

Repeat Pattern

This lesson plan will take you through the designing of a repeat pattern using the Scottish Parliament Buildings as your source of inspiration.

Recommended Age: Primary 6/7, Secondary 1/2

Recommended Stage: 5 –14 stages E/F

Although these are recommended ages/stages the lessons can be altered to suit more or less able pupils.

The pack includes the following:

- 1) A brief introduction on pattern and information on William Morris (an historical textile designer) and Timorous Beasties (two contemporary textile designers)
- 2) Some suggestions of Design Briefs
- 3) A lesson plan titled 'Creating a unit to be used for mirror image repeat pattern'. This takes you through the various stages of making a repeat pattern
- 4) An illustrated sheet showing how a pattern works
- 5) A sheet showing a completed coloured repeat pattern
- 6) A lesson plan on how to colour a design
- 7) Lesson plan on 'How to create a mirror image repeat using Microsoft Publisher'
- 8) Photographic mirror image repeat pattern created using the lesson plan above
- 9) 6 Reference photos

The main thing is to have fun, be inspired and make a pattern!

What can my pattern be used for?

A pattern can be used for anything. Patterns can be seen just about anywhere - perhaps ask your class where in their own homes they can see pattern and what has inspired the patterns - they will be amazed just how much pattern surrounds us and what has inspired it.

It is often worth having a look at who else has created patterns to be used for textiles.

Contemporary Textile Designers - **Timorous Beasties** was founded in Glasgow in 1990 by Alistair McAuley, and Paul Simmons, who met as students at Glasgow School of Art. They design fabrics and wallpapers and recently opened a shop on the Great Western Road in Glasgow. The Glasgow Toile takes a traditional fabric pattern and explores modern social and political issues. See the following websites for more information:

www.timorousbeasties.com and www.designmuseum.org/design/

Historical Textile Designer - **William Morris** (March 24, 1834 – October 3, 1896) is best known as a designer of wallpaper and patterned fabrics and a writer of poetry and fiction. He was one of the principal founders of the British Arts and Crafts Movement. He used nature as an inspiration, with patterns including Trellis and Fruit, Strawberry Thief and African Marigold, now at the William Morris Gallery. See the William Morris Gallery website for more information:

www.lbwf.gov.uk/wmq/home.htm

DESIGN BRIEFS

It might be worth giving your class a design brief to work from. All designers work from a design brief. This is really a set of instructions for the design team to work from - it tells the designer what is required.

A few ideas for design briefs:

Design Brief 1

Design a fabric to be used for the curtains or other upholstery in the offices of the MSPs. The fabric should be inspired by the Parliament buildings and should be created using a repeat pattern.

Design Brief 2

Design tablemats to be used in the staff canteen. The fabric should be inspired by the Parliament buildings and should be created using a repeat pattern.

Design Brief 3

Design a fabric suitable for the staff corporate dress - this could be used for a tie, waistcoat, shirt, or other piece of clothing. The fabric should be inspired by the Parliament buildings and should be created using a repeat pattern.

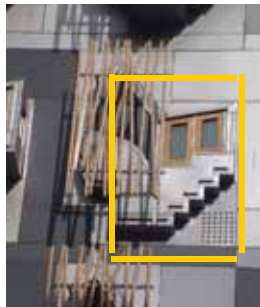
Why not make up your own Design Brief or give the pupils some ideas and see what they can come up with?

Creating a Unit to Be Used For Mirror Image Repeat Pattern

1. To begin with you need to either:
 - Visit the Scottish Parliament Building
 - Download photos from the website
 - Use one of the photos included with this pack
2. Look at your photo or drawing and decide which part you are going to use for your repeat.



