

Settle Primary
School

Key Stage 2
KIRF Challenge
Quiz Book



Name: _____.

There are 2 additional quizzes for each of the additional colour KIRFs:

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

Green 1

$7 + 9 =$	$3 + ? = 14$	$19 = ? + 8$	$9 + ? = 17$	$? + 13 = 16$	$18 = ? + ?$
$3^2 =$	$9 \times ? = 27$	What's the product of 3 and 2?	$? \times 3 = 21$	$? = 18 \div 3$	$30 \div 3 =$
4 lots of 6 =	$28 = ? \times 4$	$16 \div ? = 4$	$? \times 4 = 44$	What's the product of 4 and 9?	$32 \div 4 =$
Double 19 :	Halve 18 :	Double 370 :	Halve 360 :	Double 3900 :	Halve 4600 :
$26 + ? = 100$	$100 - 37 =$	$1000 = 390 + ?$	$1000 - 680 =$	$35 + ? = 100$	$100 - 55 =$
4 multiplied by 6 =	$9 \times ? = 81$	$36 = ? \times 6$	What's the product of 6 and 9?	$30 \div ? = 6$	$? = 72 \div 9$

Green 2

$4 + 9 =$	$6 + ? = 13$	$15 = ? + 6$	$7 + ? = 17$	$? + 5 = 18$	$19 = ? + ?$
$6 \times 3 =$	$11 \times ? = 33$	What's the product of 3 and 10?	$? \times 3 = 27$	$? = 36 \div 3$	$24 \div ? = 3$
4 lots of 8 =	$32 = ? \times 4$	$20 \div ? = 4$	$? \times 4 = 28$	What's the product of 4 and 6?	$48 \div 4 =$
Double 13 :	Halve 14 :	Double 490 :	Halve 370 :	Double 4600 :	Halve 3500 :
$73 + ? = 100$	$100 - 56 =$	$1000 = 720 + ?$	$1000 - 520 =$	$45 + ? = 100$	$100 - 15 =$
5 multiplied by 6 =	$9 \times ? = 63$	$48 = ? \times 8$	What's the product of 4 and 9?	$42 \div 7 =$	$? = 99 \div 9$

Blue 1

$35 + ? = 100$	$100 - ? = 79$	$67 + ? = 100$	$? - 29 = 71$	$100 - ? = 69$	$100 - 84 = ?$
$72 \div 9 =$	6 multiplied by 7 =	$48 = 6$ lots of ?	$56 \div ? = 7$	$9 \times ? = 63$	$96 = ? \times ?$
$100 - ? = 17$	$? + 45 = 100$	$? + 66 = 100$	$85 + ? = 100$	$? + 72 = 100$	$56 + ? = 100$
Double 57:	Halve 86:	Double 375:	Halve 850:	Double 4350:	Halve: 2750:
$1000 - 750 = ?$	$? + 650 = 1000$	$450 - ? = 1000$	$1000 = ? + 150$	$1000 - 550 = ?$	$600 = 1000 - ?$
$6 \times 9 =$	$45 \div 5 =$	$72 = 6$ lots of ?	9^2	$56 = ? \times 8$	$63 \div 7 =$

Blue 2

$57 + ? = 100$	$100 - ? = 63$	$93 + ? = 100$	$? - 37 = 63$	$100 - ? = 81$	$100 - 76 = ?$
$32 \div 8 =$	8 multiplied by 8 =	$24 = 8$ lots of ?	$42 \div ? = 6$	$7 \times ? = 77$	$63 = ? \times ?$
$100 - ? = 13$	$? + 35 = 100$	$? + 59 = 100$	$65 + ? = 100$	$? + 88 = 100$	$71 + ? = 100$
Double 39:	Halve 48:	Double 595:	Halve 350:	Double 4250:	Halve: 4850:
$1000 - 250 = ?$	$? + 850 = 1000$	$650 - ? = 1000$	$1000 = ? + 950$	$1000 - 350 = ?$	$800 = 1000 - ?$
$8 \times 7 =$	$30 \div 6 =$	$54 = 9$ lots of ?	7^2	$36 = ? \times 4$	$35 \div 5 =$

Purple 1

$10 = ? + 7.4$	$4.7 + ? = 10$	$0.9 + ? = 1$	$1 - 0.7 =$	$10 - 6.9 = ?$	$? + 2.3 = 10$
$48 \div 6 =$	$? \div 6 = 7$	$56 = 7 \times ?$	8^2	$45 \div ? = 5$	$30 = ? \times 5$
Double 55:	Halve 78:	Double 57:	Halve 52:	Double 93:	Halve 99:
Halve 540:	Double 770:	Halve 870:	Double 590:	Halve 8300:	Double 9300:
Can you find all the factor pairs (not including 1 or the number itself) for the following numbers?	21 (one pair):	51 (one pair):	45 (two pairs):	36 (four pairs):	65 (one pair):
Circle the number/s divisible by 2:	Circle the number/s divisible by 3:	Circle the number/s divisible by 5:	Circle the number/s divisible by 9:	Circle the number/s divisible by 3:	Circle the number/s divisible by 10:
79 98 35 66	75 24 43 60	75 69 90 47	37 72 93 108	72 63 47 86	76 40 15 80

