentation of given drawings and their folder.
- Pupils should be able to use their understanding of thick and thin lines to improve the presentation of drawings throughout their folder.

Iterative ***Rendering*** (*Shading*)

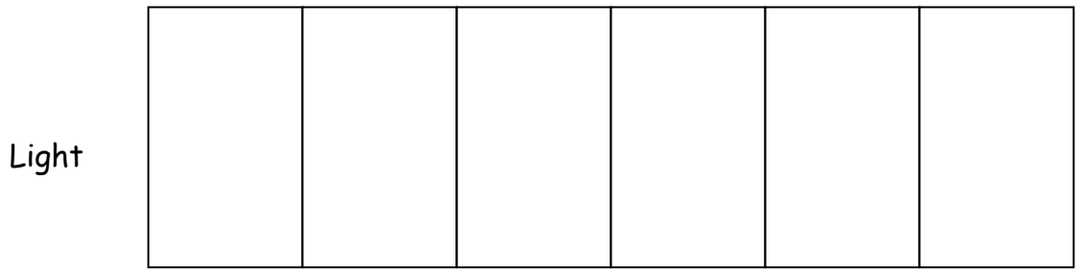
CW Classwork

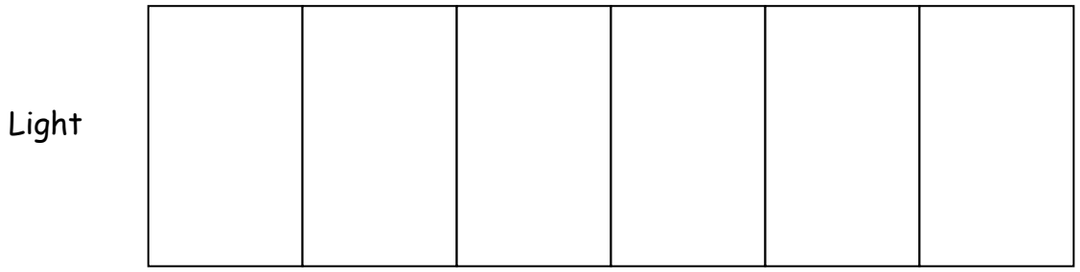
H Homework

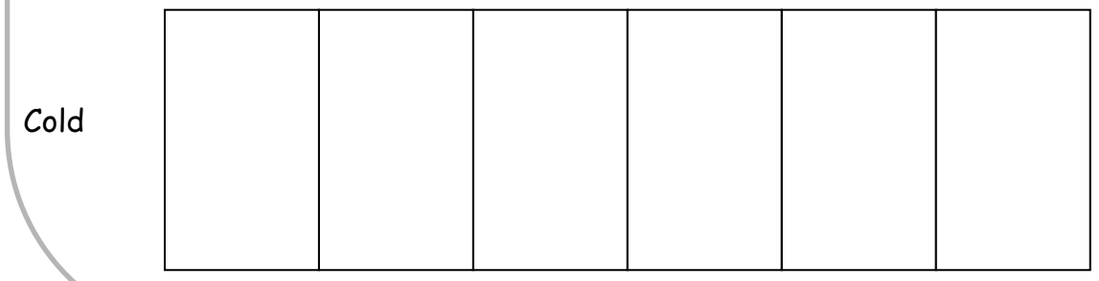
Shading

Task: Using the shading squares shade in the boxes from light to dark in the following colours, (a) pencil (b) Red (c)Blue (d) Cold to hot. An example has been given for you

