Welcome to Year 5!

We are available at the beginning and end of each day for very brief messages however, if you would like to have a lengthier chat, please speak to the office and they will arrange a mutually convenient time.

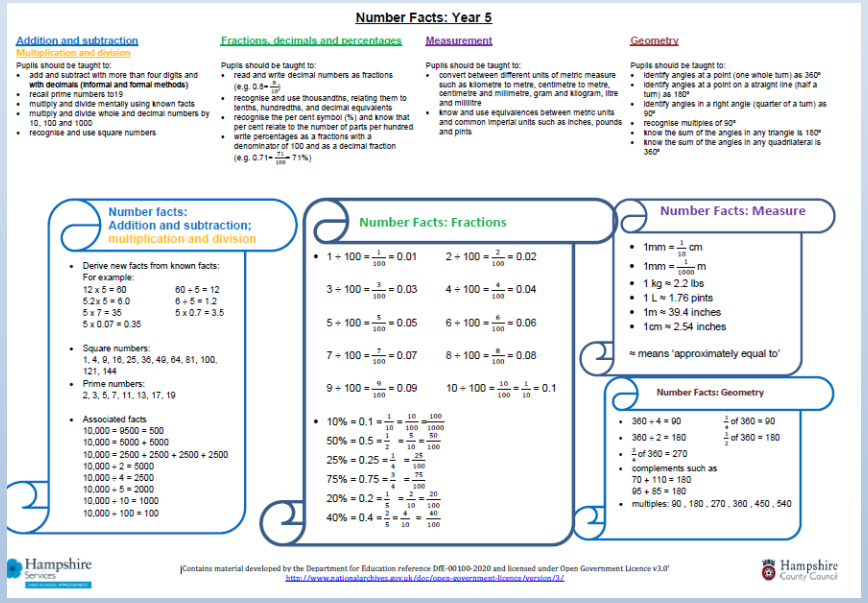
All clothes labelled, uniform guidelines followed.

Water bottles - a must! Water only.

P.E. kit to stay at school. Tuesdays and Thursday lessons. Earrings/hair in PE

The curriculum
Maths

- Year 5 expectations (End of year)



Number Facts: Year 5

Addition and subtraction
Multiplication and division

Pupils should be taught to:
- add and subtract with more than four digits and **with decimals (informal and formal methods)**
- recall prime numbers to19
- multiply and divide mentally using known facts
- multiply and divide whole and decimal numbers by 10, 100 and 1000
- recognise and use square numbers

Fractions, decimals and percentages

Pupils should be taught to:
- read and write decimal numbers as fractions (e.g. $0.8 = \frac{8}{10}$)
- recognise and use thousandths, relating them to tenths, hundredths, and decimal equivalents
- recognise the per cent symbol (%) and know that per cent relate to the number of parts per hundred
- write percentages as a fractions with a denominator of 100 and as a decimal fraction (e.g. $0.71 = \frac{71}{100} = 71\%$)

Measurement

Pupils should be taught to:
- convert between different units of metric measure such as kilometre to metre, centimetre to metre, centimetre and millimetre, gram and kilogram, litre and millilitre
- know and use equivalences between metric units and common imperial units such as inches, pounds and pints

Geometry

Pupils should be taught to:
- Identify angles at a point (one whole turn) as 360°
- Identify angles at a point on a straight line (half a turn) as 180°
- Identify angles in a right angle (quarter of a turn) as 90°
- recognise multiples of 90°
- know the sum of the angles in any triangle is 180°
- know the sum of the angles in any quadrilateral is 360°

