

## **Tessellations**

Tessellations are geometric shapes that fit together so there are no gaps. Maurits Escher, a Dutch artist, used this theory to create some amazing, eye deceiving, beautiful works.

Grandkids find the curiosity of these interlocking shapes very appealing, so I've designed this project for grandparents like me, to do with grandkids this holidays. (it's an excellent activity for that picnic afternoon outdoors).

I've done a 'cat' picture, inspired from several sites on the net, that kids can create, draw and colour in.

I have attached photos as references to the steps.

You will need:

- Heavy paper or light cardboard
- Pencil
- Scissors
- Sticky tape
- A4 sheet of paper
- Coloured text'as or pencils.

### **Step 1.**

Using the heavy paper or light cardboard, draw a square, (not too big as the end shape gets much bigger). Mine was 4 x 4 cms, but was tricky to cut out.

Cut this square out.

### **Step 2.**

At the bottom edge of your square draw a line (from exactly one corner to exactly the other corner) to make the cats ears and top of head.

Look at Photo 1.

On the left hand border draw (again from corner to corner), the cats rear end and curling tail. (keep a gap between the 'tail' and the 'ears' so you can cut them out).

Look at Photo. 1.

### **Step 3.**

Cut out the cats 'ear shape' and move this piece directly above the top edge of your square. Line it up carefully, and sticky tape it together.

Look at Photos 2, and 3.

Cut out the rear end and tail shape, move it across the square to the right hand border, line it up and tape together.

Photo 4.

You have now made the stencil shape to start working with.

#### **Step 4.**

Place this shape on the bottom edge of the piece of A4 paper, and carefully draw all around it with your pencil. Then move the stencil piece along, fit it in to the previous shape, and draw around it again.

Look at Photo 5.

Repeat this as often as you like. It will look wonderful with the page filled!

Look at photos 6 and 7.

#### **Step 5.**

Personalise your cats with expressive faces.

Look at photos 8 and 9.

#### **Step 6.**

Colour them in. This will work best with two alternating colour schemes, or one coloured cat and one white cat!

Look at photo 10

I hope that you have fun.

If you or your grandkids make this, or find another tessellation to explore, take a photo and send it to Janelle. It would be great to get some images! 🐱

**Photographs**

Photo 1

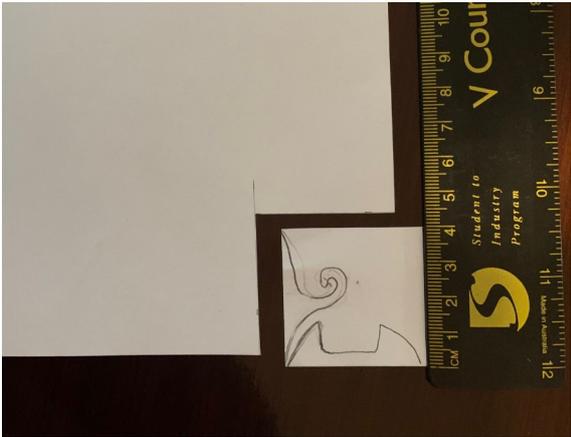


Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8

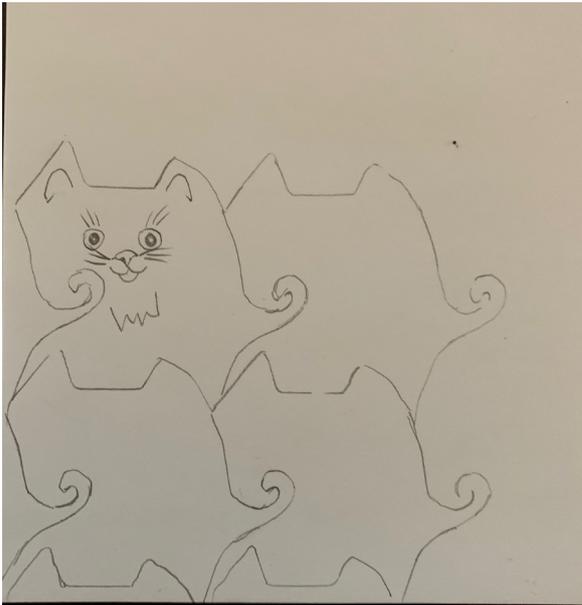


Photo 9



Photo 10

