Year 5 Autumn 1 KIRFs

Key Instant Recall Facts (KIRFs) are designed to support the development of the mental skills that underpin much of the maths work in school. Instant recall facts help enormously with mental agility within maths lessons.

Your child's KIRF this term is:

Common equivalent fractions

$\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8}$

$\frac{1}{3} = \frac{2}{6} = \frac{3}{9} = \frac{4}{12}$

$\frac{1}{4} = \frac{2}{8} = \frac{3}{12} = \frac{4}{16}$

$\frac{2}{3} = \frac{4}{6} = \frac{6}{9} = \frac{8}{12}$

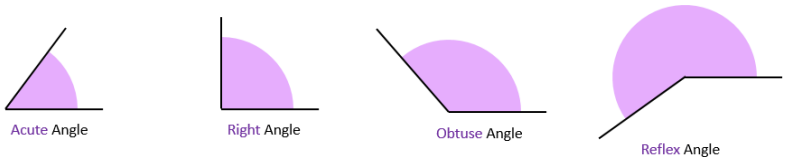
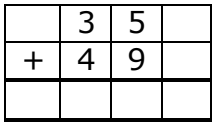
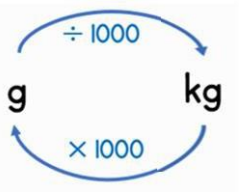
$\frac{3}{4} = \frac{6}{8} = \frac{9}{12} = \frac{12}{16}$

$\frac{1}{5} = \frac{2}{10} = \frac{3}{15} = \frac{4}{20}$

$\frac{2}{5} = \frac{4}{10} = \frac{6}{15} = \frac{8}{20}$

$\frac{3}{5} = \frac{6}{10} = \frac{9}{15} = \frac{12}{20}$

In addition you can help by practising the following:

Read and write 5-digit numbers	62,179 sixty two thousand, one hundred and seventy nine
Bonds to 1 to 1dp	0.9 + 0.1 = 1 0.8 + 0.2 = 1 0.7 + 0.3 = 1 etc
Acute, obtuse, reflex and right angle	
Add and subtract two 2-digit numbers	 35 + 49
Doubles and halves of all 2-digit numbers	Double 24 is 48 Half of 92 is 46
Tests of divisibility 2, 5 and 10	If the number ends 2, 4, 6, 8, or 0, it is divisible by 2 If the number ends in 5 or 0, it is divisible by 5 If the number ends in 0, it is divisible by 10
Convert g to kg and inverse	 1kg = 1000g 348g = 0.348kg 45kg = 45,000g

Year 5 Autumn 2 KIRFs

Key Instant Recall Facts (KIRFs) are designed to support the development of the mental skills that underpin much of the maths work in school. Instant recall facts help enormously with mental agility within maths lessons.

Your child's KIRF this term is:

Bonds to 10 to 1 decimal place

$0.1 + 9.9 = 10$ $0.2 + 9.8 = 10$ $0.3 + 9.7 = 10$

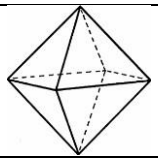
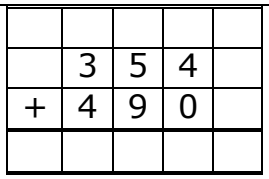
$0.4 + 9.6 = 10$ $0.5 + 9.5 = 10$ $0.6 + 9.4 = 10$

...

$4.4 + 5.6 = 10$ $4.5 + 5.5 = 10$ $4.6 + 5.4 = 10$

$4.7 + 5.3 = 10$ $4.8 + 5.2 = 10$ $4.9 + 5.1 = 10$

In addition you can help by practising the following:

