

## Year 5 Art: 3D – Block D

- This is a one-week block.
- The outline and structure of the block is as follows:

Lesson 1	Lesson 2	Lesson 3
Exploration of materials and techniques	Explicit teaching of techniques	Applying knowledge, skills and techniques



*Family of Man*  
by Barbara Hepworth (1970)

### At the end of this block, pupils will ...

Know:	Be able to:
An armature can be used to create a piece of 3D art	Use armatures to produce 3D forms
Clay can be joined by a score and slip method	Join two or more pieces of clay

In this block, pupils will develop visual spatial skills as they look at the shape and form of 3D objects. They will use papier-mâché as well as develop skills to manipulate clay.

CUSP Art Long term sequence	Block A	Block B	Block C	Block D	Block E	Block F
Year 1	Drawing	Painting	Printmaking	Textiles	3D	Collage
Year 2	Drawing	Painting	Printmaking	Textiles & Collage	3D	
Year 3	Drawing & Painting	Printmaking	Textiles & Collage	3D		
Year 4	Drawing	Painting	Printmaking & Textiles	3D & Collage		
Year 5	Drawing & Painting	Printmaking	Textiles & Collage	3D		
Year 6	Drawing	Painting & Collage	Printmaking & Textiles	3D		

# Point of reference: Y5 3D – Block D

Pupils will be able to:

- identify primary, secondary and complementary colours
- use the technique of découpage



**Prior Learning**

- make impressions in a smooth clay surface
- roll and cut clay
- construct 3D forms from wire

## CUSP Connections:

No CUSP connections

## Art History:

Barbara Hepworth (1903 – 1975)

Dame Jocelyn Barbara Hepworth was a British artist and sculptor who was born in Yorkshire. Hepworth studied at Leeds School of Art from 1920 – 1921 alongside fellow Yorkshire-born artist Henry Moore.

Along with artists such as Ben Nicholson and Naum Gabo, Hepworth was a leading figure in the colony of artists who resided in St. Ives during the Second World War. St Ives had become a refuge for many artists during the war and the wild beauty of the surrounding terrain offered a counter to the disruption and destruction of the war. Her experiences of the Cornwall landscape inspired many of her works, as did her memories of childhood in Yorkshire: “All my early memories are of forms and shapes and textures. Moving through and over the West Riding landscape with my father in his car, the hills were sculptures; the roads defined the form.”

## Links to Literature:

*Meet Barbara Hepworth* by Laura Carlin

*We Are Artists: Women who made their mark on the world* by Kari Herbert

## Materials:

Lesson 1: flour, warm water, paste brushes, tissue paper in analogous colours, newspaper, bowls for use as armatures, PVA glue, whisk

Lesson 2: air-dry clay (terracotta and buff), clay tools, rolling pins or cardboard tubes, plastic film, tins or cans to use as armatures

Lesson 3: air-dry clay (terracotta and buff), clay tools, plastic film, vessels for use as armatures

## Working Artistically

Shape	Line	Colour	Value	Form	Texture	Space
Shape is a flat (2D) area surrounded by an outline or edge.	Lines are used to show movement and mood.	Colour is used to convey atmosphere and mood.	Value is the intensity of colour and depends on the amount of white added.	Artists use form when they create sculptures. These are 3D shapes.	Texture is the look and feel of a surface.	Space in artwork makes a flat image look like it has form.

# Point of explanation:

## Y5 3D – Block D



Core Knowledge	Explanation
armature	An armature is a framework or basic structure that something such as a sculpture is built onto.
papier-mâché	Papier-mâché is a material consisting of paper pieces or pulp, sometimes reinforced with textiles, bound with an adhesive such as glue, starch or wallpaper paste.
slip	A slip is a liquid mixture or slurry of clay and / or other materials suspended in water.

Technical Vocabulary	Definition
analogous colours	three colours that are next to each other on the colour wheel (yellow, yellow-green and green)
contour	the outer edges of something: the outline of its shape or form
score	to make a cut or mark on a surface





<b>Link to video:</b> <a href="https://vimeo.com/578778333/f8ed3fd59d">https://vimeo.com/578778333/f8ed3fd59d</a>
<ul style="list-style-type: none"> <li>• Explanation and demonstration of taught content</li> <li>• Lesson by lesson guidance</li> <li>• Exemplification of techniques and outcomes</li> </ul>

