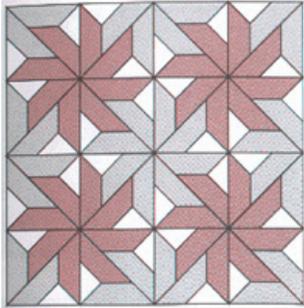


Tessellations

Activity 2 - Printing With Squares

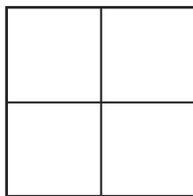


Have you ever noticed how the tiles are arranged in ceramic floors, on the walls of a bathroom, or how wallpaper and your clothing often have repeating patterns? Regular tessellations are made up from congruent regular polygons. The patterns in a regular tessellation can be formed using only one type of regular polygon. For example, there can be a tessellation made only by repeating the same equilateral triangle over and over in every direction.

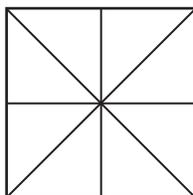
For this activity you will need: white paper, corrugated cardboard, a pencil, a ruler, one square, scissors, white glue, two or three paint brushes, two or three different paint colours and newsprint to print your design onto.

Instructions:

1. Draw a square on the white paper 7cm wide and 7cm tall.
2. Cut out the square.
3. Fold the square in half, and then again in half to make four small squares.



4. Fold the square diagonally in half, and then again diagonally in half to make eight small triangles.

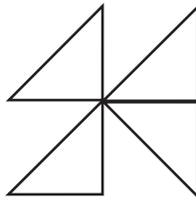


Can you believe THIS is math?

Tessellations

Activity 2 - Printing With Squares - *continued*

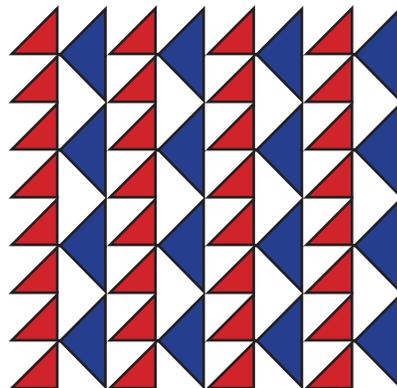
5. Cut along the fold lines to make eight triangles.
6. Discard four of the triangles.
7. Make a pattern using the remaining triangles, for example:



8. Make two 7cm squares out of the corrugated cardboard.
9. Trace the pattern you created onto it, then cut it out.
10. Glue the pieces you just cut out onto the second piece of cardboard.
11. Paint the rased pieces in two or three different colours. This is your stamp. For example:



12. Repeat the previous step to tessellate your pattern across the newsprint and make a repeating pattern (Hint: you can rotate the stamp one quarter turn at a time to make different designs).



Can you believe THIS is math?