Year 6 Maths Activity Mat: 2D Shapes

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Section 1: Circles

Draw a circle with a compass. Measure the diameter and circumference. Divide the circumference by the diameter. Your answer should be close to 3.14

Measure the circumference using string, cotton or a strip of paper.

Section 2: Squares

The side of a square is n.

Write algebraic expressions for the area and perimeter of a square.

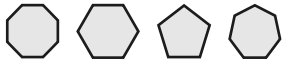
n

Section 3: Triangles

An isosceles triangle has one side 4 cm and one side 8 cm. What could the length of the other side be?

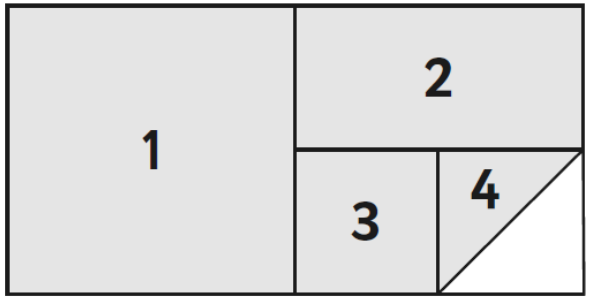
Section 4: Polygons

Which regular polygons tessellate?



Section 5: Rectangles

Calculate the fraction of the whole rectangle of each numbered part of this rectangle.



1 =

2 =

3 =

4 =

Section 6: Logo

Use a Turtle Logo programme to draw squares and rectangles. Use the commands **repeat**, **fd** *number* and **rt** *number*.

Which regular polygons can you draw?

There are various online Turtle Logo programmes – search "Turtle Logo".

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Draw a circle with a compass. Measure the diameter and circumference. Divide the circumference by the diameter. Your answer should be close to 3.14

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Section 2: Squares

The side of a square is n.

Write algebraic expressions for the area and perimeter of a square.

Area = n^2 **Perimeter = 4n**

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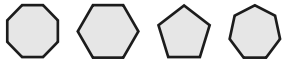
4cm or 8cm

Section 4: Polygons

Which regular polygons tessellate?



regular hexagons

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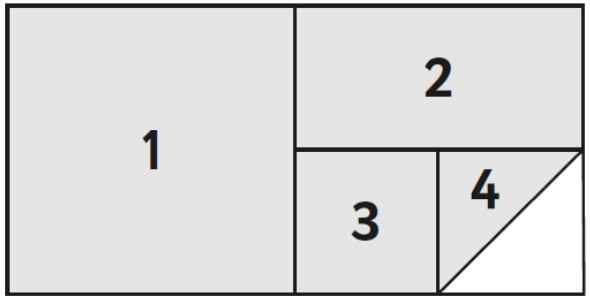

1 = $\frac{1}{2}$ **3 =** $\frac{1}{8}$

2 = $\frac{1}{4}$ **4 =** $\frac{1}{16}$

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examples: square – repeat 4[fd 100 rt 90]
hexagon – repeat 6[fd 100 rt 60]