



Transcript of video Let's make a pattern!

[http://topdrawer.aamt.edu.au/Patterns/A g bXfgLbXlg# Tessellations/Growing-patterns-can-tessellate](http://topdrawer.aamt.edu.au/Patterns/A%20g%20b%20X%20f%20g%20L%20b%20l%20g%20Tessellations/Growing-patterns-can-tessellate)

Let's make a pattern.

Start with an equilateral triangle.

(An equilateral triangle in the middle)

Then put a square on each side.

(Three squares put on each side of triangle)

Now fill in the gaps with triangles.

(Gaps filled with triangles)

Look at the pattern around the middle triangle.

(Focusing on the middle triangle)

It goes square, triangle, triangle, then square, triangle, triangle, and square, triangle, triangle again.

(Showing each group of square, triangle, triangle sequencing around the middle triangle)

There are three lots of square, triangle, triangle.

(Focusing on the three groups of shapes)

Why are there three?

Because there are three sides to the triangle.

(Showing all three groups of square, triangle, triangle on each side of the triangle)

One, two, three.

How many pieces are there in this ring?

(Counting number of pieces in the ring)

One two three – three, four five six – six, seven, eight, nine – nine.

(Counting number of pieces in the ring)

In this ring, there are nine pieces, three lots of three.



(Counting total number of pieces in the ring)

Now, let's try another ring around this pattern.

(Making another ring around the pattern)

Put squares on the sides of the triangles.

(Squares being put on the side of the triangles)

Then triangles on the squares.

(Placing triangles on squares)

Now fill in the gaps with triangles again.

(Gaps filled with triangles)

What is the pattern in this ring?

(Looking at the pattern of the ring)

There are three lots of square, triangle, triangle, triangle, square, triangle.

(Looking at sequencing around the ring)

How many pieces are there in this ring?

(Counting total pieces in the ring)

Six, twelve, eighteen.

(Counting total pieces in the ring)

There are eighteen pieces, three lots of six.

(Counting total pieces in the ring)

There were nine pieces in the first ring.

(Counting number of pieces in first ring)

And eighteen pieces in the second ring.

(Counting number of pieces in second ring)

How many pieces will there be in the next ring?

Have a think about that.

Let's look at something else.

Look at how the pieces fit together at each point in the pattern.

(Pieces being fitted together in the pattern)

Everywhere you look, two squares and three triangles fit around a point.

(Sequence of pieces being fitted together around a point in the pattern)

Can you find any more patterns?