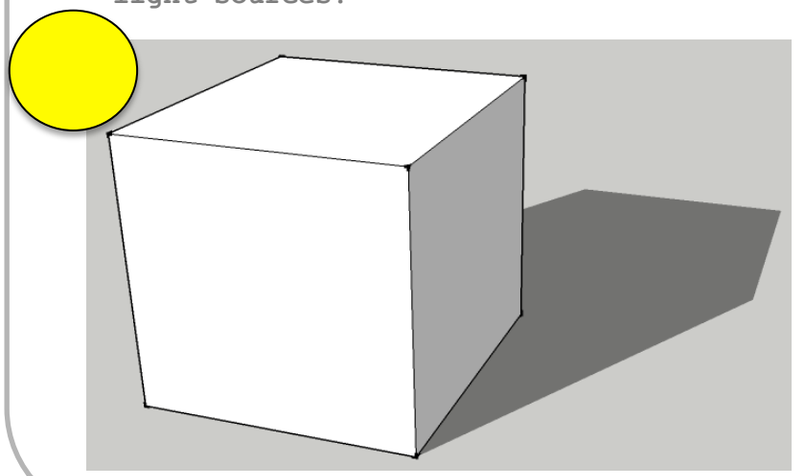
You have five minutes

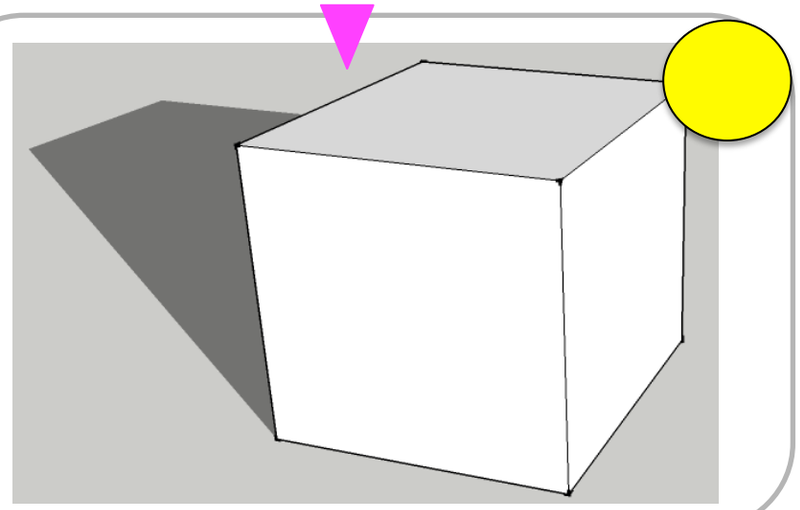


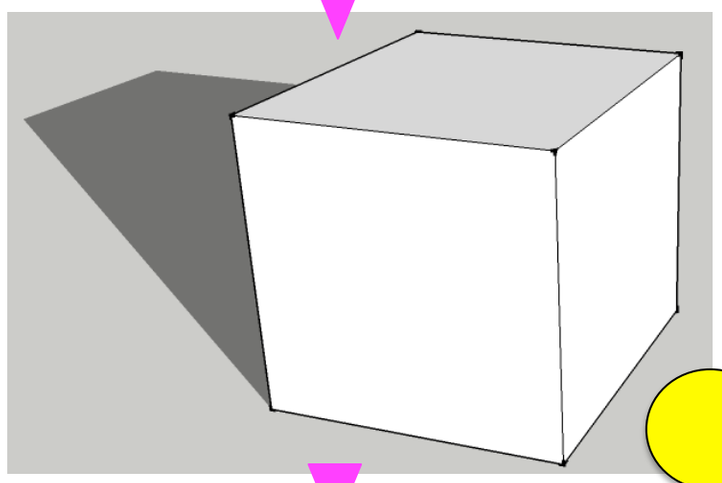




Task: Render the cubes shown below with a colour of your choice using the shading technique from the given light sources.