Purple 2

$10 = ? + 3.7$	$5.8 + ? = 10$	$0.6 + ? = 1$	$1 - 0.3 =$	$10 - 5.7 = ?$	$? + 4.9 = 10$
$42 \div 6 =$	$? \div 6 = 3$	$63 = 9 \times ?$	7^2	$35 \div ? = 5$	$49 = ? \times 7$
Double 69:	Halve 96:	Double 39:	Halve 86:	Double 47:	Halve 89:
Halve 480:	Double 690:	Halve 630:	Double 670:	Halve 6800:	Double 7900:
Can you find all the factor pairs (not including 1 or the number itself) for the following numbers?	33 (one pair):	18 (two pairs):	75 (two pairs):	56 (three pairs):	48 (four pairs):
Circle the number/s divisible by 2:	Circle the number/s divisible by 3:	Circle the number/s divisible by 5:	Circle the number/s divisible by 9:	Circle the number/s divisible by 3:	Circle the number/s divisible by 10:
53 76 94 47	77 84 69 29	60 73 85 59	333 117 199 46	74 61 59 87	72 30 60 93

Lilac 1

$? + 4.8 = 10$	$10 = 7.4 + ?$	$68 + ? = 100$	$1 - 0.79 =$	$10 = ? + 8.5$	$4.3 + ? = 10$
$7.2 \div ? = 9$	How many 7s make 4.9?	What's the product of 0.7 and 6?	What is 9×0.7 ?	What is 8 multiplied by 0.9?	$? \times 0.7 = 3.5$
Double 5.7:	Halve 7.4:	Double 2.9:	Halve 9.5:	Double 3.7:	Halve 7.8:
Double 6550:	Halve 6360:	Double 990:	Halve 990:	Double $? = 8650$:	Halve $? = 6455$:
Circle the number/s divisible by 4: 415 580 344	Circle the numbers divisible by 6: 60 79 53	Circle the number/s divisible by 4: 967 812 859	Circle the numbers divisible by 6: 90 76 96	Circle the numbers divisible by 4: 777 430 652	Circle the numbers divisible by 6: 199 572 642
Write a multiple of 4 between 405 and 420:	$7.2 \div 8 =$	Halve 7.7	$0.9 \times 6 =$	Write a multiple of 6 between 641 and 660:	Double $? = 16.8$

Lilac 2

$? + 5.7 = 10$	$10 = 6.8 + ?$	$79 + ? = 100$	$1 - 0.33 =$	$10 = ? + 3.5$	$2.9 + ? = 10$
$6.4 \div ? = 8$	How many 8s make 5.6?	What's the product of 9 and 0.6?	What is 9×0.8 ?	What is 0.6 multiplied by 8?	$? \times 0.7 = 4.2$
Double 6.9:	Halve 9.4:	Double 3.8:	Halve 3.7:	Double 6.5:	Halve 7.7:
Double 7550:	Halve 2560:	Double 690:	Halve 690:	Double ? = 8644:	Halve ? = 7885:
Circle the number/s divisible by 4: 660 655 416	Circle the numbers divisible by 6: 56 93 84	Circle the number/s divisible by 4: 909 864 636	Circle the numbers divisible by 6: 54 69 72	Circle the numbers divisible by 4: 802 560 984	Circle the numbers divisible by 6: 123 552 589
Write a multiple of 4 between 330 and 340:	$5.6 \div 7 =$	Halve 9.4	$0.5 \times 8 =$	Write a multiple of 6 between 590 and 600:	Double ? = 18.7

Gold 1

$0.25 + ? = 1$	$1 - 0.47 =$	$0.72 = 1 - ?$	$0.57 + ? = 1$	$? + 0.93 = 1$	$0.95 = 1 - ?$
$50 \times 6 =$	$60 \times 70 =$	$900 \times 7 =$	$0.9 \times 8 =$	$6 \times 800 =$	$9 \times 0.9 =$
Put one prime number between 50 and 72 in each of the next 5 boxes:					
Double 67 000:	Halve 84 000:	Double 27 000:	Halve 87 000:	Double 69 000:	Halve 77 000:
Write the decimal and percentage equivalent for the following fractions:	$\frac{7}{10}$	$\frac{3}{5}$	$\frac{4}{10}$	$\frac{1}{3}$	$\frac{67}{100}$
8^2	$\sqrt{81}$	7^2	$\sqrt{36}$	11^2	$\sqrt{100}$

Gold 2

$0.35 + ? = 1$	$1 - 0.77 =$	$0.89 = 1 - ?$	$0.68 + ? = 1$	$? + 0.83 = 1$	$0.85 = 1 - ?$
$70 \times 6 =$	$80 \times 70 =$	$600 \times 8 =$	$0.4 \times 8 =$	$7 \times 900 =$	$8 \times 0.9 =$
Put one prime number between 72 and 100 each of the next 5 boxes:					
Double 87 000:	Halve 73 000:	Double 39 000:	Halve 96 000:	Double 53 000:	Halve 99 000:
Write the decimal and percentage equivalent for the following fractions:	$\frac{9}{10}$	$\frac{4}{5}$	$\frac{3}{10}$	$\frac{4}{6}$	$\frac{23}{100}$
7^2	$\sqrt{144}$	11^2	$\sqrt{64}$	6^2	$\sqrt{81}$