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Mathematics – Recall of Key Facts

Progression Document

"Without mathematics, there's nothing you can do. Everything around you is mathematics. Everything around you is numbers."
Shakuntala Devi, Indian writer and mental calculator

Compassion ● Forgiveness ● Hope ● Justice ● Respect ● Honesty ● Love

Counting

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Recognise and read the numbers 1 to 20 in numerals. Say 1 more than any number between 0-20. Say 1 less than any number between 0-20. Subitising to 5. Dice Patterns.	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. Say 1 more or 1 less than any two digit number. Count in multiples of 2,5, 10 (Y1 counting).	Count in steps of 2,3 and 5 from 0 and in 10s from any number forwards and backwards (Y2 counting).	Count from 0 in multiples of 4, 8, 50 and 100. Find 10 or 100 more or less than a given number (Y3 counting).	Count in multiples of 6,7,9,25 and 1000 (Y4 counting).	Count forward or backwards in steps of powers of 10 from any given number up to 1,000,000 (Y5 counting). Count forwards and backwards with positive and negative numbers, including through zero. Count up and down in tenths from any given number.	

Number Bonds (addition & subtraction)

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number bonds to 5 (partitioning & recombining). Doubling, halving and sharing.	Number bonds (fact families) to 10.	Number bonds to 20. Recall and use addition and subtraction facts to 20 fluently.	Number bonds (fact families) to 100, including multiples of 10.	Number bonds (fact families) to 100.	Decimal number bonds (fact families) to 1 and to 10 (1dp), i.e. 0.4 and 0.6 = 1; 1.2 and 8.8 = 10.	Decimal number bonds (fact families) to 1 and to 10 (2dp), i.e. 1.23 and 8.77 = 10.

Place Value

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Matching numerals to quantities, up to 10 (resources to include numeral numerals, objects, number block and tens frame).	Read and write numbers from 1 to 20 in numerals and words.	Read and write numbers to at least 100 in numerals and words. Recognise odd and even numbers.	Read and write numbers up to 1000 in numerals and words.	Read Roman Numerals to 100.	Read and write numbers up to 1,000,000 in numerals and words. Roman Numerals to 1000.	Read and write numbers up to 10,000,000 in numerals and words.

Multiplication Facts

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Counting in 2s and 10s.		Recall and use multiplication and division facts for 2, 5 and 10 multiplication tables.	Recall and use multiplication and division facts for 3, 4 and 8 multiplication tables.	Recall and use multiplication and division facts for up to 12 x 12.	All multiplication facts to 12 x 12. Relate the multiplication facts to multiples of 10 and 100, i.e. 40 x 30 = 120.	All multiplication facts to 12 x 12. Relate this to decimal multiplication, e.g. 0.4 x 3 = 1.2.
Beyond Times Tables						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
			Recognise multiples of 2, 5, 10 up to 100. Know by heart all doubles of multiples of 5 up to 100, i.e. double 45, double 15. Know by heart all doubles of multiples of 10 up to 100, i.e. double 30. Know by heart all halves of multiples of 10 up to 100, i.e. half of 70.	Recognise and use factor pairs (for 8, 12, 16, 32).	Recognise prime and composite numbers to 20. Recognise and use factor pairs (for 8, 12, 24, 25, 16, 32, 48). Identify multiples.	Identify pairs of factors for all 2-digit whole numbers. Identify common factors and common multiples. Recognise prime numbers up to 50. Recall square numbers (up to 12 x 12) and cube numbers (up to 12 x 12 x 12).
Time						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Recite the days of the week. Know birthday month. Recall seasons order.	O'clock and half past. Days of the week. Months of the year. Seasons.	Tell the time to 5 minutes, including quarter past and to. Minutes in an hour and hours in a day.	Tell the time accurate to 5 minutes, including Roman Numerals. Seconds in a minute. Minutes in an hour. Hours in a day. Months of the year. Numbers of days in each month. Days in a year and leap year.	Tell the time to 1 minute. Use analogue and digital clocks to tell the time.	Read, write and convert between analogue and digital 12- and 24-hour clocks. Use knowledge of time facts to write equivalent times to multiples of ¼ of a unit, e.g. 180 seconds = 3 mins, 5 ¼ hours = 5 hours 15 mins.	Recall time intervals using digital and analogue clocks.

Halves and Doubles/ Fractions, Decimals and Percentages						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Share into equal groups. Recognise a half. Doubling 1, 2, 4, 8.	Know halves and doubles of numbers to 10. Recognise a half and a quarter.	Know halves and doubles to 20. Quarter quantities. Recognise the whole number and number of parts, creating the fraction.	Halves and doubles to 20. Calculate a half, quarter, third and tenth.	Halves and doubles to 100. Double any 2 digit-number. Halve any 2-digit number. Recognise and write equivalents of fractions ¼, ½, ¾. tenths and hundredths.	Halves and doubles to 1dp. Recall decimal equivalents of fractions to ¼, ½. ¾,1/3, 1/5, tenths, hundredths. Read write decimal numbers as fractions, 0.71 = 71/100. Write percentages as a fraction with denominator 100 and as a decimal.	Doubles and halves of ll multiples of 10 to 10,000. Recall and use equivalences between simple fractions, decimals and percentages. Convert between fractions, decimals and percentages (0.1, 0.25, 0.33, 0.66, 0.5, 0.75).
Money/ Measures						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Use everyday language to talk about money.	Recognise and know the value of different denominations of coins and notes.	Recognise and use symbols for £ and p. Combine amounts to make values up to 20.	Add and subtract amounts of money to give change using both £ and p in practical contexts. <u>Conversions</u> Recall of metric conversions: 1km = 1000m 1m = 100cm 1cm = 10mm 1kg = 1000g 1l = 1000ml	Change from £1. <u>Conversions</u> Recall of metric conversions: 1km = 1000m 1m = 100cm 1cm = 10mm 1kg = 1000g 1l = 1000ml	Change from £5. <u>Conversions</u> Recall of metric conversions: 1km = 1000m 1m = 100cm 1cm = 10mm 1kg = 1000g 1l = 1000ml Use knowledge of measurement equivalents to convert.	Change from £10. <u>Conversions</u> Recall of metric conversions: 1km = 1000m 1m = 100cm 1cm = 10mm 1kg = 1000g 1l = 1000ml Use the above to calculate fractions and decimals of measures.