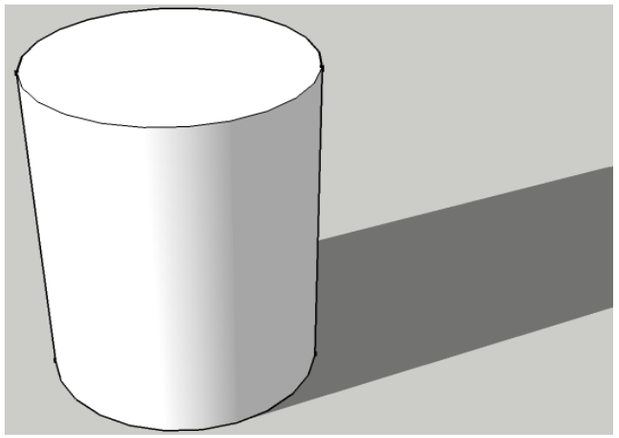


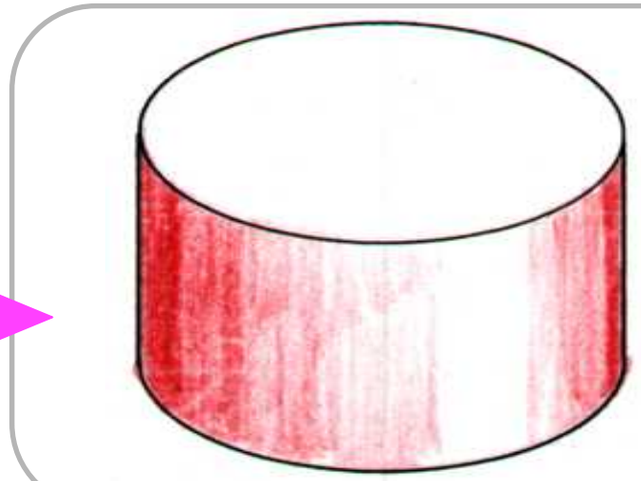
Lesson Objectives / (Nodau Dysgu)

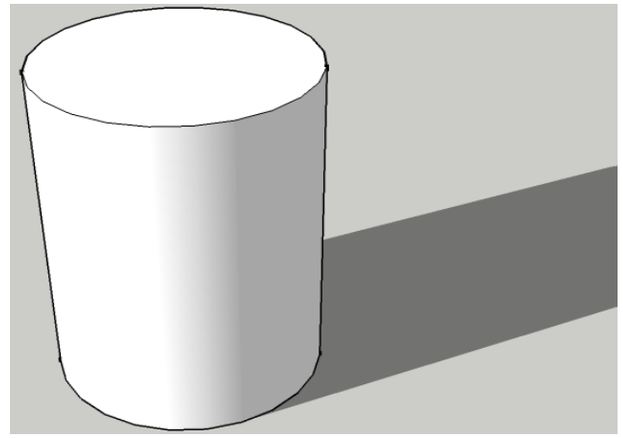
- Pupils should be able to understand how to use shading to enhance a drawing
- Pupils should be able to use their understanding of shading to improve the presentation of given drawings and their folder.
- Pupils should be able to use their understanding of shading to improve the presentation of drawings throughout their folder.

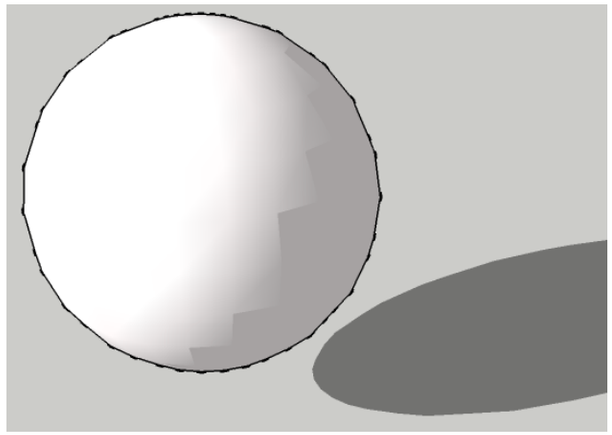
Iterative ***Rendering*** (*Shading*)

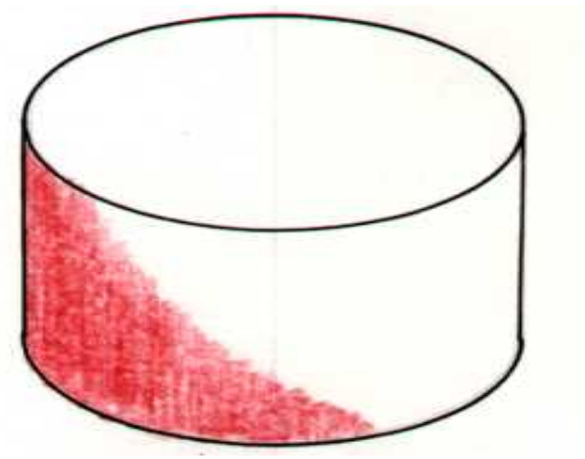
Task: Render the shapes below using the two techniques for curved surfaces.