Value of each digit in 5-digit numbers	94357 = 90,000 + 4,000 + 300 + 50 + 7
Octahedron	
Add and subtract two 3 digit numbers	 354 + 490
Doubles and halves of all two-digit numbers	Double 45 is 90 Half of 98 is 49
Tests of divisibility 3, 6 and 9	If the digits add up to 3, 6 or 9, the number is divisible by **3** If the digits add up to 3, 6 or 9 *and* the number is even, the number is divisible by **6** If the digits add up to 9, the number is divisible by **9**
Compare and add fractions with the same denominator	$\frac{2}{7} + \frac{3}{7} = \frac{5}{7}$ $\frac{2}{7} < \frac{3}{7}$
Roman numerals to 1000	**Roman Numerals: 1 - 1000** I V X L C D M 1 5 10 50 100 500 1000 1 I, 2 II, 3 III, 4 IV, 5 V, 6 VI, 7 VII, 8 VIII, 9 IX, 10 X 11 X1, 20 XX, 30 XXX, 40 XL, 50 L, 60 LX, 70 LXX, 80 LXXX, 90 XC, 100 C 200 CC, 300 CCC, 400 CD, 500 D, 600 DC, 700 DCC, 800 DCCC, 900 CM, 1000 M, 1001 MI

Year 5 Spring 1 KIRFs

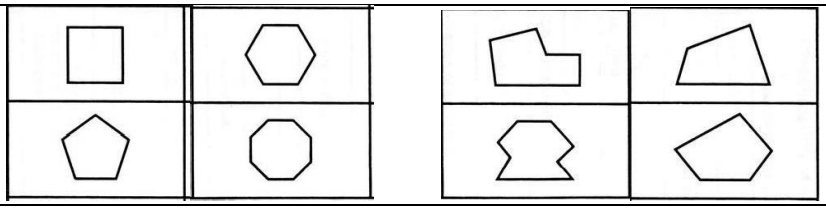
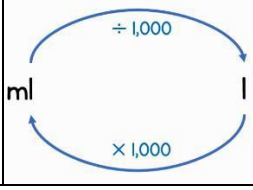
Key Instant Recall Facts (KIRFs) are designed to support the development of the mental skills that underpin much of the maths work in school. Instant recall facts help enormously with mental agility within maths lessons.

Your child's KIRF this term is: Use knowledge of times tables and place value to multiply whole numbers and tenths

3x4=12	so	0.3x4=1.2
5x6=30	so	5x0.6=3.0
7x8=56	so	0.7x8=5.6
12x12=144	so	12x1.2=14.4

x	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

In addition you can help by practising the following:

Value of each digit in 5 digit numbers to 1 decimal place	1674.6	1000 + 600 + 70 + 4 + 0.6	
Rounding	1674.6	Nearest thousand Nearest hundred Nearest ten Nearest whole number	2000 1700 1670 1675
Bonds to 1 to 2 decimal places	0.64 + 0.36 = 1 0.45 + 0.55 = 1		
Regular and irregular polygons			
Add and subtract two 4-digit numbers	3 5 4 7 + 4 9 0 4	3547 + 4904	
Doubles and halves of all multiples of 10 to 1000	Double 620 is 1,240 Half of 940 is 470		
Prime numbers up to 19	2, 3, 5, 7, 11, 13, 17, 19		
Convert ml to l and inverse		1l = 1000ml 1.25l = 1250ml	

Year 5 Spring 2 KIRFs

Key Instant Recall Facts (KIRFs) are designed to support the development of the mental skills that underpin much of the maths work in school. Instant recall facts help enormously with mental agility within maths lessons.

Your child's KIRF this term is:

