



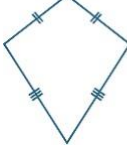

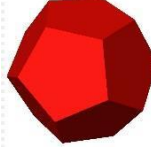
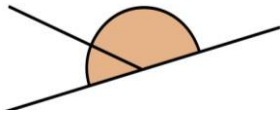
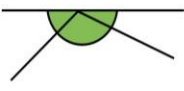
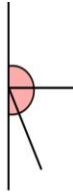
Year 6 Autumn 1 KIRFs

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:

$13^2 = 13 \times 13 = 169$	$\sqrt{169} = 13$
$14^2 = 14 \times 14 = 196$	$\sqrt{196} = 14$
$15^2 = 15 \times 15 = 225$	$\sqrt{225} = 15$
$1^3 = 1 \times 1 \times 1 = 1$	$\sqrt[3]{1} = 1$
$2^3 = 2 \times 2 \times 2 = 8$	$\sqrt[3]{8} = 2$
$3^3 = 3 \times 3 \times 3 = 27$	$\sqrt[3]{27} = 3$
$4^3 = 4 \times 4 \times 4 = 64$	$\sqrt[3]{64} = 4$
$5^3 = 5 \times 5 \times 5 = 125$	$\sqrt[3]{125} = 5$

In addition you can help by practising the following:

Read and write 6-digit numbers	648,315 Six hundred and forty eight thousand, three hundred and fifteen																					
Kite and dodecahedron	  																					
Add and subtract 2 4 digit numbers diff decimal places	<table border="1" data-bbox="454 1232 805 1355"> <tr><td></td><td></td><td>3</td><td>.</td><td>5</td><td>4</td><td>7</td></tr> <tr><td>+</td><td>4</td><td>9</td><td>.</td><td>0</td><td>4</td><td></td></tr> <tr><td></td><td></td><td></td><td>.</td><td></td><td></td><td></td></tr> </table> $3.547 + 49.04$			3	.	5	4	7	+	4	9	.	0	4					.			
		3	.	5	4	7																
+	4	9	.	0	4																	
			.																			
Doubles and halves of 1-digit decimals	Double 0.6 is 1.2 Half of 1.8 is 0.9																					
Add and subtract fractions where the denominators are multiples	$\frac{1}{2} + \frac{1}{4} = \frac{2}{4} + \frac{1}{4} = \frac{3}{4}$ $\frac{1}{3} + \frac{1}{9} = \frac{3}{9} + \frac{1}{9} = \frac{4}{9}$																					
Angles in a straight line	Angles add up to 180°   																					
Bonds to 1 to two decimal places	$0.64 + 0.36 = 1$ $0.17 + 0.83 = 1$																					



Year 6 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: Use knowledge of times tables and place value to multiply pairs of numbers with one decimal place

$$3 \times 4 = 12 \quad \text{so} \quad 0.3 \times 0.4 = 0.12$$

$$5 \times 6 = 30 \quad \text{so} \quad 0.5 \times 0.6 = 0.3$$

$$7 \times 8 = 56 \quad \text{so} \quad 0.7 \times 0.8 = 0.56$$

$$12 \times 12 = 144 \quad \text{so} \quad 1.2 \times 1.2 = 1.44$$

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 6-digit numbers	$943,167 = 900,000 + 40,000 + 3,000 + 100 + 60 + 7$																					
Bonds to 10 to 2 decimal places	$1.37 + 8.63 = 10 \quad 6.03 + 3.97 = 10$																					
Angles in an intersection																						
Add and subtract two 4-digit numbers diff decimal places	<table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td></td><td></td><td>3</td><td>.</td><td>5</td><td>4</td><td>7</td></tr> <tr><td>+</td><td>4</td><td>9</td><td>.</td><td>0</td><td>4</td><td></td></tr> <tr><td></td><td></td><td></td><td>.</td><td></td><td></td><td></td></tr> </table> $3.547 + 49.04$			3	.	5	4	7	+	4	9	.	0	4					.			
		3	.	5	4	7																
+	4	9	.	0	4																	
			.																			
Doubles and halves of 2 digit decimals	Double 2.3 is 4.6 Half of 9.8 is 4.9																					
Convert between mixed and improper fractions	$\frac{9}{4} = 2\frac{1}{4}$ $3\frac{1}{2} = \frac{7}{2}$																					
Convert between g, kg and tonnes	 $1\text{kg} = 1000\text{g} \quad 1000\text{kg} = 1\text{ tonne}$ $1634\text{g} = 1.634\text{kg} \quad 20\text{kg} = 20,000\text{g}$																					