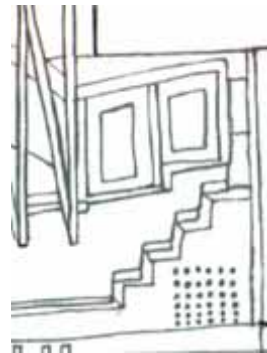
3. Now draw a box around the part you want to use for your repeat



Photo

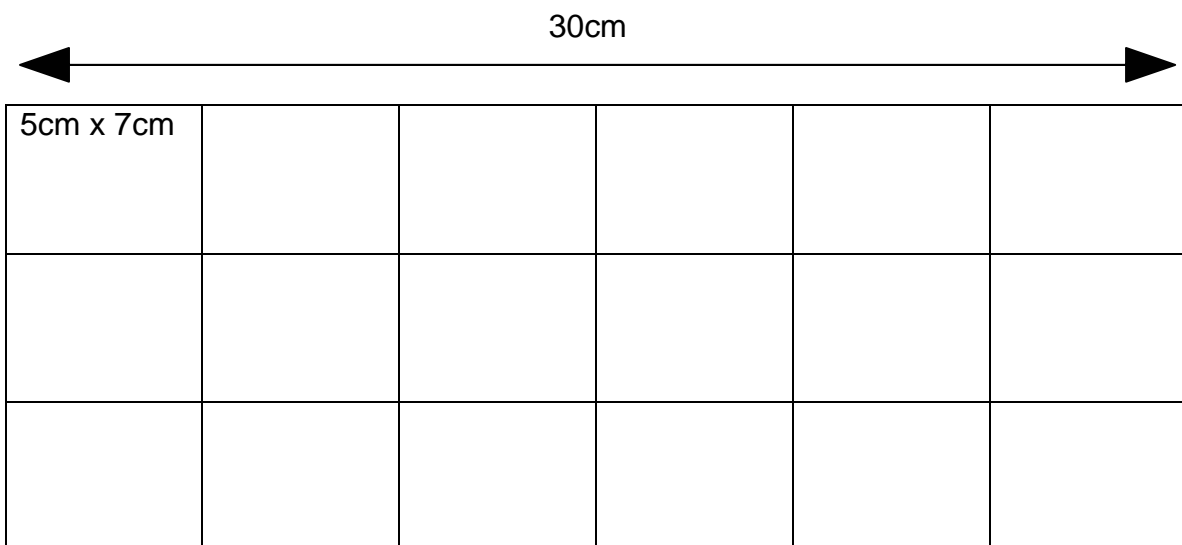


Unit



Traced Unit 5 cm x 7 cm

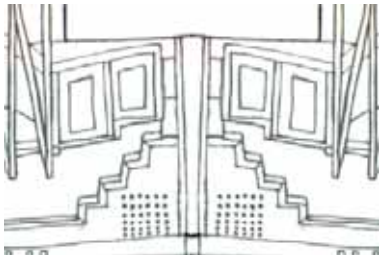
4. Trace this area or draw freehand if preferred (you will still need to trace your drawing). From now on this will be known as your 'unit'.
5. You now need to measure the size of the unit so that you can draw a grid for your repeat.
6. On a sheet of A4 paper draw out a grid, fill the page with as many units as you can - use pencil and draw lightly, you are going to rub out the grid when the pattern is completed.



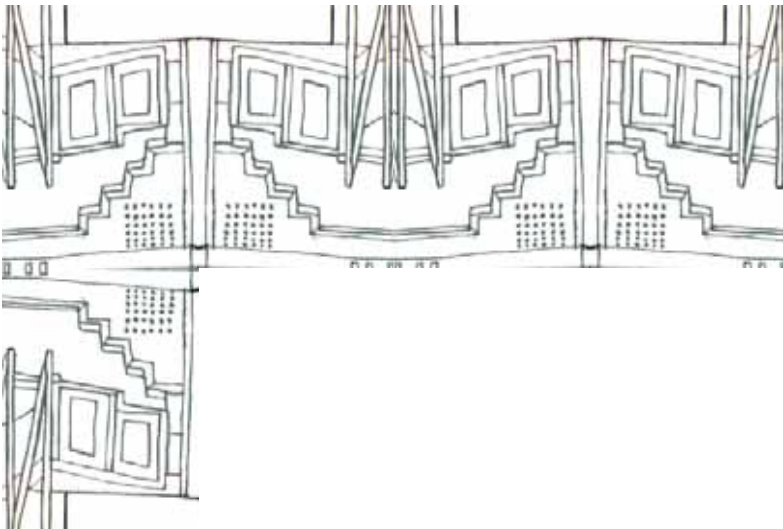
This is what your A4 page should look like when you are ready to start drawing out your repeat.