Decimal equivalents 100ths

$\frac{1}{100} = 0.01$ $\frac{17}{100} = 0.17$ $\frac{26}{100} = 0.26$

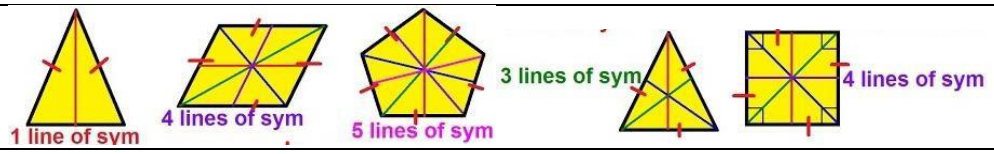
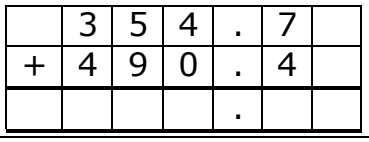
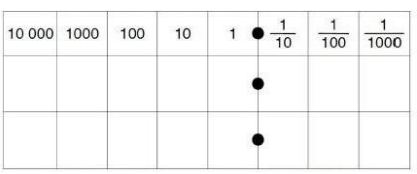
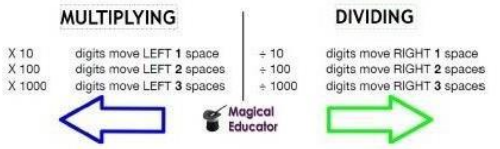
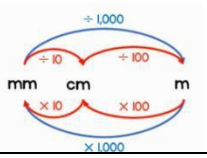
$\frac{52}{100} = 0.52$ $\frac{63}{100} = 0.63$ $\frac{99}{100} = 0.99$

$^{1}/_{10} = 0.1$ $^{2}/_{10} = 0.2$ $^{3}/_{10} = 0.3$

$^{4}/_{10} = 0.4$ $^{5}/_{10} = 0.5$ $^{6}/_{10} = 0.6$

$^{7}/_{10} = 0.7$ $^{8}/_{10} = 0.8$ $^{9}/_{10} = 0.9$

In addition you can help by practising the following:

Value of each digit in 5 digit numbers 2dp	674.61	600 + 70 + 4 + 0.6 + 0.01	
Rounding	674.61	Nearest thousand Nearest hundred Nearest ten Nearest whole number Nearest tenth	1000 700 670 675 674.6
Bonds to 10 to 2 decimal places	1.37 + 8.63 = 10 6.24 + 3.76 = 10		
Lines of symmetry			
Add and subtract two 4-digit numbers 1 decimal place		354.7 + 490.4	
Doubles and halves of all multiples of 10 to 1000	Double 250 is 500 Half of 320 is 160		
Multiply and divide by 10 100 and 1000	 		
Convert between mm cm and m		0.01m = 1cm = 10mm 1m = 100cm = 1000mm 1.275m = 127.5cm = 1275mm	

Year 5 Summer 1 KIRFs

Key Instant Recall Facts (KIRFs) are designed to support the development of the mental skills that underpin much of the maths work in school. Instant recall facts help enormously with mental agility within maths lessons.

Your child's KIRF this term is:

Percentage and decimal equivalents of halves, quarters and tenths

½ = 50% = 0.5

¼ = 25% = 0.25

¾ = 75% = 0.75

$^{1}/_{10}$ = 10% = 0.1

$^{2}/_{10}$ = 20% = 0.2

$^{3}/_{10}$ = 30% = 0.3

$^{4}/_{10}$ = 40% = 0.4

$^{5}/_{10}$ = 50% = 0.5

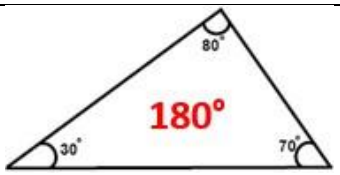
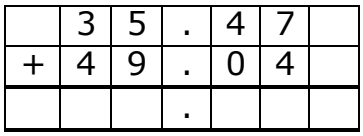
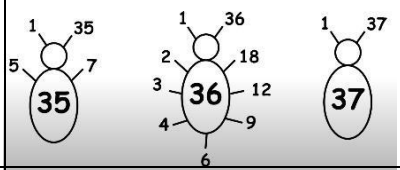
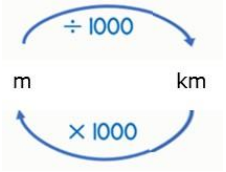
$^{6}/_{10}$ = 60% = 0.6

