

Year 6

Knowledge organisers- SATS revision - Maths

Fractions

Numerator → $\frac{2}{5}$

Denominator → 5

Finding fractions of amounts

$\frac{2}{5}$ of 35

First, divide by the denominator: $35 \div 5 = 7$

Then, multiply the answer by the numerator 7

$\times \frac{2}{5} 7 = 14$

So, $\frac{2}{5}$ of 35 = 14

Adding and subtracting fractions

To add and subtract fractions they must have a common denominator. If you have to, find equivalent fractions to get a common denominator.

$$\frac{1}{2} + \frac{1}{3} = ?$$

$$\frac{1 \times 3}{2 \times 3} = \frac{3}{6} \quad \frac{1 \times 2}{3 \times 2} = \frac{2}{6}$$

$$\frac{3}{6} + \frac{2}{6} = \frac{5}{6}$$

Multiplying fractions

Multiply the numerators: $\frac{2}{5} \times \frac{3}{4} = \frac{6}{20}$

Multiply the denominators: $\frac{2}{5} \times \frac{3}{4} = \frac{6}{20}$

Simplify the fraction if necessary: $\frac{6}{20} = \frac{3}{10}$

To multiply fractions you need to multiply the numerators, then the denominators. Simplify if you can.

Dividing fractions

$$\frac{2}{3} \div 2 = \frac{2}{6} \quad \frac{1}{3}$$

Multiply the denominator by the whole number. Simplify if needs be.

Percentages - Means 'out of 100'

To find 50% of a number \div by 2

To find 10% of a number \div by 10

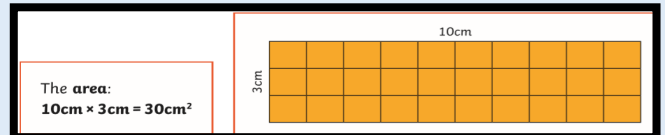
To find 1% of a number \div by 100

Equivalents

Decimal	Percentage	Fraction
0.5	50%	$\frac{1}{2}$
0.25	25%	$\frac{1}{4}$
0.75	75%	$\frac{3}{4}$
0.2	20%	$\frac{1}{5}$
0.1	10%	$\frac{1}{10}$
0.33	33.3%	$\frac{1}{3}$

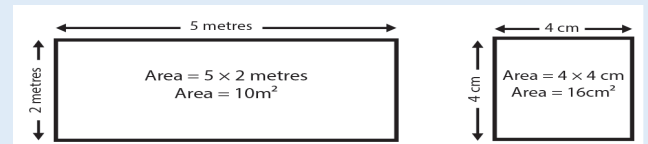
Perimeter

The perimeter of a shape is the distance around it. To find the perimeter of a straight sided shape just add up all of the shapes sides.



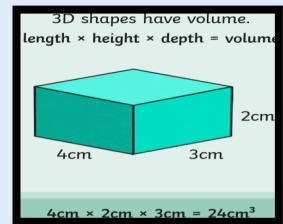
Area

The area of a 2d shape is the space taken, or its surface. You multiply the length by its width.



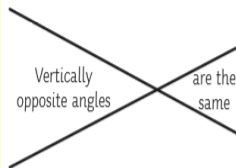
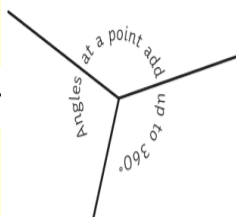
Volume

Length x height x Depth = volume.



Angles

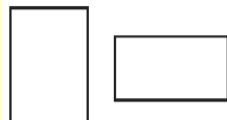
Angles on a straight line add up to 180°



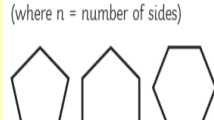
The interior angles in any triangle add to 180° degrees



The interior angles in any quadrilateral add to 360°



The interior angles in any polygon add to $(n-2) \times 180^\circ$ (where n = number of sides)



Converting measures

1000g = 1kg so 4.6kg = $4.6 \times 1000 = 4600g$
And 450g = $450 \div 1000 = 0.45kg$

1000ml = 1L so 3L = $3 \times 1000 = 3000ml$
And 750ml = $750 \div 1000 = 0.75L$

10mm = 1cm 100cm = 1m 1000m = 1km
1 mile = 1.6km

Year 6

Knowledge organisers- SATS revision - SPaG

Sentence Types

Command – when you are telling someone to do something.

- Give the present to your friend.

Exclamation – uses exclamation mark to show sentence is saying something surprising or with force.

- That dog is dirty!

Statement – simply tells the reader something.

- I have many friends.

Question – uses a question mark to ask a question.

- How many friends do you have?

Word classes

Adjective – describes a noun. – a tiny dog.

Verb – a doing or action word. – I play games. I am studying.

Subject – the thing or person who is carrying out an action
– Kaden spoke to Sam.

Object – who the action is done to or for. – Kaden spoke to Sam.

Noun – names, person, place or thing – hand, London, family, love

Pronoun – takes the place of a noun – Bailey went for a walk. He enjoyed seeing the flowers.

Adverbs – give additional information about the time, place or manner of the verb or sentence. – Stephanie slowly walked down the hall.

Adverbial phrases – when more than one word does the adverb's job. – The hurricane struck the island whilst we were asleep.

Determiners – words that introduce the noun. – She took a small suitcase.

Prepositions – where or when something is in relation to something else. – The dog was under the table.

Punctuation

, ! ? " ' () – brackets – dash ; semicolon : colon

Possessive Apostrophes – used to show when one thing belongs to another.

- The bone that belongs to the dog – The dog's bone.
- The phone that belongs to Millie – Millie's phone.

Omission/Contraction Apostrophes – show that you have left out some letters in a word.

- You have – you've

Present Progressive (is/are ing word) – indicates continuing action, something that is happening now. – She is reading the book.

Past Progressive (was were ing word) – indicates continuing action, something that was happening. – He was reading the book when I arrived.

Present Perfect – uses have/has – I have read 'The Three Little Pigs'

Past Perfect – uses had – He had left the room.

Active Sentences – sentence where the subject does the action. – The boy hugged the teddy bear.

Passive Sentences – sentence where the subject has the action done to it. – The teddy bear was hugged by the boy.

Antonym – words that mean the opposite.

- dark and light

Synonym – words that mean the same.

- dirty and unclean

Homophones – words that sound the same, but don't mean the same thing.

- to, too, two

Co-ordinating Conjunctions – a conjunction placed between words, phrases or clauses

- He likes dogs and she likes cats

Subordinating Conjunctions – a conjunction that introduces a subordinate clause.

- I do not like dogs because they are loud.

FANBOYS (these are the only co-ordinating conjunctions) – for, and, nor, but, or, yet, so.