

Mitchell's Quilt



Mitchell's grandmother made him this beautiful quilt to cover his bed. Mitchell was fascinated by the colourful geometric designs and patterns that decorated the quilt.

Grandma explained to Mitchell that quilting is a method of sewing two layers of cloth together, with wadding in between. The sewing traps air in the material, making it very warm for bedding. The first stage in making a quilt involves making square blocks with geometric patterns. The blocks are then put together to make a large rectangular quilt with an attractive design.

The art of quilting is very old. Hundreds of years ago quilting was used to make clothes. Soldiers wore quilted vests underneath their armour and, in later times, women wore quilted petticoats for warmth during cold European winters.

DO IT

- 1** How many square blocks can you identify in the photograph above?
- 2** List all of the colours that you can see on the quilt.
- 3** List all of the geometric shapes that you can see.
- 4** What do you think is unusual about each of the square blocks on the quilt?
- 5** How many of the square blocks have line symmetry?
- 6** How many of the square blocks have rotational symmetry?

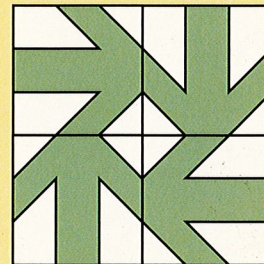
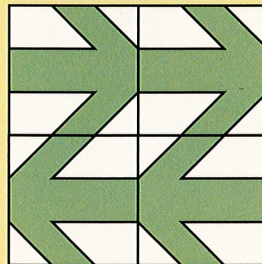
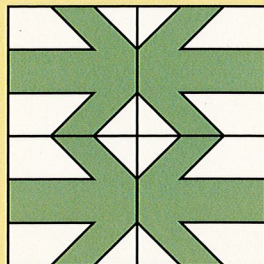
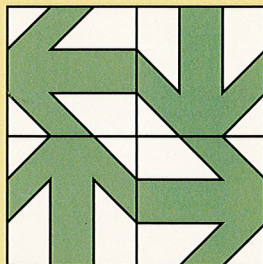
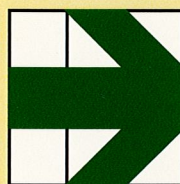
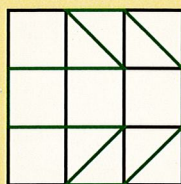
Mitchell's Quilt

WORKING MATHEMATICALLY

- 1 Collect some paper squares of different colours.
- 2 Cut each paper square into four smaller squares.
- 3 Take some of the small paper squares and cut them diagonally in half to form two triangles.
- 4 Take some more of the small paper squares and cut them diagonally to make four smaller triangles.
- 5 Select your favourite quilt design from the photograph on the front of the card and use your squares and rectangles to copy it.
- 6 Use the squares and triangles to make a quilt block of your own.
- 7 Glue your shapes to a sheet of black paper and display your design.

INVESTIGATION

- 1 Use a 3 x 3 grid (like the one below) to create a design of your own. Colour it in.



- 2 Make three more copies of your design.
- 3 Flip, slide or turn your designs to make geometric patterns like the examples above. Investigate different arrangements until you find your favourite one.
- 4 Glue your shapes to a sheet of black paper and display your design.

RESEARCH

- Find out more about how quilts are made.
- Invite a quilt maker to give a talk about quilting to the class.
- Further investigate the history of quilting and how it was used by different cultures.
- Can you find any link between quilting and recycling?
- What kinds of materials are used for quilting today?