# Point of delivery:

## Y5 3D – Block D

Revisiting prior learning 	Taught content 	Point of practice 	Point of reflection 
<p>1. Use complementary colours to create the illusion of movement</p> <p>Identify primary and secondary colours</p> <p>Use the technique of découpage</p>	<p>Define and explore analogous colours</p> <p>Use an armature to support modelling of soft materials</p> <p>Explain and explore the effects created by using different modelling materials</p>	<p>Introduce the Knowledge Note and key vocabulary for this block.</p> <p>Demonstrate how to make papier-mâché. Using a bowl wrapped in plastic film as an armature, pupils apply several layers of small pieces of torn newspaper to the surface, covering each piece of paper with their flour and water paste. Once several layers have been applied, leave to dry. Once completely dry, the papier-mâché bowl can be removed from the armature and the plastic film removed. It can then be painted using acrylic or poster paint.</p> <p>Refer pupils to previous learning about the colour wheel and revise primary, secondary and complementary colours. Introduce pupils to analogous colours (colours that sit next to each other on the colour wheel). Show examples of these colours. Compare analogous colours with complementary colours. Discuss how, unlike complementary colours, analogous colours are harmonious.</p> <p>Next, using a bowl wrapped in plastic film as an armature, create a 3D form by attaching multiple layers of tissue and watered-down PVA glue to the surface. Prompt pupils to select tissue in three analogous colours and apply small pieces of the tissue to avoid any wrinkles. Once several layers have been applied, paint a final layer of PVA glue over the surface and leave to dry.</p> <p>Discuss with pupils the processes they have completed and, once the bowls are dry, evaluate the outcomes.</p>	<p>Can apply layers of torn paper evenly to create a smooth surface</p> <p>Can use an armature to create a 3D form that, once dry, holds its shape</p> <p>Can select analogous colours for their harmonious effect</p>
<p>2. Make impressions in a smooth clay surface</p> <p>Roll and cut clay</p>	<p>Use an armature to support modelling with clay</p> <p>Recreate a design by modelling shapes and lines from clay</p> <p>Apply the score and slip method of joining clay</p> <p>Explain techniques and processes</p>	<p>Refer pupils to the clay skills they learned in Years 1 and 2. Explain that pupils will apply and build on these skills to create a cylindrical form using two tones of clay (buff and terracotta).</p> <p>First, pupils draw out a simple pattern on a rectangular piece of paper that is long enough to wrap around a tin or can, leaving a small overlap. The can will be used as an armature to support the clay whilst it is being formed.</p> <p>Once the design is drawn, pupils use this as a template and roll out a slab of clay to the same size. Pupils recreate their design onto the slab by attaching shapes and lines of contrasting clay using the score and slip method. Once the pattern and decoration has been applied and pushed gently into the slab using a rolling pin, it is then wrapped around the armature. Ensure this has been wrapped in plastic film to avoid the clay sticking. The ends of the slab are then joined securely using the score and slip method. Before the clay dries, the armature will need to be carefully removed. When fully dry, the form can be painted and given a glossy finish with a coat of PVA glue.</p> <p>Use questioning to elicit pupils' understanding of the techniques they have learned.</p> <p>Pupils complete Vocabulary Task 1.</p>	<p>Can manipulate and mould clay to form desired shapes and lines</p> <p>Can join two or more pieces of clay securely using the score and slip technique</p> <p>Can explain learned techniques</p>

# Point of delivery: Y5 3D – Block D

Revisiting prior learning 	Taught content 	Point of practice 	Point of reflection 
<p>3. Use an armature to support modelling with clay</p> <p>Recreate a design by modelling shapes and lines from clay</p> <p>Apply the score and slip method of joining clay</p>	<p>Explore methods of creating and combining shapes and coils to build and decorate a 3D form</p> <p>Apply previously taught techniques to join clay securely</p> <p>Describe and respond to the methods used</p>	<p>Refer pupils to the skills and techniques they learned in the previous lesson. Explain to pupils that they will apply these techniques to build a decorative coil pot.</p> <p>Using an inverted bowl or can as an armature, demonstrate how to build the pot by rolling out ropes of clay, creating interesting shapes and coils and attaching them to the surface of the armature. Remind pupils that they must join the coils using the slip and score method wherever the ropes meet another section.</p> <p>Pupils build up their coils and shapes around the sides of the armature, making sure that the ropes they roll out are thick enough not to crack when scored. Pupils can experiment by making coils, braids, twists and small discs or by combining two colours of clay.</p> <p>Once the entire pot has been built and has been allowed to dry for an hour, the armature must then be removed carefully.</p> <p>Once the pot is completely dry, pupils may choose to paint or varnish it.</p> <p>Allow pupils the opportunity to discuss any challenges they faced and how they overcame them, making suggestions about what they might do differently next time.</p> <p>Pupils then complete Vocabulary Task 2.</p>	<p>Can roll and manipulate clay to form coils, braids and twists</p> <p>Can use the slip and score method to join decorative and structural elements</p> <p>Can identify areas of difficulty and suggest improvements</p>

