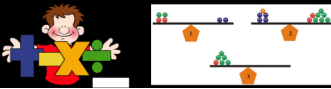





Common Language and Methodology for Teaching Numeracy 3-18
St. Ninian's High School


Decimal Numbers

When multiplying by a single digit the decimal point always stays in line.

When dividing by a single digit the decimal point always stays in line.


Decimal Numbers





Counting Method



Hrs	Mins
	20
2	
+	10
2	30




Units of Length Converting Measurements






Convert 34cm to mm
 $34 \times 10 = 340 \text{ mm}$

Convert 50cm to m
 $50 \div 100 = 0.5 \text{ m}$

Diagram showing conversions between Kilometres (km), metres (m), centimetres (cm), and millimetres (mm) with multiplication and division factors.




Perimeter






Calculate the perimeter of the rectangle below.


Perimeter = $6 + 3 + 6 + 3 = 18 \text{ cm}$




Area of a Rectangle





Find the area of the rectangle.



Area = Length \times Breadth
 $A = L \times B$
 $A = 9 \times 2$
 $A = 18 \text{ cm}^2$



Naming Angles





Type of angle is acute
 Name of angle is $\angle ABC$


Type of angle is obtuse
 Name of angle is $\angle ZYX$

MIDDLE LETTER IS ALWAYS WHERE THE ANGLE IS

ALWAYS 3 CAPITAL LETTERS



Type of Angles




Acute less than 90°

Right - Angle exactly 90°


Obtuse Between $90^\circ - 180^\circ$

Straight Line Angle exactly 180°

reflex over 180° less than 360°



Find Missing Angle



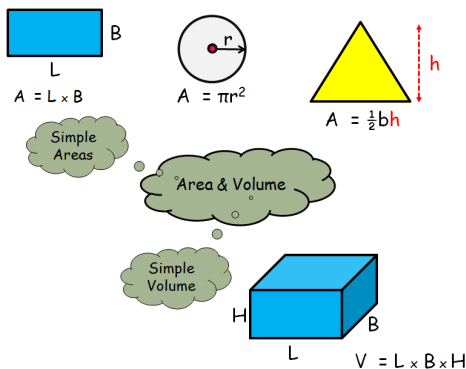
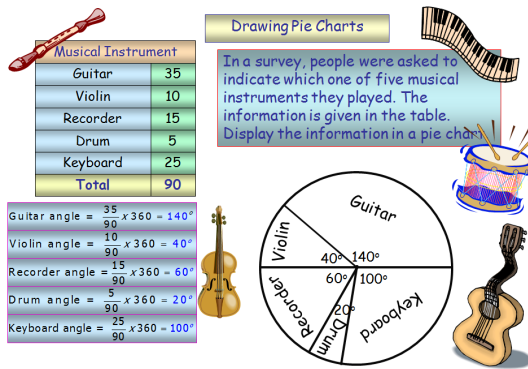
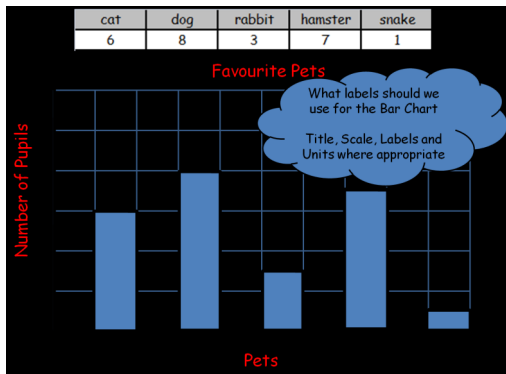
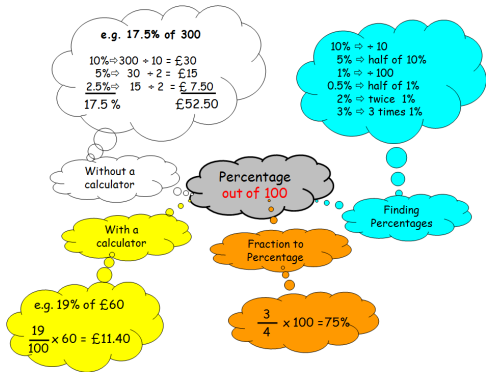
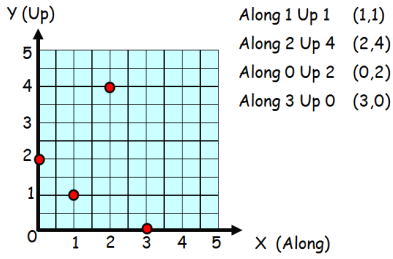
Two angles making a straight line add to 180° (Supplementary angles)

Angles opposite each other at a cross are equal.

Angles round a point always add up to 360°



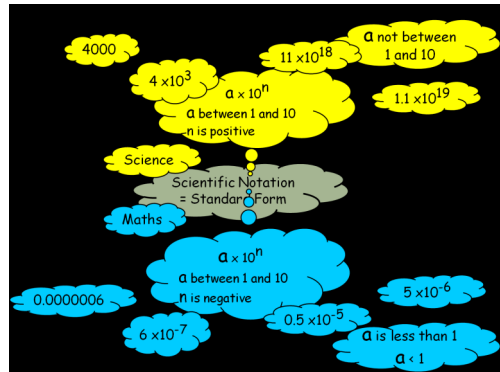
Coordinates



Simple Percentages



100%	50%	$33\frac{1}{3}\%$	25%	20%	10%	5%	1%
1	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{10}$	$\frac{1}{20}$	$\frac{1}{100}$



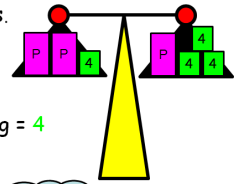
Balancing Method



Lets solve it using maths.

Let P be the weigh of a big bag.

We know that a small bag = 4



$$2P + 4 = P + 12$$

Subtract 4 from each side: $2P = P + 8$

Subtract P from each side: $P = 8$



Ratio



Bill and Ben share a raffle win of £400 in the ratio 3:5. How much does each get ?

Step 1: Since the ratio is 3:5, there are :

$$3+5 = 8 \text{ shares}$$

Step 2: Each share is worth : $\frac{50}{8}400$

Step 3: Bill gets $3 \times 50 = \pounds 150$

Ben gets $5 \times 50 = \pounds 250$

Check!

$$150 + 250 = 400$$

Face Edges and Vertices