Year 6 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: decimal equivalents of eighths

$$\frac{1}{8} = 0.125$$

8

$$\frac{3}{8} = 0.375$$

8

$$\frac{5}{8} = 0.625$$

8

$$\frac{7}{8} = 0.875$$

8

$$\frac{2}{8} = 0.250$$

8

$$\frac{4}{8} = 0.500$$

8

$$\frac{6}{8} = 0.750$$

8

$$\frac{8}{8} = 1.000$$

8

In addition you can help by practising the following:

Value of each digit in 6-digit numbers, 2 decimal places	6746.17	6000 + 700 + 40 + 6 + 0.1 + 0.07																													
Rounding	6746.17	Nearest ten-thousand Nearest thousand Nearest hundred Nearest ten Nearest whole number Nearest tenth	10000 7000 6700 6750 6746 6746.2																												
Bonds to 1, 3 decimal places	0.333 + 0.667 = 1 0.167 + 0.833 = 1																														
Angles in triangles and quadrilaterals																															
Add and subtract two 5-digit numbers different decimal places	<table border="1"> <tr><td></td><td></td><td>2</td><td>3</td><td>.</td><td>5</td><td>4</td><td>7</td></tr> <tr><td>+</td><td>5</td><td>4</td><td>9</td><td>.</td><td>0</td><td>4</td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td>.</td><td></td><td></td><td></td></tr> </table>			2	3	.	5	4	7	+	5	4	9	.	0	4						.				23.547 + 549.04					
		2	3	.	5	4	7																								
+	5	4	9	.	0	4																									
				.																											
Doubles and halves of multiples of 10 to 10,000	Double 650 is 1,300 Half of 2,500 is 1,250																														
Convert between ml, cl and l		$1l = 100cl = 1000ml$ $1.25l = 125cl = 1250ml$																													
Multiply and divide by 10, 100, 1000 and 0.1	<table border="1"> <tr><td>10 000</td><td>1000</td><td>100</td><td>10</td><td>1</td><td>•</td><td>$\frac{1}{10}$</td><td>$\frac{1}{100}$</td><td>$\frac{1}{1000}$</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td>•</td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td>•</td><td></td><td></td><td></td></tr> </table>	10 000	1000	100	10	1	•	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$						•									•				<p>MULTIPLYING</p> <p>X 10 digits move LEFT 1 space X 100 digits move LEFT 2 spaces X 1000 digits move LEFT 3 spaces</p> <p>←</p>	<p>DIVIDING</p> <p>÷ 10 digits move RIGHT 1 space ÷ 100 digits move RIGHT 2 spaces ÷ 1000 digits move RIGHT 3 spaces</p> <p>→</p>	<p>Multiplying by 0.1 is the same as dividing by 10</p>
10 000	1000	100	10	1	•	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$																							
					•																										
					•																										



Year 6 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:
Prime numbers up to 100

2, 3, 5, 7, 11,
13, 17, 19, 23, 29,
31, 37, 41, 43, 47,
53, 59, 61, 67, 71,
73, 79, 83, 89, 97

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

In addition you can help by practising the following:

Value of each digit in 6-digit numbers 3 decimal places	674.617	$600 + 70 + 4 + 0.6 + 0.01 + 0.007$																								
Rounding	674.617	Nearest thousand: 1000 Nearest hundred: 700 Nearest ten: 670 Nearest whole number: 675 Nearest tenth: 674.6 Nearest hundredth: 674.62																								
Bonds to 100 to 2 decimal places	$12.37 + 87.63 = 100$ $39.05 + 60.95 = 100$																									
Parts of a circle	 Radius Diameter Circumference																									
Add and subtract two 5-digit numbers diff decimal places	<table border="1"> <tr><td></td><td></td><td>2</td><td>3</td><td>.</td><td>5</td><td>4</td><td>7</td></tr> <tr><td>+</td><td>5</td><td>4</td><td>9</td><td>.</td><td>0</td><td>4</td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td>.</td><td></td><td></td><td></td></tr> </table>			2	3	.	5	4	7	+	5	4	9	.	0	4						.				$23.547 + 549.04$
		2	3	.	5	4	7																			
+	5	4	9	.	0	4																				
				.																						
Doubles and halves multiples of 100 to 100,000	Double 6,500 is 13,000 Half of 25,000 is 12,500																									
Convert between mm cm, m, and km		$0.01m = 1cm = 10mm$ $1m = 100cm = 1000mm$ $1km = 1000m = 100,000cm$ $1.275m = 127.5cm = 1275mm$																								
Tests of divisibility 4, 6 and 8	Divisible by 4 if the last 2 digits are divisible by 4 Divisible by 6 if the sum of the digits is 3, 6 or 9 and the number's last digit is 0, 2, 4, 6 or 8 Divisible by 8 if the last 3 digits are divisible by 8																									
	3192	92 is divisible by 4 so 3192 is divisible by 4 Digital sum is 6 and last digit is 2 so 3192 is divisible by 6 192 is divisible by 8 so 3192 is divisible by 8																								