## Questions for assessment



**Why** is it important not to allow the paper to wrinkle when you apply it to the armature?

**What** is different about the finished bowls?

**How** does light affect the colours used in the tissue bowl?

**What** would happen if you used complementary colours?

**Why** is it important to score the surface of the clay when joining pieces?

**What** did you find difficult about adding your decoration to the clay slab?

**What** happens if you roll out the clay too thinly?

**How** do you make braids or twists from clay?

**What** effects did you create by using two colours of clay?

**What** would you do differently next time?

# Oracy and Vocabulary: Y5 3D – Block D

## Task 1:

Use a thesaurus to help you complete the table with synonyms of the verb *score*.  
Two have been done for you.

gouge	nick			

Exploration: 

1. How does a nick become a gouge?
2. What happens if you do not score clay when joining pieces?
3. Why is it important to use slip when joining clay?
4. What might happen if you roll out clay very thinly?

What happens when clay dries?

How do you stop clay from drying out?

Is it easier making patterns by scoring into the clay or by adding pieces of clay?



Task 2: Discuss the questions below.

Explain the meaning of these words to a partner:

slip score coil slab

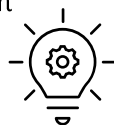
Explain to a partner the methods you used to make your coil pot.



Explain any problems you experienced and how you overcame them.



What advice would you give a friend to prevent them experiencing the same problems?



Write an emotion word that expresses how you feel about each of the 3D forms you have made.

papier-mâché bowl	
tissue paper bowl	
decorated slab cylinder	
coil pot	

# Vocabulary: Y5 3D – Block D

OWN-it	Analyse
<p>Underline the part of the word that means <i>turn</i>.</p> <p style="text-align: center; font-size: 1.2em;">inverted</p>	
<p>Change this noun to an <i>adjective</i>.</p> <p style="text-align: center; font-size: 1.2em;">contour / _____</p>	
<p>Tick the correct word class for the word <i>armature</i>.</p> <p> <input type="checkbox"/> noun  <input type="checkbox"/> adverb  <input type="checkbox"/> preposition         </p>	

KNOW-it	Definition
<p>Write a definition of the word <i>armature</i>.</p> <p>_____</p> <p>_____</p>	
<p>Tick the correct definition of <i>papier-mâché</i>.</p> <p> <input type="checkbox"/> a mixture of glue and water  <input type="checkbox"/> a mixture of paper and glue  <input type="checkbox"/> a mixture of paper and water         </p>	
<p>Which colours are analogous colours? Tick one option.</p> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px 20px; text-align: center;">red, yellow and blue</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px 20px; text-align: center;">green, green-yellow and yellow</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px 20px; text-align: center;">green, orange and purple</div> </div>	

LINK-it	Connect						
<p>Tick the word that is not a synonym of <i>analogous</i>.</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <tr> <td style="padding: 5px 20px;">alike</td> <td style="width: 30px; height: 20px;"></td> </tr> <tr> <td style="padding: 5px 20px;">comparable</td> <td style="width: 30px; height: 20px;"></td> </tr> <tr> <td style="padding: 5px 20px;">dissimilar</td> <td style="width: 30px; height: 20px;"></td> </tr> </table>		alike		comparable		dissimilar	
alike							
comparable							
dissimilar							
<p>Write two different meanings of the word <i>score</i>.</p> <p>1. _____</p> <p>2. _____</p>							
<p>Match the synonyms.</p> <table style="width: 100%; margin-top: 10px;"> <tr> <td style="border: 1px solid black; border-radius: 10px; padding: 5px 20px; text-align: center;">mark</td> <td style="border: 1px solid black; border-radius: 10px; padding: 5px 20px; text-align: center;">outline</td> </tr> <tr> <td style="border: 1px solid black; border-radius: 10px; padding: 5px 20px; text-align: center;">frame</td> <td style="border: 1px solid black; border-radius: 10px; padding: 5px 20px; text-align: center;">score</td> </tr> <tr> <td style="border: 1px solid black; border-radius: 10px; padding: 5px 20px; text-align: center;">contour</td> <td style="border: 1px solid black; border-radius: 10px; padding: 5px 20px; text-align: center;">armature</td> </tr> </table>		mark	outline	frame	score	contour	armature
mark	outline						
frame	score						
contour	armature						

