

Year 5 KIRFS

I know decimal number bonds to 1

$$\begin{array}{ll} 0.6 + 0.4 = 1 & 3.7 + 6.3 = 10 \\ 0.4 + 0.6 = 1 & 6.3 + 3.7 = 10 \\ 1 - 0.4 = 0.6 & 10 - 6.3 = 3.7 \\ 1 - 0.6 = 0.4 & 10 - 3.7 = 6.3 \end{array}$$

$$\begin{array}{ll} 0.75 + 0.25 = 1 & 4.8 + 5.2 = 10 \\ 0.25 + 0.75 = 1 & 5.2 + 4.8 = 10 \\ 1 - 0.25 = 0.75 & 10 - 5.2 = 4.8 \\ 1 - 0.75 = 0.25 & 10 - 4.8 = 5.2 \end{array}$$

and 10

Key Vocabulary

What do I **add** to 0.8 to make 1?
What is 1 **take away** 0.06?
What is 1.3 **less than** 10?
How many more than 9.8 is 10?
What is the **difference** between 0.92 and 10?

This

list

I know the multiplication and division facts for all times tables up to 12×12

Children should be able to answer these questions in any order, including missing number questions

e.g. $7 \times \bigcirc = 28$ or $\bigcirc \div 6 = 7$.

Key Vocabulary

What is 12 **multiplied by** 6?
What is 7 **times** 8?
What is 84 **divided by** 7?

I can recall metric conversions

1 kilogram = 1000 grams

1 kilometre = 1000 metres

1 metre = 100 centimetres

1 metre = 1000 millimetres

1 centimetre = 10 millimetres

1 litre = 1000 millimetres

Children should also be able to apply these facts to answer questions.

e.g. How many metres in $1\frac{1}{2}$ km?

Look at the prefixes – Can your child work out the meanings of kilo-, centi- and milli-?

How far? – Calculate some distances using

Top tip: practise these

Year 5 KIRFS

Stage 4

I can identify prime numbers up to 20

A prime number is a number with no factors other than itself and one.

The following numbers are prime numbers:

2, 3, 5, 7, 11, 13, 17, 19

A composite number is divisible by a number other than 1 or itself. The following numbers are composite numbers:

4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20

Children should be able to explain how they know that a number is composite.

E.g.
is

15

Key Vocabulary

- prime number**
- composite number**
- factor**
- multiple**

Stage 4

I can recall square numbers up to 12² and their square roots

$1^2 = 1 \times 1 = 1$	$\sqrt{1} = 1$
$2^2 = 2 \times 2 = 4$	$\sqrt{4} = 2$
$3^2 = 3 \times 3 = 9$	$\sqrt{9} = 3$
$4^2 = 4 \times 4 = 16$	$\sqrt{16} = 4$
$5^2 = 5 \times 5 = 25$	$\sqrt{25} = 5$
$6^2 = 6 \times 6 = 36$	$\sqrt{36} = 6$
$7^2 = 7 \times 7 = 49$	$\sqrt{49} = 7$
$8^2 = 8 \times 8 = 64$	$\sqrt{64} = 8$
$9^2 = 9 \times 9 = 81$	$\sqrt{81} = 9$
$10^2 = 10 \times 10 = 100$	$\sqrt{100} = 10$
$11^2 = 11 \times 11 = 121$	$\sqrt{121} = 11$
$12^2 = 12 \times 12 = 144$	$\sqrt{144} = 12$

Children should also be able to recognise

Key Vocabulary

- What is 8 squared?
- What is 7 multiplied by itself?
- What is the square root of 144?
- Is 81 a square number?

Stage 5

I can find factor pairs of a number

Children should now know all multiplication and division facts up to 12×12 .

When given a number in one of these times tables, they should be able to state a factor pair which multiply to make this

$$24 = 4 \times 6$$

$$24 = 8 \times 3$$

$$56 = 7 \times 8$$

$$54 = 9 \times 6$$

$$42 = 6 \times 7$$

$$25 = 5 \times 5$$

$$84 = 7 \times 12$$

$$15 = 5 \times 3$$

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Key Vocabulary

- Can you find a **factor** of 28?
- Find two numbers whose **product** is 20.
- I know that 6 is a factor of 72 because 6 multiplied by 12 equals 72.

are
ex-

Top tip: practise these facts little and often!