Number facts: Addition and subtraction; multiplication and division

- Derive new facts from known facts: For example:
  12 x 5 = 60 → 60 ÷ 5 = 12
  5.2 x 5 = 6.0 → 6 ÷ 5 = 1.2
  5 x 7 = 35 → 5 x 0.7 = 3.5
  5 x 0.07 = 0.35
- Square numbers: 1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144
- Prime numbers: 2, 3, 5, 7, 11, 13, 17, 19
- Associated facts
  10,000 = 9500 = 500
  10,000 = 5000 + 5000
  10,000 = 2500 + 2500 + 2500 + 2500
  10,000 ÷ 2 = 5000
  10,000 ÷ 4 = 2500
  10,000 ÷ 5 = 2000
  10,000 ÷ 10 = 1000
  10,000 ÷ 100 = 100

Number Facts: Fractions

- $1 \div 100 = \frac{1}{100} = 0.01$
- $2 \div 100 = \frac{2}{100} = 0.02$
- $3 \div 100 = \frac{3}{100} = 0.03$
- $4 \div 100 = \frac{4}{100} = 0.04$
- $5 \div 100 = \frac{5}{100} = 0.05$
- $6 \div 100 = \frac{6}{100} = 0.06$
- $7 \div 100 = \frac{7}{100} = 0.07$
- $8 \div 100 = \frac{8}{100} = 0.08$
- $9 \div 100 = \frac{9}{100} = 0.09$
- $10 \div 100 = \frac{10}{100} = \frac{1}{10} = 0.1$

- $10\% = 0.1 = \frac{1}{10} = \frac{10}{100} = \frac{100}{1000}$
- $50\% = 0.5 = \frac{1}{2} = \frac{5}{10} = \frac{50}{100}$
- $25\% = 0.25 = \frac{1}{4} = \frac{25}{100}$
- $75\% = 0.75 = \frac{3}{4} = \frac{75}{100}$
- $20\% = 0.2 = \frac{1}{5} = \frac{2}{10} = \frac{20}{100}$
- $40\% = 0.4 = \frac{2}{5} = \frac{4}{10} = \frac{40}{100}$

Number Facts: Measure

- 1mm = $\frac{1}{10}$ cm
- 1mm = $\frac{1}{1000}$ m
- 1 kg ≈ 2.2 lbs
- 1 L ≈ 1.76 pints
- 1m ≈ 39.4 inches
- 1cm ≈ 2.54 inches

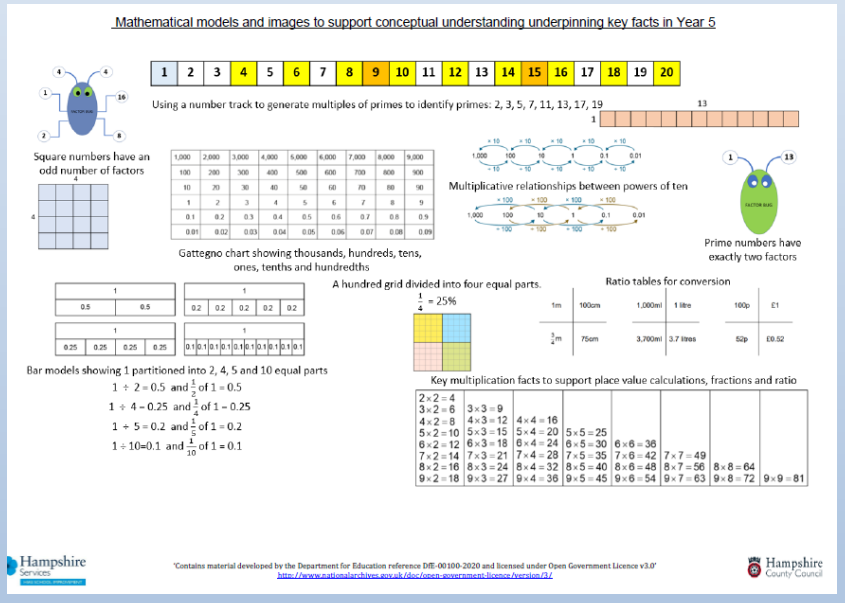
≈ means 'approximately equal to'