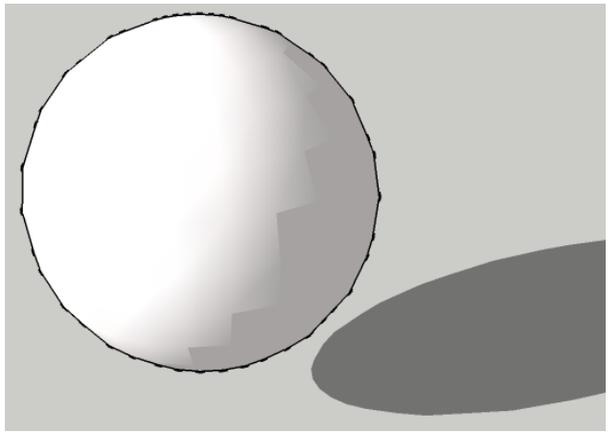


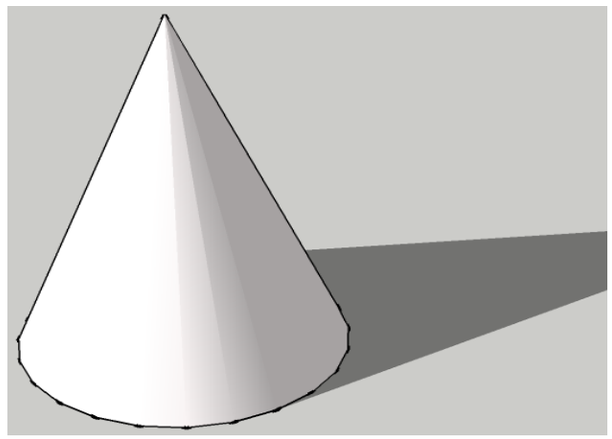


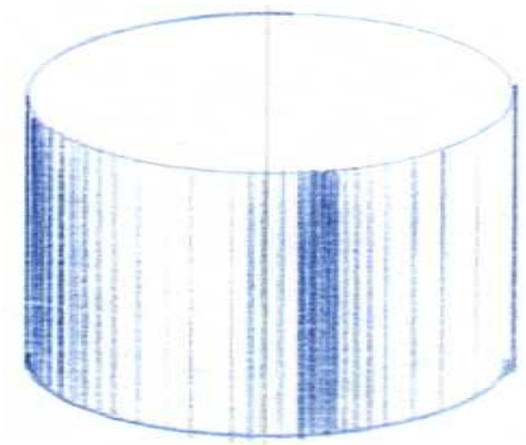


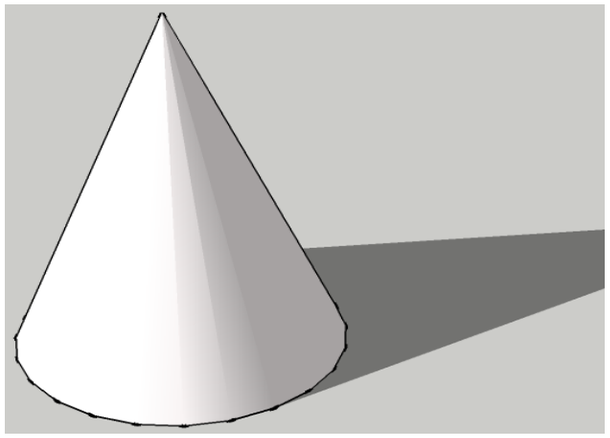












Lesson Objectives / (Nodau Dysgu)

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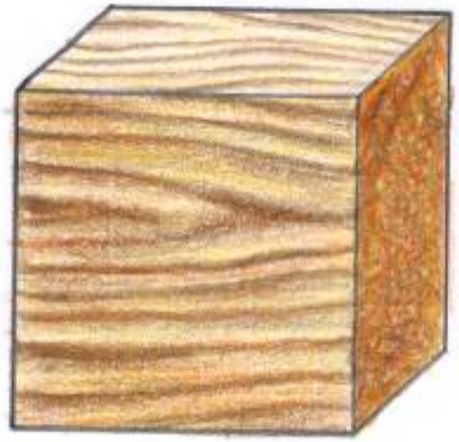
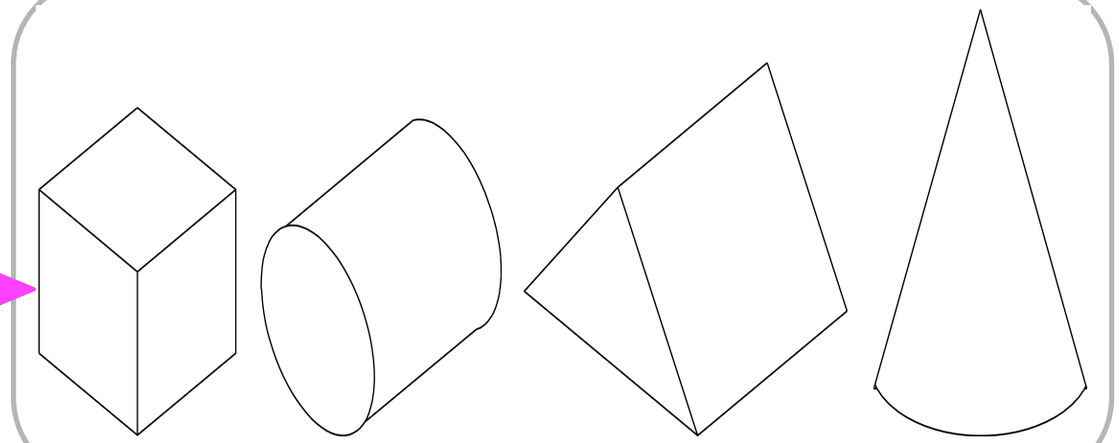
- Pupils should be able to use their understanding of shading to improve the presentation of drawings throughout their folder.