USE-it	Use in context
<p>Use the word <i>translucent</i> in a sentence.</p> <p>_____</p> <p>_____</p>	
<p>Complete this sentence.</p> <p>_____ is used to _____ pieces of clay and is a mixture of _____ and _____.</p>	
<p>Tick the box if the word <i>scored</i> has been used correctly in this sentence.</p> <p>Tom <i>scored</i> his name into the desk. <span style="float: right; border: 1px solid black; width: 30px; height: 30px; display: inline-block; vertical-align: middle;"></span></p>	

# Knowledge Note:

## Y5 3D – Block D

Year 5: 3D



### Core content:

Develop visual spatial skills.

Look at the shape and form of 3D objects.

Use papier-mâché and develop skills to manipulate clay.

### Technical vocabulary:

**Contour** – the outer edges of something: the outline of its shape or form.



**Analogous colours** – three colours that are next to each other on the colour wheel.



**Armature** – a framework or basic structure that something such as a sculpture is built onto.



**Slip** – a liquid mixture of clay and / or other materials suspended in water.



**Score** – to make a cut or mark on a surface.



**Papier-mâché** – a material consisting of paper pieces mixed with glue.



### Connections:

Barbara Hepworth  
(1903 – 1975)  
British artist and sculptor



Year 5: 3D



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# Exemplification:

## Y5 3D – Block D

Make a flour and water paste using hot water and flour

The paste will be used with newspaper to create papier-mâché

Invert a bowl and cover it tightly with plastic wrap

Tear up pieces of newspaper

Make sure the pieces are small so that they will form a smooth surface without wrinkles

Cover the armature (wrapped bowl) with layers of small pieces of newspaper covering each layer with a coat of the paste

Do three / four layers

- Turn over a small bowl - cover in plastic wrap
- Make a flour and water paste
- Apply to small pieces of newspaper
- Build layers on the surface of the bowl.
- Repeat the layering process 3-4 times.
- Leave to dry.

# Y5 3D



Place in a warm location to dry

Drying could take a couple of days depending on the size and the number of layers used

When dry carefully remove the papier-mâché bowl from the armature and gently peel off the plastic wrap

If damp allow for further drying before painting with poster or acrylic paint and then coating with a layer of PVA glue to form a sealant and varnish

# Exemplification: Y5 3D – Block D

Pupils will revisit the colour wheel and revise their knowledge of primary and secondary colours

Introduce analogous colours (three colours sitting next to each other on the colour wheel)

Pupils will select three analogous colours to use in this activity

Using their chosen colours pupils tear up small pieces of tissue paper

Cover the vessel to be used as an armature with plastic wrap

Cover the armature with several layers of watered-down PVA glue and tissue paper

When a number of layers have been completed leave to dry (this will take several hours and is best left overnight if possible)

