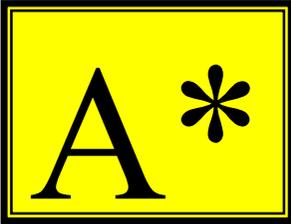
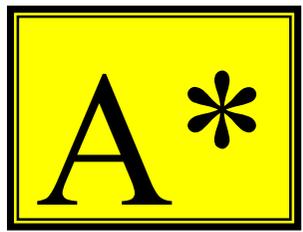


# Geometry

Moving from A to A\*



Solve 3-D problems using Pythagoras' theorem and trigonometric ratios (A\*)

Solve more complex 2-D problems using Pythagoras' theorem & trigonometry (A)

Solve problems using area and volume scale factors (A)

Solve related problems involving, for example, capacity, using area and volume scale factors (A\*)

Solve practical problems using similar triangles (A)

Prove that two triangles are congruent (A)

Find angles in circles using the alternate segment theorem (A)

Use circle theorems to prove geometrical results (A\*)

Solve problems using addition & subtraction of vectors (A)

Solve more complex geometrical problems using vectors (A\*)

Use the sine and cosine rules to calculate missing angles or sides in non right-angles triangles (A)

Find the area of a triangle using the formula  $\text{Area} = \frac{1}{2} ab \sin C$  (A)

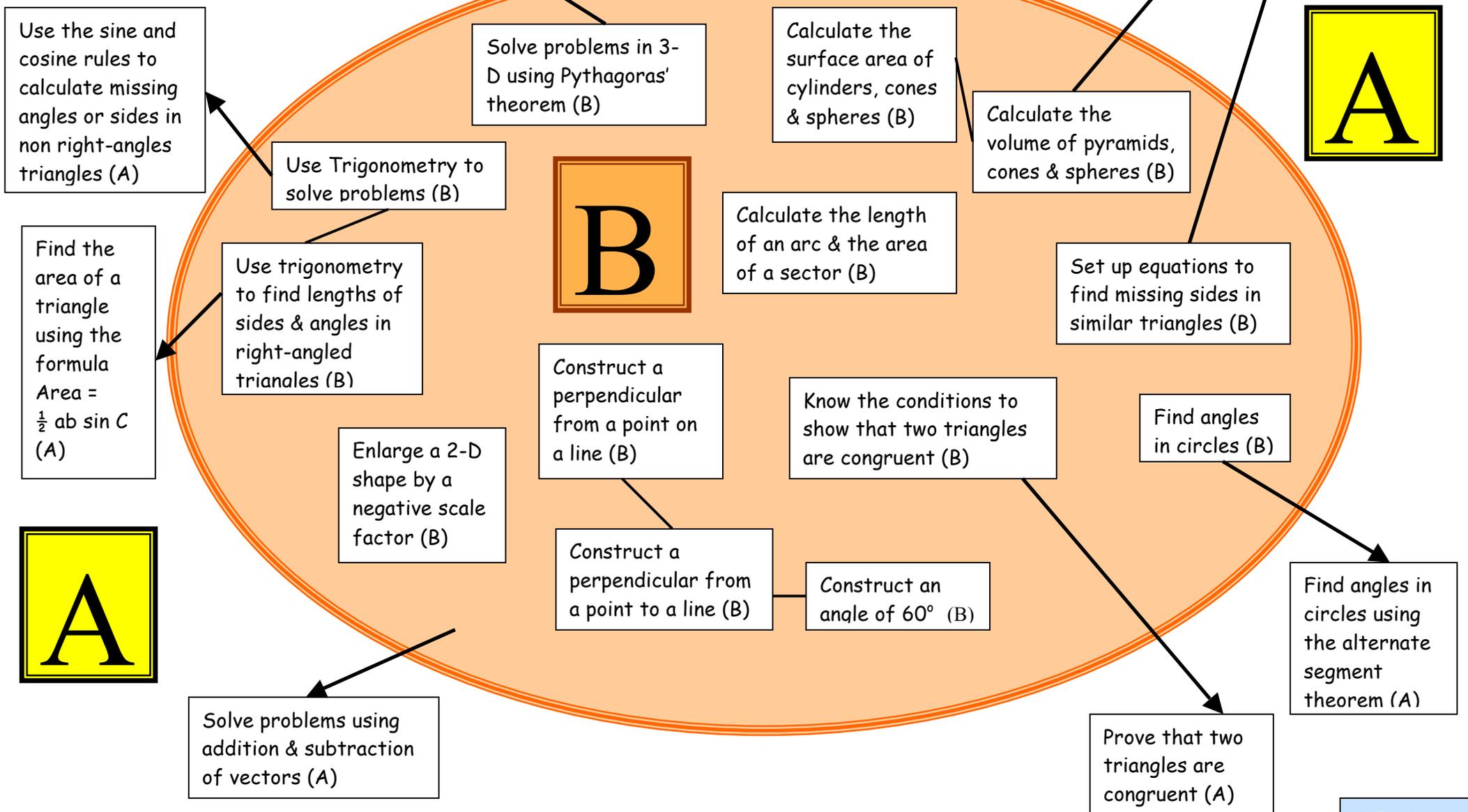
Use the sine & cosine rules to solve more complex problems involving non right-angled triangles (A\*)