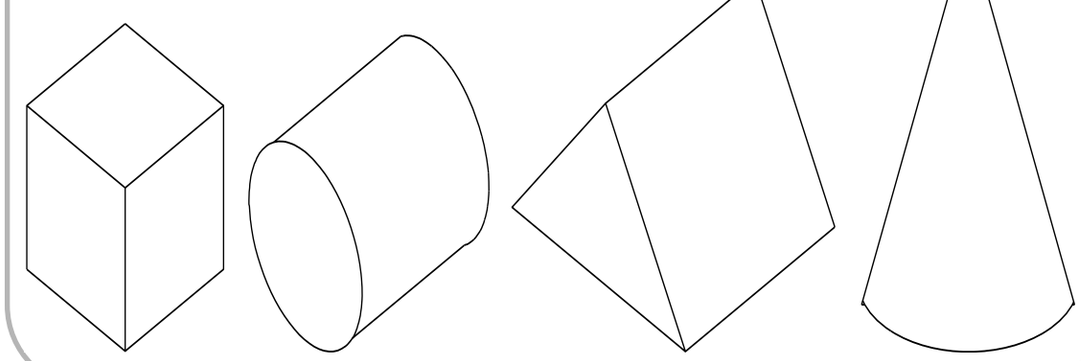
Iterative *Rendering* (*Textures*)



WOOD

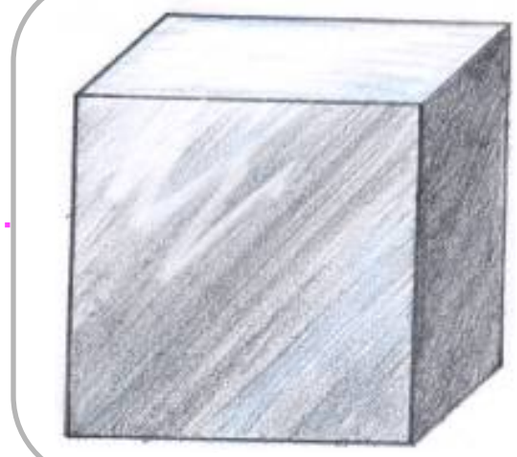
One of the easiest textures to apply using different shades of brown, orange and yellow. The grain effect is very easy to draw once the object has been shaded.