7. Now place your tracing paper pencil side down on the top left hand box on your grid and draw over the lines carefully.
8. Next flip the tracing paper over into the second top left hand box and again draw over the lines - see image 'repeat pattern 2 units' (you know whether you are correct if the lines all match up) - continue until the end of the first line.
9. Now place your tracing paper back over the first box so that it all matches up and then flip it down so that all the lines join up and draw carefully over the lines — see image 'repeat pattern 5 units' - continue this process until all the boxes are filled — see image 'repeat pattern complete'.
10. Now carefully rub out the grid lines
11. You are now ready to colour your design - see 'repeat pattern coloured' for ideas on how to colour your design see sheet titled, "Ideas for colouring your repeat pattern."

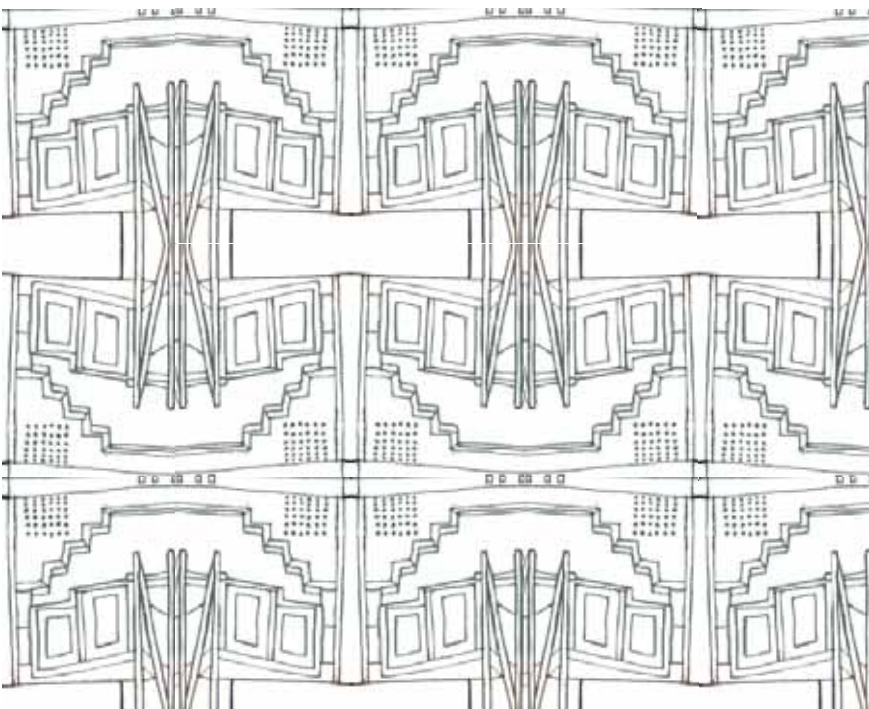
REPEAT PATTERN 2 UNITS



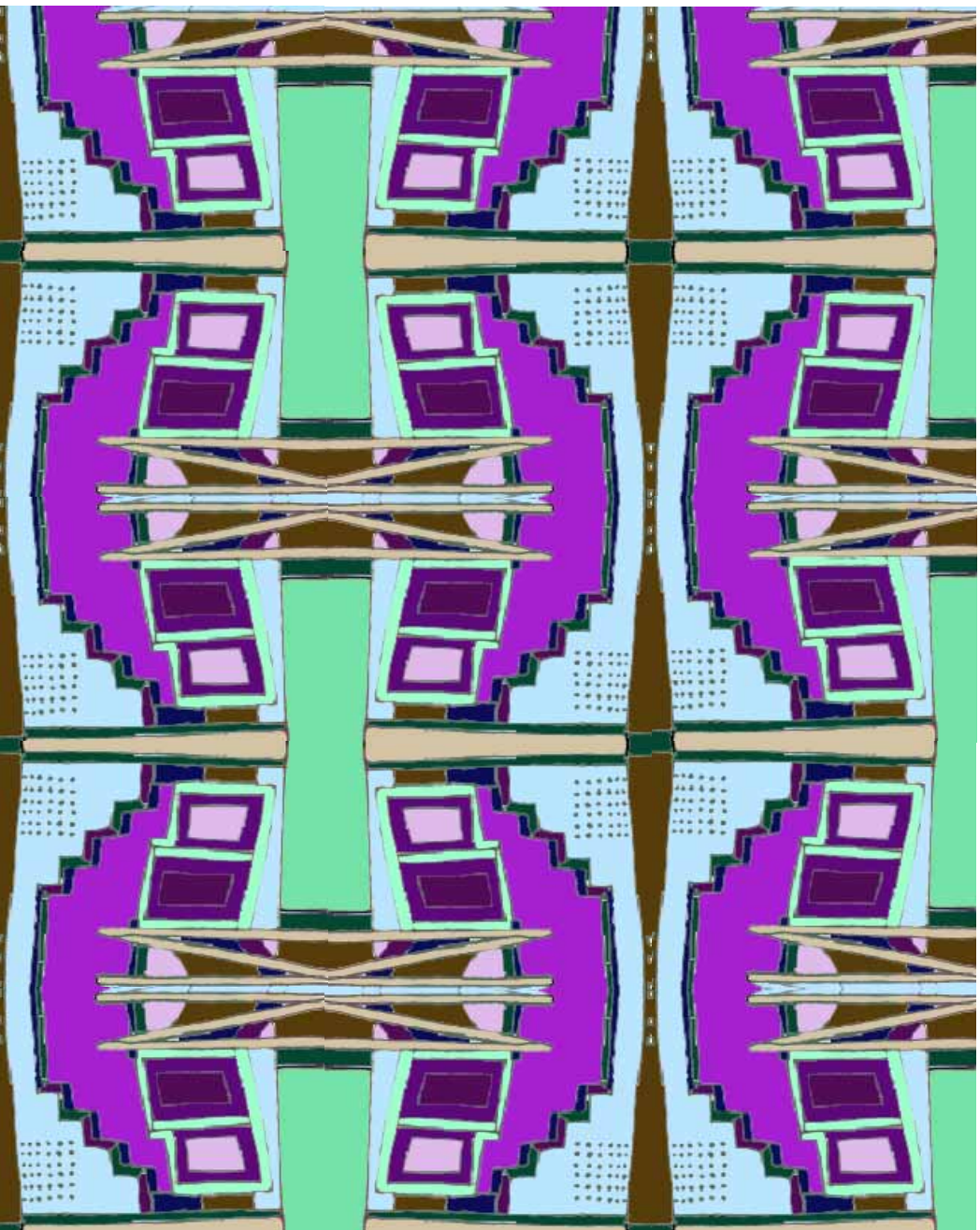
REPEAT PATTERN 5 UNITS



REPEAT PATTERN COMPLETE



REPEAT PATTERN COLOURED



Ideas for Colouring your repeat pattern

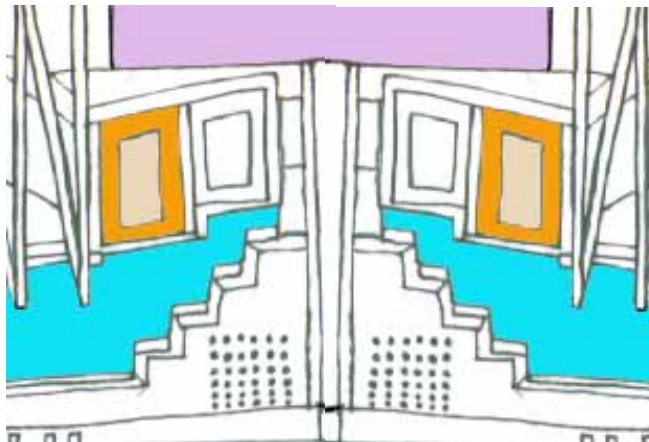
How do we decide upon a colour scheme?

