## 2D Shapes

## Activity 1

Can you label the parts of a circle? Then, answer the questions.

## Radius Diameter Circumference



A circle has a radius of 5 cm . What is the diameter? $\qquad$
The diameter of a circle is 3.2 m . What is the radius?

## Activity 2

Find the missing angles.


## Activity 3

The area of a triangle can be calculated using the following formula:

(1) Area: $\qquad$ $\mathrm{cm}^{2}$


14 cm
(2) Area: $\mathrm{cm}^{2}$

You can prove the formula works for right-angled triangles by drawing a triangle within a rectangle.

Area of rectangle $=a b$
Area of triangle $=1 / 2 a b$


Can you prove that the formula works for all triangles, including isosceles and scalene triangles? You could either prove this algebraically or using pictures. You may wish to cut out bits of paper to prove it!

Hint! You might find it useful to break the triangle up