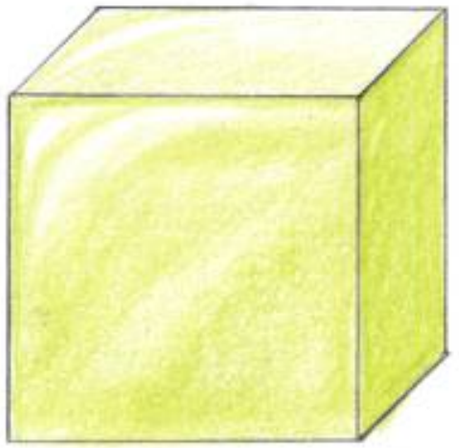




METAL

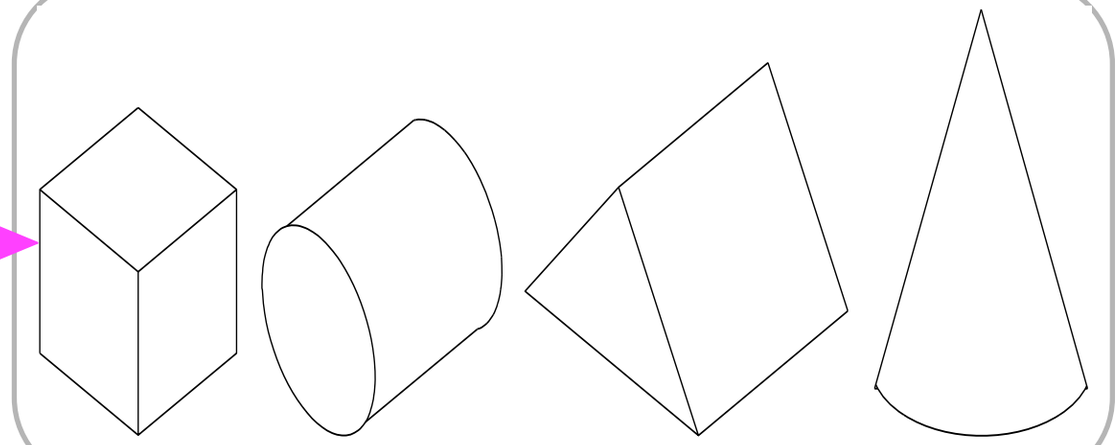
When applying a metal texture, remember your three tone shading. Build up the colour using grey and pale blue, then add reflective streaks as if the light is bouncing off the surface. You can do this using a white pencil or by rubbing out streaks of the base colour.





PLASTIC

Plastic is one of the more difficult textures to apply as it can be a very reflective surface. Use a technique similar to that of metal. Make sure the reflection lines follow the shape of the object.

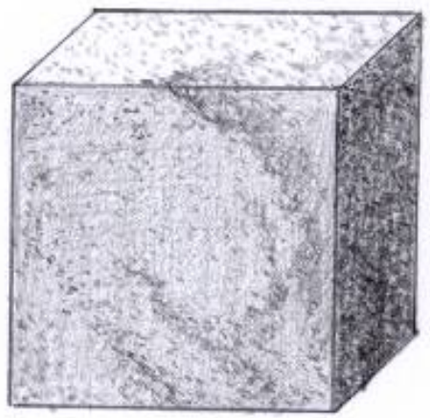


Lesson Objectives / (Nodau Dysgu)

- Pupils should be able to understand how to use texture to enhance a drawing
- Pupils should be able to use their understanding of textures to improve the presentation of given drawings and their folder.
- Pupils should be able to use their understanding of textures to improve the presentation of drawings throughout their folder.