Number Facts: Geometry

- 360 ÷ 4 = 90 → $\frac{1}{4}$ of 360 = 90
- 360 ÷ 2 = 180 → $\frac{1}{2}$ of 360 = 180
- $\frac{3}{4}$ of 360 = 270
- complements such as
  70 + 110 = 180
  95 + 85 = 180
- multiples: 90 , 180 , 270 , 360 , 450 , 540

Hampshire Services

Hampshire County Council



Mathematical models and images to support conceptual understanding underpinning key facts in Year 5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Using a number track to generate multiples of primes to identify primes: 2, 3, 5, 7, 11, 13, 17, 19

Square numbers have an odd number of factors

1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09

Gattegno chart showing thousands, hundreds, tens, ones, tenths and hundredths

Multiplicative relationships between powers of ten

Prime numbers have exactly two factors

Bar models showing 1 partitioned into 2, 4, 5 and 10 equal parts

A hundred grid divided into four equal parts.

$\frac{1}{4} = 25\%$

Ratio tables for conversion

1m	100cm	1,000ml	1 litre	100p	£1
$\frac{3}{4}$m	75cm	3,700ml	3.7 litres	52p	£0.52

$1 \div 2 = 0.5$ and $\frac{1}{2}$ of $1 = 0.5$

$1 \div 4 = 0.25$ and $\frac{1}{4}$ of $1 = 0.25$

$1 \div 5 = 0.2$ and $\frac{1}{5}$ of $1 = 0.2$

$1 \div 10 = 0.1$ and $\frac{1}{10}$ of $1 = 0.1$

Key multiplication facts to support place value calculations, fractions and ratio

2 × 2 = 4								
3 × 2 = 6	3 × 3 = 9							
4 × 2 = 8	4 × 3 = 12	4 × 4 = 16						
5 × 2 = 10	5 × 3 = 15	5 × 4 = 20	5 × 5 = 25					
6 × 2 = 12	6 × 3 = 18	6 × 4 = 24	6 × 5 = 30	6 × 6 = 36				
7 × 2 = 14	7 × 3 = 21	7 × 4 = 28	7 × 5 = 35	7 × 6 = 42	7 × 7 = 49			
8 × 2 = 16	8 × 3 = 24	8 × 4 = 32	8 × 5 = 40	8 × 6 = 48	8 × 7 = 56	8 × 8 = 64		
9 × 2 = 18	9 × 3 = 27	9 × 4 = 36	9 × 5 = 45	9 × 6 = 54	9 × 7 = 63	9 × 8 = 72	9 × 9 = 81	

Hampshire Services

Hampshire County Council

Times Tables

- Expectation for the end of Year 5 is that the children know all their tables to 12 x 12, have rapid recall, and use them to solve both multiplication and division problems.
- TT Rockstars
- Weekly times tables test - Fridays
- Additional support in class/home

Reading

- Children are expected to read suitable library books on a regular basis
- We have a class read which is used to tackle a range of reading skills during guided reading sessions.
- Children will record their personal reading in their reading diary.
- Children should fill their diary in at school as well as at home.

Spellings

- Fridays – Yellow book goes home with new spelling list stuck inside.
- Children will be tested the following Friday – Usually 6 words are from the statutory word list for years 5 and 6 and 6 pattern words from the Read Write Inc. spelling programme
- The test will be in the yellow book
- Additional support as required

Homework

- Homework will be given out on Fridays and due in the following Wednesday unless stated otherwise
- Alternating between maths and English/project
- Regular reading and filling out diary at home.
- Practise spellings at home.

Trips

- Captain Phillimore's Woods x 2

- Fishbourne Roman Palace this Friday 19th September
- Swanage residential is in May, details later in the year.

Parent volunteers – please let any of the Year 5 team know in advance if you can help on a Woods trip.

We look forward to teaching your children this year.

Please don’t hesitate to contact us in person or via the office.

Questions