Carefully remove the creation from its armature

Peel off the plastic wrap

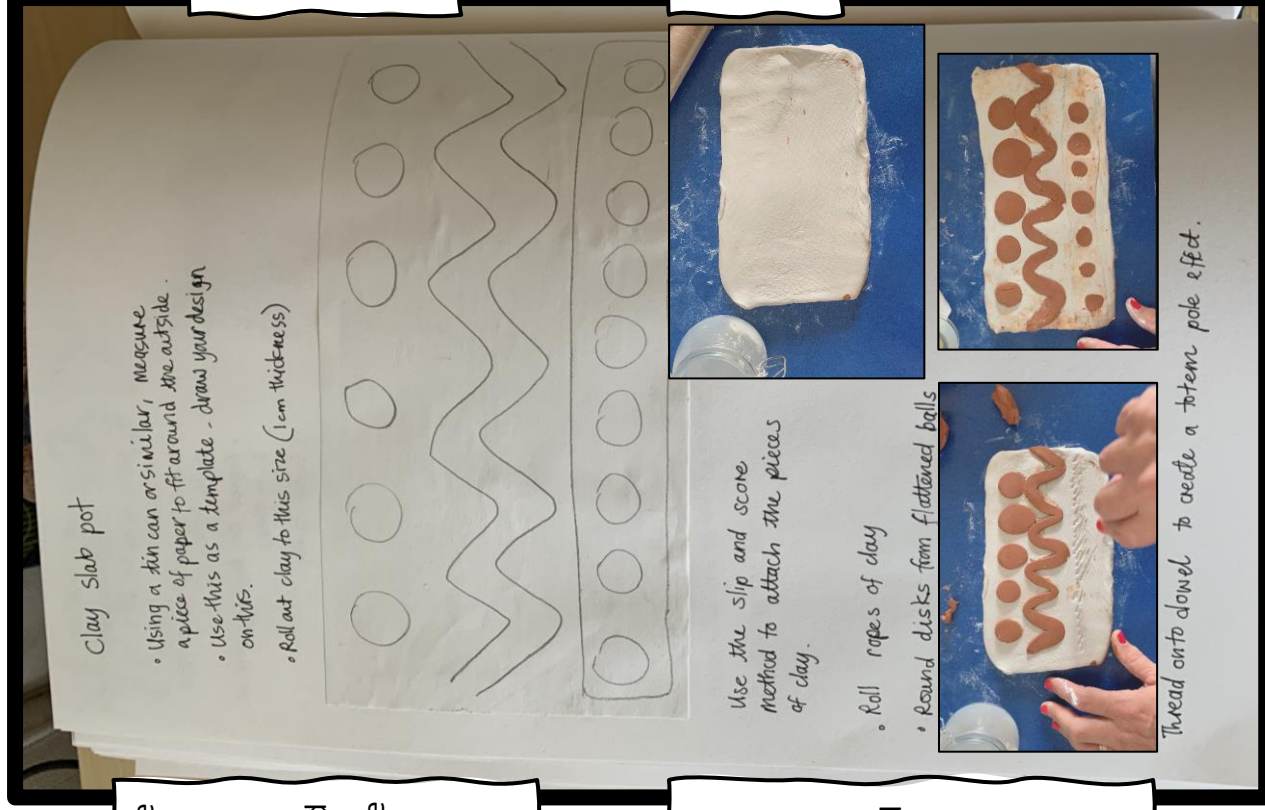
The tissue paper will dry translucent and when positioned in a well-lit spot the colours will glow

The PVA glue will give the object a plastic feel



# Exemplification:

## Y5 3D – Block D



First pupils produce a design on a piece of paper that is long enough to wrap around a tin can (or another suitable container) allowing for a small overlap

Don't make the design too complicated

Roll out the clay to the same size as the design and to a thickness of 1cm

Pupils will use the slip and score method to join pieces of clay

Slip can be made by mixing a small amount of clay with water.

Pupils recreate their patterns using rolled and shaped pieces of clay

Score the clay where it is to be joined by making short cuts with a clay tool

Smear the areas to be joined with a small amount of the slip

Join the pieces applying a little pressure to ensure there is a seal

Continue to follow the design applying more pieces of clay

Two colours of clay have been used here but the same process can be used with interesting effect by just using one type of clay

A rolling pin can be made from a stiff cardboard tube wrapped with a piece of plastic wrap to ensure it doesn't stick to the clay while rolling



# Exemplification: Y5 3D – Block D

Once the pattern is complete pupils carefully lift their slab from the work surface and wrap it around the prepared armature



Smooth any cracks with fingers dipped in the slip  
Encourage pupils to talk about the form and shape they have created



Join the two sides by using the score and slip method and apply a little more slip to ensure a smooth join has been made

The slab tube will take several days to fully dry

However clay will shrink as it dries so it is important to remove the armature after an hour

Do this carefully and allow to dry

When dry the slab tubes can be painted with acrylic or poster paint and displayed as individual pieces or threaded onto a piece of dowel to create a totem pole effect



Ask pupils:  
What steps did you find easy in this process?  
What advice or tips would you pass on?

# Exemplification: Y5 3D – Block D

Prepare a chosen armature by wrapping it in plastic wrap

Make long ropes of clay ensuring they are thick enough to be scored without breaking

Thin ropes may break as they dry

Thick ropes can produce a chunky and clumsy appearance

*Coil pot*

- Use ropes of clay to twist around the armature.
- Join with slip and score method.
- Create ropes, twists and disks of clay.
- You could combine colours of clay too.

*As before, cover the armature with plastic wrap.*

*Starting from the big upwards (with cup the works better).*

• Remember to score wherever two parts meet.

• Use slip to smooth out cracks.

Gently wrap the ropes around the armature allowing them to create interesting shapes and coils – rather than just wrapping around in rows

Be sure to score and use slip as well as pressure to make a lasting join

Use the score and slip method throughout this process when joining clay

Decide which is the easiest way to work – top to bottom or the reverse?

# Exemplification: Y5 3D – Block D

