Settle Primary School
KIRF Quiz Book

Name: _____.

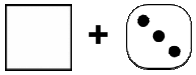
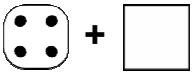
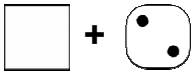
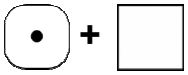
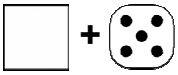
How to use the KIRF quiz book.

This is our new KIRF quiz book which we have designed to encourage speed and accuracy when completing KIRFS. You can select the quiz for the level of KIRFs that your child is currently working on (or the level they have just completed in order to build confidence). Ask them to complete the quiz in the quickest time possible, adding a 10 second time penalty for each incorrect question. They can then record their total time on the time trial record sheet towards the back of this booklet. Copies of the quiz your child is working on can be collected from their class teacher. This book is also on the school website.

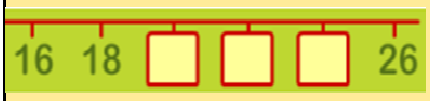
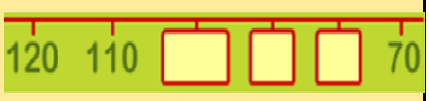
There is room for 5 attempts so children can work on reducing their time, although they can do the quiz many more times than this as repetition is the key to learning their recall facts. The quiz will also be used regularly as part of your child's numeracy lessons and the fastest KIRF pupils will be celebrated in school.

You can still encourage your child to practise their KIRFs using the following website: http://www.conkermaths.org/
There is an additional KIRF quiz book for Key Stage 2 children with alternative quizzes for each of the different colour KIRFs.

Red

Say the number names in order to 5:	1	2	3	4	5
...Then to 10:	6	7	8	9	10
How many more spots do you need to make 5? 					
Can you name the following days of the week?	Tuesday	Sunday	Saturday	Monday	Friday
Can you count in 10s?	10	20	30	40	50
	60	70	80	90	100
Can you count in 2s?	2	4	6	8	10
	12	14	16	18	20

Orange

□ + 2 = 5	□ + 4 = 5	5 = 3 + □	□ + 1 = 5	5 = 2 + □	□ + 5 = 5
Can you name the two seasons of the year that start with an 'S'?	Which day comes after Wednesday?	Which month follows January?	Which day comes before Sunday?	Which month follows August?	Which month comes before December?
□ + 2 = 10	□ + 4 = 10	10 = 3+ □	□ + 1 = 10	10 = 7+ □	□ + 5 = 10
Double 6:	Halve 8:	Double 5:	Halve 4:	Double 9:	Double 7:
9 – 6 =	7 + 2 =	□ + 3 = 7	□ + 4 = 6	2 + □ = 8	□ - 4 = 5
					

Yellow

□ +12= 20	□ +15=20	20 = 6+ □	□ + 3 = 20	20 = 7+ □	□ +18=20
8 x 2 =	14 = 2 x ?	? X 6 = 12	5 lots of 2 =	16 = 8 ÷ ?	18 divided by 9 =
80 = 10 x ?	10 times 9 =	7 = ? ÷ 10	6 x 10 =	10 multiplied by 10 =	40 ÷ 4 =
Double 16:	Halve 14:	Double 15:	Halve 18:	Double 19:	Halve 12:
? - 40 = 30	60 - 40 =	140 - ? = 80	10 = 40 - ?	50 + 70 =	90 + ? = 120
50 = 10 x ?	5 times 9 =	7 = ? ÷ 5	6 x 5 =	5 multiplied by 5=	20 ÷ 4 =

Green

6 + 9 =	8 + ? = 17	19 = ? + 6	7 + ? = 18	? + 4 = 16	15 = ? + ?
5 x 3 =	10 x ? = 30	What's the product of 3 and 8?	? X 3 = 27	? = 21 ÷ 3	12 ÷ ? = 4
4 lots of 7 =	24 = ? X 4	12 ÷ ? = 4	? X 5 = 20	What's the product of 4 and 8?	36 ÷ 4 =
Double 17 :	Halve 16 :	Double 350 :	Halve 440 :	Double 4600 :	Halve 2300 :
78 + ? = 100	100 – 34 =	1000 = 560 + ?	1000 - 730 =	85 + ? = 100	100 - 35 =
3 multiplied by 6 =	9 x ? = 72	42 = ? X 7	What's the product of 3 and 9?	48 ÷ 8 =	? = 63 ÷ 9

Blue

55 + ? = 100	100 - ? = 70	63 + ? = 100	? - 22 = 78	100 - ? = 85	100 - 55 = ?
72 ÷ 8 =	7 multiplied by 7 =	48 = 8 lots of ?	42 ÷ ? = 7	7 x ? = 63	56 = ? X ?
100 - ? = 19	? + 25 = 100	? + 56 = 100	35 + ? = 100	? + 82 = 100	51 + ? = 100
Double 37:	Halve 46:	Double 390:	Halve 1500:	Double 3250:	Halve: 4650:
1000 - 650 = ?	? + 750 = 1000	550 - ? = 1000	1000 = ? + 850	1000 - 450 = ?	400 = 1000 - ?
8 x 9 =	30 ÷ 5 =	54 = 6 lots of ?	6^2	36 = ? x 9	35 ÷ 7 =

