

Number Facts: Year 5

Multiplication and division

Pupils should be taught to:

- recall prime numbers up to 19
- multiply and divide numbers mentally drawing upon known facts
- multiply and divide whole numbers and those involving decimals by 10, 100, 1000
- recognise and use square numbers

Geometry:

Pupils should be taught to identify:

- angles at a point and one whole turn (total 360°)
- angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°)
- other multiples of 90°

Fractions

Pupils should be taught to:

- read and write decimal numbers as fractions (e.g. $0.71 = \frac{71}{100}$)
- recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- recognise the per cent symbol (%) and understand that per cent relates to “number of parts per hundred”, and write percentages as a fraction with denominator hundred, and as a decimal fraction

Measurement

Pupils should be taught to:

- convert between different units of metric measure (e.g. kilometre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- understand and use equivalences between metric units and common imperial units such as inches, pounds and pints

Geometry

- ✓ To know complements to 360.
- ✓ Know complements to 180
- ✓ Recognise multiples of 90.
- ✓ Know that the angles in a triangle total 180 degrees
- ✓ Know that the angles in a quadrilateral total 360 degrees
- ✓ Know that the angles of a straight line total 180 degrees
- ✓ $360 \div 4 = 90$ 1/4 of 360 = 90
- ✓ $360 \div 2 = 180$ 1/2 of 360 = 180
- ✓ 3/4 of 360 = 270

Always ensure that appropriate models and images are used to support children's conceptual understanding.

Fractions

- $1 \div 100 = \frac{1}{100} = 0.01$ $2 \div 100 = \frac{2}{100} = 0.02$
- $3 \div 100 = \frac{3}{100} = 0.03$ $4 \div 100 = \frac{4}{100} = 0.04$
- $5 \div 100 = \frac{5}{100} = 0.05$ $6 \div 100 = \frac{6}{100} = 0.06$
- $7 \div 100 = \frac{7}{100} = 0.07$ $8 \div 100 = \frac{8}{100} = 0.08$
- $9 \div 100 = \frac{9}{100} = 0.09$ $10 \div 100 = \frac{10}{100} = \frac{1}{10} = 0.1$
- $10\% = 0.1 = \frac{1}{10} = \frac{10}{100} = \frac{100}{1000}$
- $50\% = 0.5 = \frac{1}{2} = \frac{5}{10} = \frac{50}{100}$
- $25\% = 0.25 = \frac{1}{4} = \frac{4}{10} = \frac{40}{100}$
- $75\% = 0.75 = \frac{3}{4} = \frac{75}{100}$
- $20\% = 0.2 = \frac{1}{5} = \frac{2}{10} = \frac{20}{100}$
- $40\% = 0.4 = \frac{4}{10} = \frac{40}{100}$

Multiplication and Division

- ✓ Know the 6, 7 and 9 times table and the related division facts
- ✓ Know all the table facts and the related division facts
- ✓ $500 \times 2 = 1000$
- ✓ $1000 \div 2 = 500$
- ✓ $250 \times 4 = 1000$
- ✓ $1000 \div 4 = 250$
- ✓ $200 \times 5 = 1000$
- ✓ $1000 \div 5 = 200$

Measurement

- $1\text{mm} = \frac{1}{10}\text{cm}$ $1\text{mm} = \frac{1}{1000}\text{m}$
- $1\text{kg} = 2.20462\text{lbs}$
- $1\text{l} = 1.75975\text{pints}$
- $1\text{m} = 39.3701\text{inches}$