Find two angles between  $0^\circ$  and  $360^\circ$  for any given value of a trigonometric ratio (+ or -) (A\*)

Solve simple equations where the trigonometric ratio is the subject (A\*)

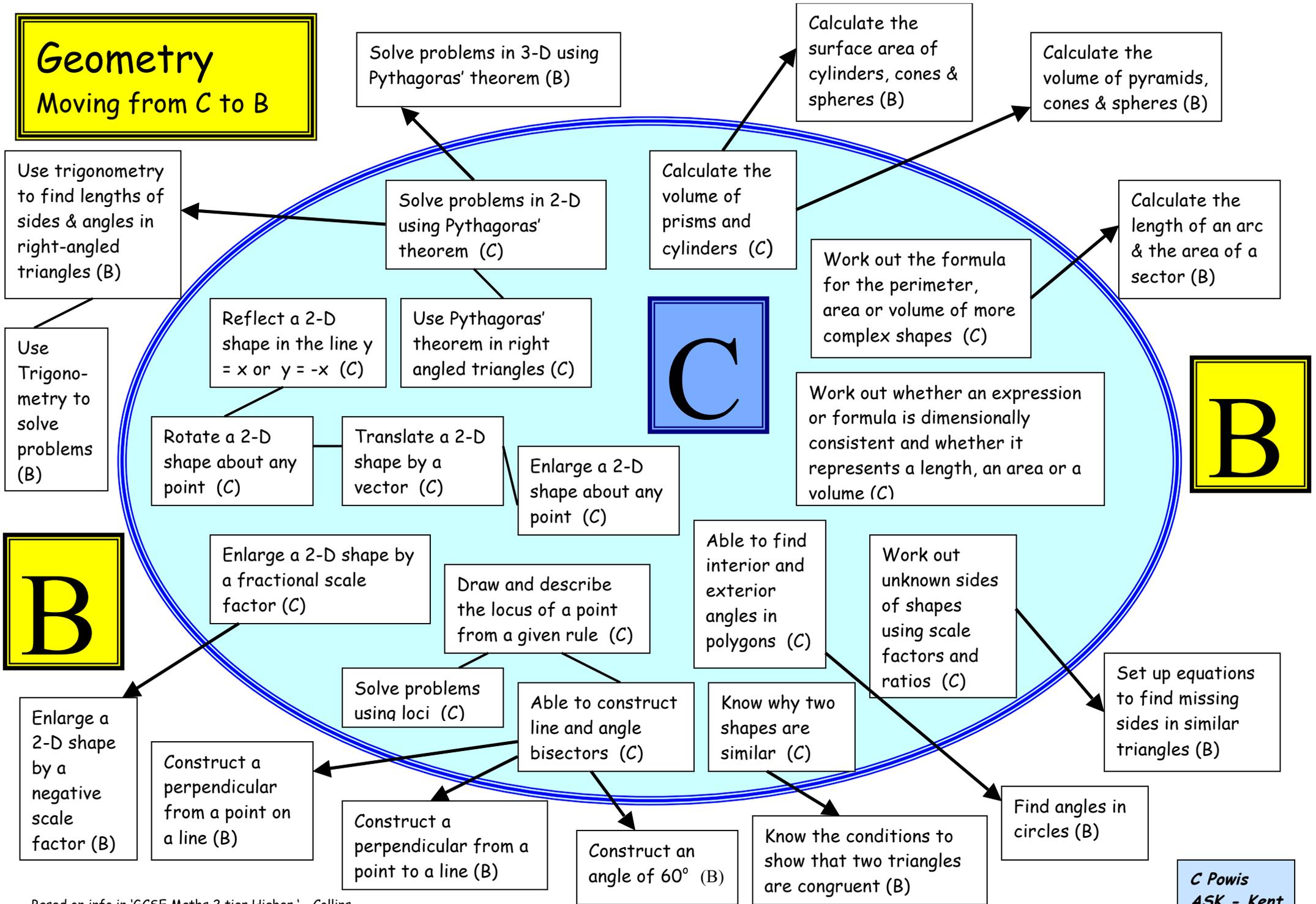
# Geometry

## Moving from B to A



# Geometry

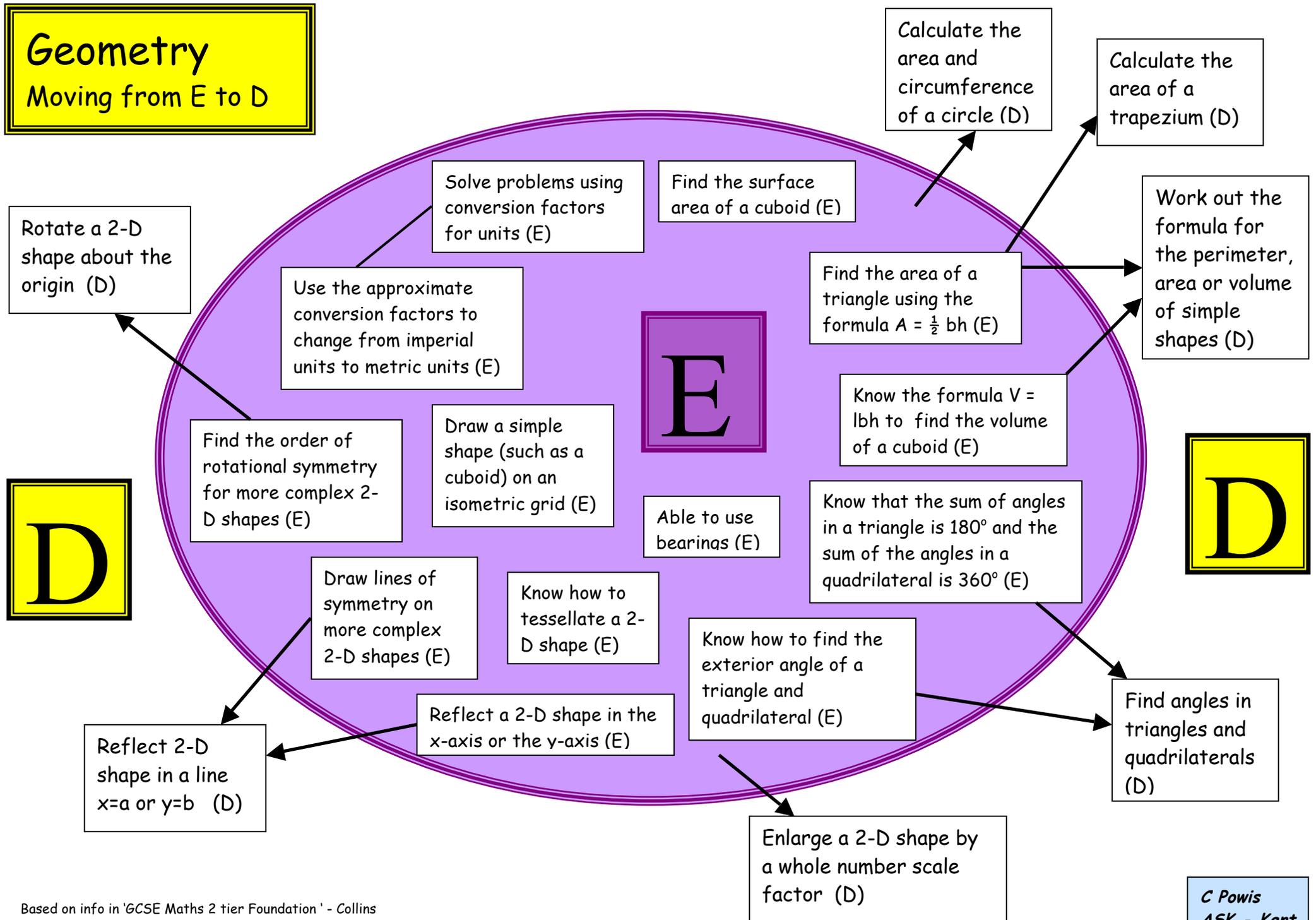
## Moving from C to B





# Geometry

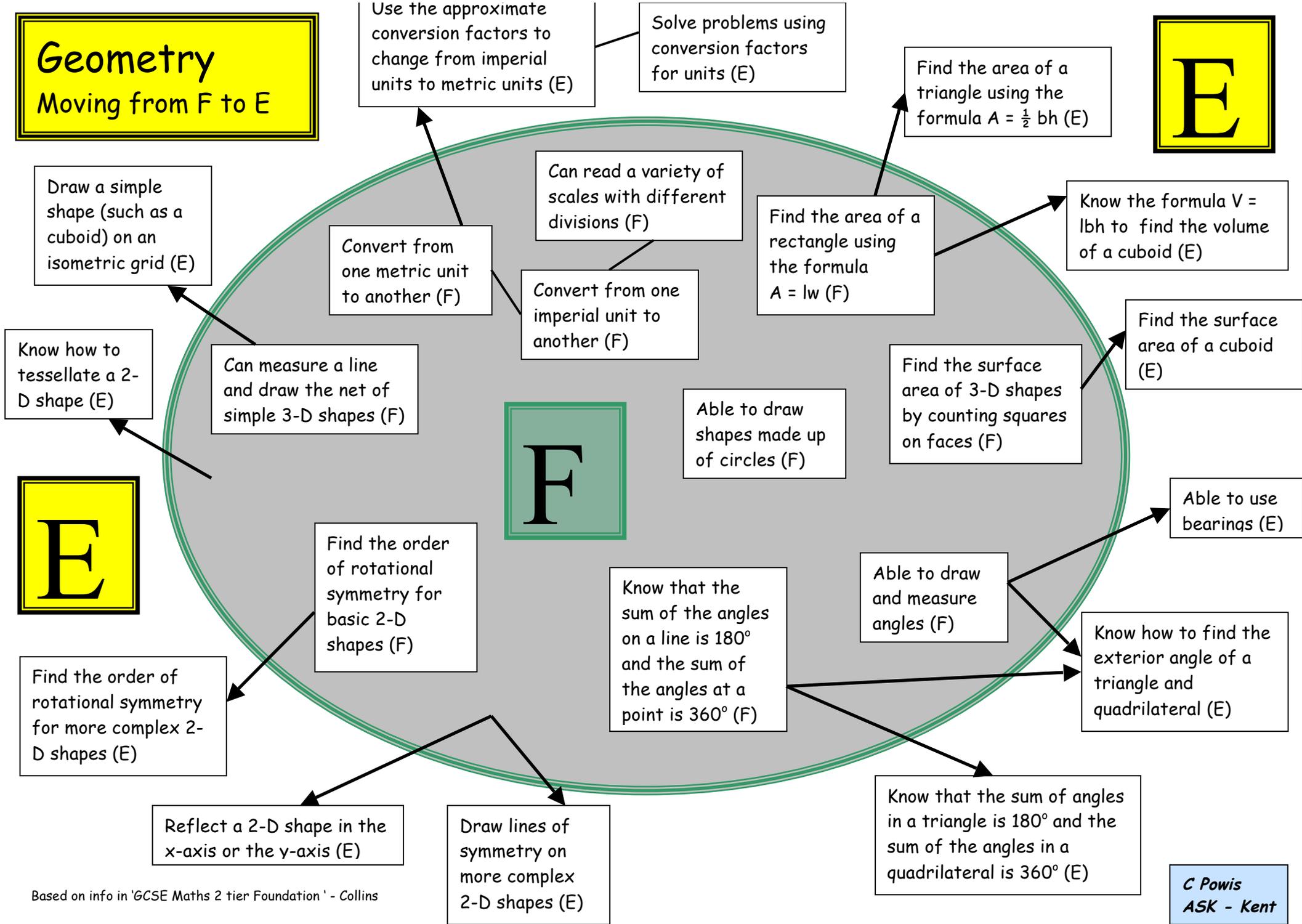