Purple

10 = ? + 3.4	4.8 + ? = 10	0.8 + ? = 1	1 - 0.6 =	10 - 6.7 = ?	? + 2.9 = 10
36 ÷ 6 =	? ÷ 6 = 4	63 = 7 x ?	9^2	25 ÷ ? = 5	30 = ? X 6
Double 59:	Halve 76:	Double 37:	Halve 82:	Double 53:	Halve 69:
Halve 380:	Double 490:	Halve 830:	Double 570:	Halve 6500:	Double 7300:
Can you find all the factor pairs (not including 1 or the number itself) for the following numbers?	85 (one pair):	25 (one pair):	98 (two pairs):	42 (three pairs):	54 (three pairs):
Circle the number/ s divisible by 2: 59 78 95 46	Circle the number/ s divisible by 3: 45 23 76 90	Circle the number/ s divisible by 5: 65 79 80 57	Circle the number/ s divisible by 9: 64 54 99 49	Circle the number/ s divisible by 3: 78 66 49 85	Circle the number/ s divisible by 10: 70 32 65 90

Lilac

? + 5.8 = 10	10 =6.4 + ?	78 + ? = 100	1 - 0 .73 =	10 = ? + 4.5	2.3 + ? = 10
72 ÷ ? = 8	How many 7s make 56?	What's the product of 8 and 6?	What is 9^2?	What is the $\sqrt{64}$?	? X 7 = 42
Double 6.7:	Halve 8.4:	Double 5.9:	Halve 6.2:	Double 6.7:	Halve 9.6:
Double 5450:	Halve 8560:	Double 790:	Halve 590:	Double ? = 5644:	Halve ? = 4555:
Circle the number/s divisible by 4: 424 555 316	Circle the numbers divisible by 6: 66 53 44	Circle the number/s divisible by 4: 912 807 659	Circle the numbers divisible by 6: 84 99 86	Circle the numbers divisible by 4: 852 440 784	Circle the numbers divisible by 6: 123 552 589
Write a multiple of 4 between 205 and 220:	5.6 ÷ 8 =	Halve 7.4	0.9 x 8 =	Write a multiple of 6 between 541 and 560:	Double ? = 19.6

Gold

0.45 + ? = 1	1 - 0.67 =	O.82 = 1 - ?	0.73 + ? = 1	? + 0.98 = 1	0.45 = 1 - ?
30 x 6 =	50 x 70 =	900 x 8 =	0.6 x 8 =	7 x 800 =	6 x 0.9 =
Put one prime number between 6 and 50 each of the next 5 boxes:					
Double 97 000:	Halve 54 000:	Double 29 000:	Halve 76 000:	Double 78 000:	Halve 85 000:
Write the decimal **and** percentage equivalent for the following fractions:	$\frac{1}{4}$	$\frac{2}{5}$	$\frac{6}{10}$	$\frac{2}{3}$	$\frac{3}{4}$
6^2	$\sqrt{49}$	9^2	$\sqrt{25}$	4^2	$\sqrt{64}$

My time trial record sheet.

Level	1st try	2nd try	3rd try	4th try	5th try
Red					
Orange					
Yellow					
Green					
Blue					
Purple					
Lilac					
Gold					

Rules for Divisibility

Divisor	Divisibility Rule	Example
2	The last digit is even (0, 2, 4, 6, or 8)	38 : 8 is even which is divisible by 2.
3	The sum of the digits is divisible by 3.For large numbers, digits may be summed iteratively.	4 053 = 4 + 0 + 5 + 3 = 12, and 1 + 2 = 3 which is clearly divisible by 3.
4	The last two digits divisible by 4.	20 516: 16 is divisible by 4.
5	The last digit is 0 or 5.	1 285: the last digit is 5.
6	If it is divisible by 2 and by 3.	2 562 = 2 + 5 + 6 + 2 = 15 which is divisible by 3. and the last digit is even so it's also divisible by 2, so the number is divisible by 6.
7	This is a tricky one so children would be best to use their knowledge of 7 x table to count on, e.g. 7 x 10 is 70, so 7 x 20 is double this. Or 7 x 8 = 56, so 70 x 8 = 560. However, there is a rule: Take the last digit in a number. Double and subtract this number from the rest of the digits (repeat the process for larger numbers), e.g. 357: double 7 = 14, 35 –14 = 21. This is divisible by 7 so 357 is divisible by 7.	
8	If the last three digits are divisible by 8, then the entire number is also divisible by 8.	1 024: 024 is divisible by 8
9	The sum of the digits is divisible by 9. For large numbers, digits may be summed iteratively.	1 269 = 1 + 2 + 6 + 9 = 18 and 1 + 8 = 9 which is clearly divisible by 9.
10	The last digit is 0.	5070: the last digit is 0.