



Year 4 - Maths Cheat Sheet

Reference

A quick reference for the methods and terms that come up in Year 4 maths - not every parent used these exact methods at school, so this is here as a refresher for column addition, subtraction, short multiplication and division, plus the other key terms your child will meet this year.

The Four Operations

Addition (Column Method)

Line up the numbers by place value - ones under ones, tens under tens. Add each column from the right. If a column totals 10 or more, carry the extra ten into the next column.

$$\begin{array}{r} 156 \\ + 278 \\ \hline 434 \end{array}$$

Subtraction (Column Method)

Line up the numbers by place value. Subtract each column from the right. If the top digit is smaller than the bottom one, borrow 10 from the column to its left.

$$\begin{array}{r} 623 \\ - 348 \\ \hline 275 \end{array}$$

Multiplication (Short Multiplication)

Multiply the ones digit of the top number by the bottom number first, carrying any tens into the next column, then move left one digit at a time.

$$\begin{array}{r} 47 \\ \times 6 \\ \hline 282 \end{array}$$

Division (Short / "Bus Stop")

Divide the divisor into each digit. Write the answer above, carry any remainder to the next digit, and repeat until every digit is used.

$$\begin{array}{l} 77 \div 5: \\ 5 \text{ into } 7 = 1 \text{ r}2 \\ \text{carry } 2, \text{ makes } 27 \\ 5 \text{ into } 27 = 5 \text{ r}2 \\ \text{Answer: } 15 \text{ r } 2 \end{array}$$

Times Tables Shortcuts

×10

add a zero on the end.

$$6 \times 10 = 60$$

×5

find half the number, then ×10.

$$8 \times 5: \text{half of } 8 \text{ is } 4, \text{ so } 40$$

×9

multiply by 10, then subtract the number.

$$7 \times 9: 70 - 7 = 63$$

×4

double the number, then double again.

$$6 \times 4: 6 \times 2 = 12, 12 \times 2 = 24$$

Fractions & Decimals

Fraction

equal parts of a whole - numerator (top) over denominator (bottom).

$3/4$ means 3 parts out of 4

Equivalent fractions

multiply or divide top and bottom by the same number.

$1/2 = 2/4 = 4/8$

Decimal tenths

one tenth (0.1) is the same as 1/10.

$0.5 = 5/10 = 1/2$

Decimal hundredths

one hundredth (0.01) is the same as 1/100.

$0.25 = 25/100 = 1/4$

Measurement & Time Conversions**Length**

1 metre = 100cm; 1 kilometre = 1,000m.

$250cm = 2m\ 50cm$

Mass & capacity

1kg = 1,000g; 1 litre = 1,000ml.

$1,500g = 1kg\ 500g$

Perimeter

add up the length of every side.

Rectangle $5cm \times 3cm$: $5+3+5+3=16cm$

Area (rectangle)

length $\times$ width.

Rectangle $5cm \times 3cm$: $5 \times 3 = 15cm^2$

Time

1 hour = 60 minutes; 1 minute = 60 seconds.

$90\ minutes = 1\ hour\ 30\ minutes$

Shape & Data Terms**Acute angle**

an angle smaller than a right angle (less than 90°).

Right angle

exactly a quarter turn (90°).

Obtuse angle

bigger than a right angle, smaller than a straight line (90° - 180°).