## Moving from E to D



# Geometry

## Moving from F to E

**E**



Based on info in 'GCSE Maths 2 tier Foundation' - Collins

# Geometry

## Moving from G to F

**F**

**G**

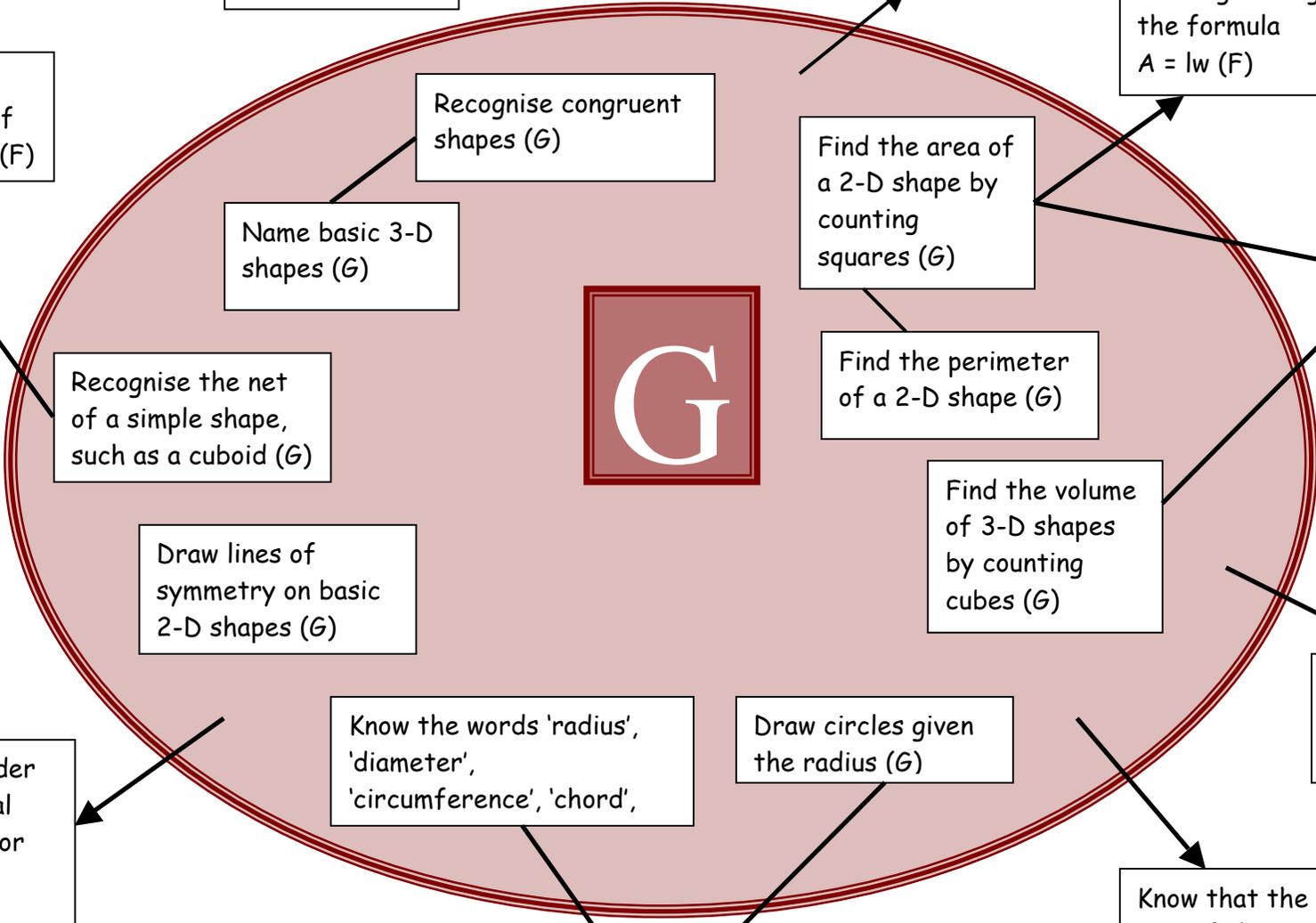
Convert from one metric unit to another (F)

Convert from one imperial unit to another (F)

Can read a variety of scales with different divisions (F)

Find the area of a rectangle using the formula  $A = lw$  (F)

Can measure a line and draw the net of simple 3-D shapes (F)



**F**

Recognise the net of a simple shape, such as a cuboid (G)

Name basic 3-D shapes (G)

Recognise congruent shapes (G)

Find the area of a 2-D shape by counting squares (G)

Find the perimeter of a 2-D shape (G)

Find the volume of 3-D shapes by counting cubes (G)

Find the surface area of 3-D shapes by counting squares on faces (F)

Able to draw and measure angles (F)

Know that the sum of the angles on a line is  $180^\circ$  and the sum of the angles at a point is  $360^\circ$  (F)

Able to draw shapes made up of circles (F)

Know the words 'radius', 'diameter', 'circumference', 'chord',

Draw circles given the radius (G)

Draw lines of symmetry on basic 2-D shapes (G)

Find the order of rotational symmetry for basic 2-D shapes (F)