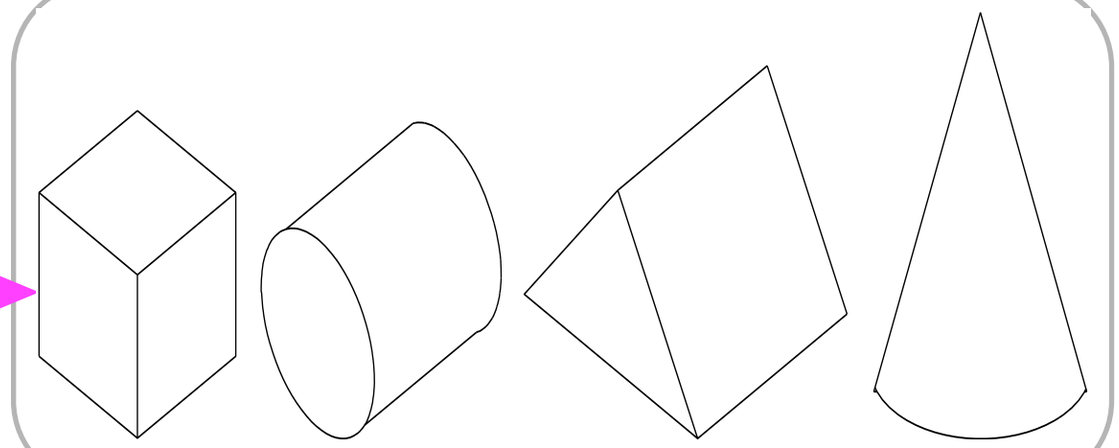
CW Classwork H Homework

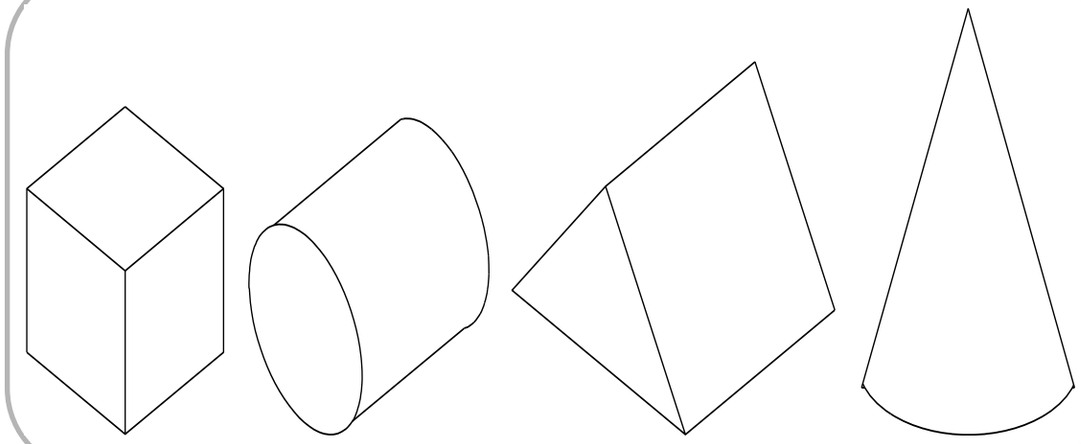
Iterative ***Rendering*** (*Textures*)



CONCRETE

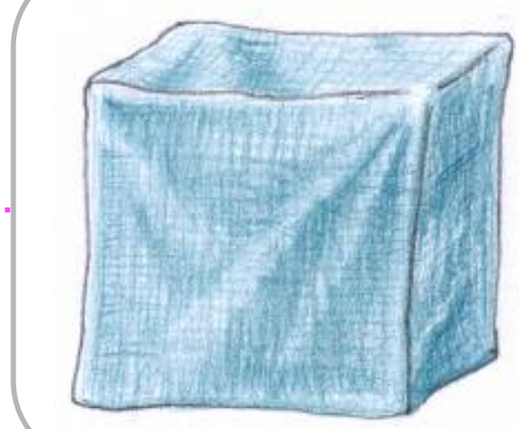
The easiest way to apply this texture is with a series of dots. Place the dots closer together to create dark areas and further apart to produce lighter areas. Try to make the surface look uneven.





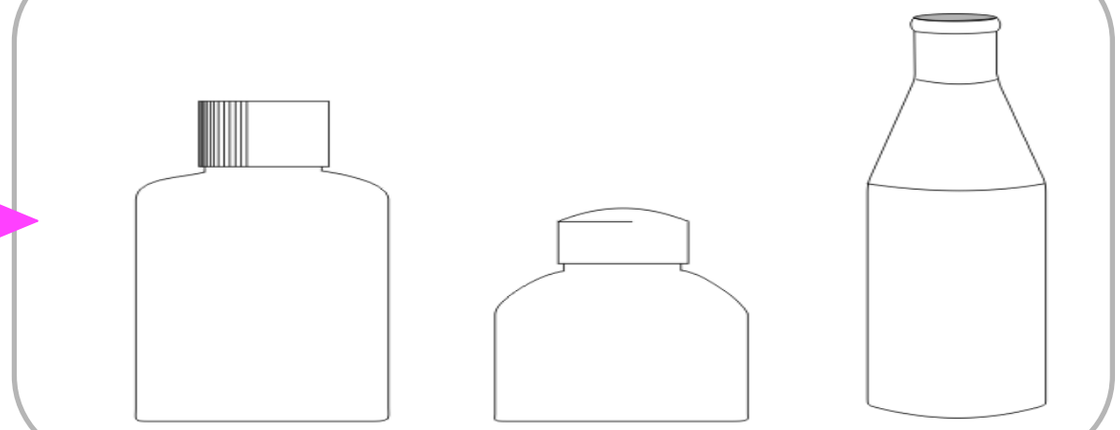
FABRIC

You need to create a soft effect, so avoid using straight lines drawn with a ruler. Soften the edges and apply bold colours using strokes in different directions to give a woven texture. You can also use lots of short pencil streaks to produce a furry effect.



GLASS

Glass is one of the more easy textures to apply as it can be a very reflective surface. Use a technique similar to that of plastic. Make sure the reflection lines follow the shape of the object.



Lesson Objectives / (Nodau Dysgu)

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