$^{7}/_{10}$ = 70% = 0.7

$^{8}/_{10}$ = 80% = 0.8

$^{9}/_{10}$ = 90% = 0.9

In addition you can help by practising the following:

Value of each digit in 5-digit numbers 3dp	64.825 = 60 + 4 + 0.8 + 0.02 + 0.005
Bonds to 1 to 3 decimal places	0.333 + 0.667 = 1 0.247 + 0.753 = 1
Angles in a triangle	
Add and subtract two 4-digit numbers 2 decimal places	
Doubles and halves of all multiples of 100 to 10,000	Double 4,200 is 8,400 Half of 6,400 is 3,200
Recognise factor pairs for numbers up to 100	 35 = 1x35 = 5x7 36 = 36x1 = 18x2 = 12x3 = 9x4 = 6x6 (odd number of factors so square) 37 = 1x37 (two factors so prime)
Convert between m and km	 1000m = 1km 3486m = 3.486km 45km = 45000m

Year 5 Summer 2 KIRFs

Key Instant Recall Facts (KIRFs) are designed to support the development of the mental skills that underpin much of the maths work in school. Instant recall facts help enormously with mental agility within maths lessons.

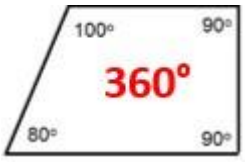
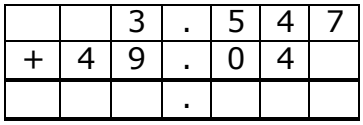
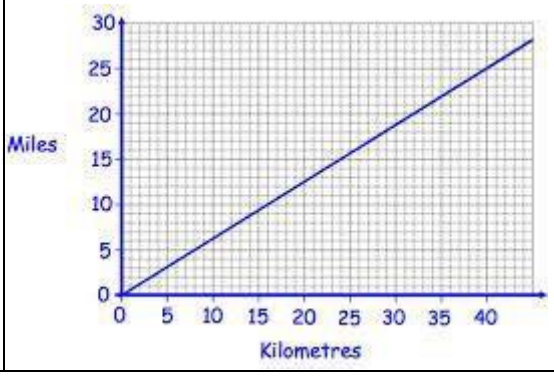
Your child's KIRF this term is:

$\frac{1}{5} = 20\% = 0.2$ $\frac{2}{5} = 40\% = 0.4$ etc.

$\frac{1}{20} = 5\% = 0.05$ $\frac{2}{20} = 10\% = 0.1$ etc.

$\frac{1}{25} = 4\% = 0.04$ $\frac{2}{25} = 8\% = 0.08$ etc.

In addition you can help by practising the following:

Bonds to 100 to 2dp	12.37 + 87.63 = 100
Angles in a quadrilateral	
Add and subtract two 4-digit numbers different decimal places	 3.547 + 49.04
Doubles and halves of all multiples of 100 to 10,000	Double 6,000 is 12,000 Half of 10,000 is 5,000
Square numbers to 12x12 and their roots	$1 \times 1 = 1^2 = 1$ $\sqrt{1} = 1$ $2 \times 2 = 2^2 = 4$ $\sqrt{4} = 2$ $3 \times 3 = 3^2 = 9$ $\sqrt{9} = 3$ $4 \times 4 = 4^2 = 16$ $\sqrt{16} = 4$ $5 \times 5 = 5^2 = 25$ $\sqrt{25} = 5$ $6 \times 6 = 6^2 = 36$ $\sqrt{36} = 6$ $7 \times 7 = 7^2 = 49$ $\sqrt{49} = 7$ $8 \times 8 = 8^2 = 64$ $\sqrt{64} = 8$ $9 \times 9 = 9^2 = 81$ $\sqrt{81} = 9$ $10 \times 10 = 10^2 = 100$ $\sqrt{100} = 10$ $11 \times 11 = 11^2 = 121$ $\sqrt{121} = 11$ $12 \times 12 = 12^2 = 144$ $\sqrt{144} = 12$
Convert between miles and km	 5 miles = 8 km 10 miles = 16 km