Chapter 10

Perimeter - the distance around an object (add all the sides)

Area - the number of square unit needed to cover a region. The amount of space inside a shape.

Area of squares and rectangles

Length x width. (L x W Your answer is always written in units squared ex. cm^2)

Area of Parallelograms

Base x height (length x width)

Area of Trapezoids – $(Base_1 + Base_2) \times \frac{1}{2}$ height

Area of Triangles

1/2 (base x height) ex.

square root - one of the two equal factors of a number

radical sign - the symbol for square root ($\sqrt{\ }$)

perfect square - the square of a whole number. Example 36 is a perfect square because 36 = 6 x 6

Pythagorean theorem - $a^2 + b^2 = c^2$

this is used to find the length of a side of a right triangle.

hypotenuse - the side opposite the right angle

legs - the two sides that form the right angle

Composite figure - a figure made up of geometric shapes.

Circles - a closed plane figure made up of points

circumference - the distance around the circle. $C = \pi d$

area - πr^2

Pi = 3.14 or 22/7

Irrational number - a number that does not terminate or repeat.

Face – a flat surface of a 3D figure

Edge – where the two faces meet

Net – a flat diagram of a polyhedron

Polyhedron – a 3D figure whose faces are all polygons

Vertex – the point where 3 or more edges meet

Base – the side of a polygon

Prism – has two parallel, congruent bases.

Pyramid – has one base

Cylinder – has 2 parallel, congruent bases which are circles

Cone – has one base

Sphere – the surface is made up of points which are the same distance from a given point

Volume – how many cubic units a 3D figure holds

Formulas : Rectangular prism
Triangular prism
Cylinder
Rectangular pyramid
Triangular pyramid
Cone

Surface area – the combined area of all the surfaces.

Formulas –

Prisms
Square pyramid
Triangular pyramid
Cone