Here are a few suggestions:

- Look out the window and use the colours that you see - nature is never wrong!
- Open your wardrobe and find a scarf, duvet set, outfit that you really like
- Go out and about and take some photos or make colour sketches of e.g. the seaside, the city, the garden
- Pile up the fruit bowl
- Look at a painting and use the colours from the artwork
- Or why not use the Parliament buildings?

Remember that everyone will choose a different colour scheme and none is wrong.

The secret of correct colouring is to remember that you must colour each part of the unit the same on every unit (see below)



Here are a few techniques:

Black Permanent Marker with coloured ink

- 1) Go over all the outlines with a black permanent marker pen.
- 2) Rub out the pencil lines.
- 3) Now using coloured ink, easy brush or equivalent, colour the design. You can let the colours run together within each segment which looks really effective -the end result is a bit like a stained glass window.

Flat designer colour

Mix the colour (using block paints) you desire until the paint is quite thick then paint each section with that colour as neatly as you can - the end result should look really smooth and flat - repeat for all colours. Make sure that you mix enough colour to last for the whole design - adding a little white makes it go further and gives a flatter, smoother finish.

Cut paper - this is only advised for fairly simple designs, as it is very time consuming

- 1) Trace one area of your unit and then transfer the tracing onto coloured paper and cut out (remember to reverse the image so that when you stick it down it is the right way round). Cut out as many pieces of that shape and colour as you can see on your design, then glue each piece in place (use minimum glue).
- 2) Repeat the process until the design is complete.

Coloured Pencil

Coloured pencils can be used in different ways, one way is to use the same pressure all the time - this gives an even surface. However you can also vary the pressure from leaning heavily (dark colour is achieved) to leaning lightly (a lighter colour is achieved). This makes it more interesting - again remember to do the same thing in each section.

Black permanent marker outlines, oil pastel and acrylic paint etching

- 1) Go over all the outlines with a black permanent marker.
- 2) Colour each area with oil pastel (lean heavily).
- 3) Paint over the whole design with dark coloured acrylic paint (paint very lightly so that you can just see the design underneath).
- 4) Once dry, using an ink pen nib scratch away the acrylic paint - you can scratch out patterns in each segment or simply scratch it all out, either way is effective but the secret is to remove most of the acrylic paint.

Creating a Repeat Pattern using Microsoft Publisher

You have been shown how to create a repeat pattern by hand – using a computer is quicker and is well worth a try. After creating it you can use various art programmes to manipulate the pattern.

Stage 1

1. Click on Microsoft Publisher.
2. Click on blank publications.
3. Double click on full page.

Stage 2

4. Put picture in scanner face down or plug in camera.
5. Click on Insert > Picture> From Scanner or Camera > acquire image.
6. The scanner programme will now open up.
7. Click on preview.
8. Select area to be scanned by drawing a square using the square select tool.
9. Click on scan.
10. The scanned image (unit) will appear on your blank page.
11. Change the size of the unit if required by moving the unit to the top left hand corner of the whole page then.
12. Use the bottom right hand tab, push it up until you find the size you want.

Stage 3

13. Click on edit > copy.
14. Click on edit > paste.
15. Move the copied unit along side the original unit and using the second last purple and grey triangle on the end of the lower tool bar (flip horizontal) make a mirror image (symmetrical) repeat.
16. Click on edit > paste.
17. Line up the copied unit below the original unit and using the last purple and grey triangle on the end of the lower tool bar (flip vertical) make a mirror image repeat.
18. Click on edit > paste.
19. Line up the fourth copied unit to make a square and using both of the last 2 purple and grey triangles on the end of the tool bar (flip horizontal and vertical) make a mirror image repeat.

Stage 4

20. Now go to edit >select all.
21. Now click on the little grey box at the bottom left hand corner of your design to group your objects.
22. Click on edit > copy.
23. Click on edit > paste.
24. You have now grouped 4 units together and can repeat the whole thing – well done!