

Key Instant Recall Facts

Year 6 – Autumn, Half Term 1

I know all my times tables facts to 12x12

Example

fact family:

$$7 \times 8 = 56$$

$$8 \times 7 = 56$$

$$56 \div 8 = 7$$

$$56 \div 7 = 8$$

Example missing

number questions:

$$7 \times \underline{\quad} = 56$$

$$56 = \underline{\quad} \times 7$$

$$\underline{\quad} = 8 \times 7$$

$$56 \div \underline{\quad} = 7$$

$$56 \div 8 = \underline{\quad}$$

$$\underline{\quad} \div 7 = 8$$

Key Vocabulary

What is 8 **times** 4?

What is 8 **multiplied** by 4?

What is 16 **divided** by 8?

What, **multiplied by** 7 equals 56?

56 is what **times** 7?

Name a **factor pair** of 56?

Being able to answer missing number and division questions helps children

be able to recognise factor pairs, such as for the above example -

‘Name the factor pairs of 56’ (7 x 8, also 14 x 4, 28 x 2, 56 x 1)

Top Tips

The secret to success is practising **little** and **often**.

Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don’t need to practise them all at once: perhaps you could have a fact of the day. If you would like more ideas, please speak to your child’s teacher.

Speed Challenge – Take two packs of playing cards and remove the kings. Turn over two cards and ask your child to multiply the numbers together (Ace = 1, Jack = 11, Queen = 12). How many questions can they answer correctly in 2 minutes? Practise regularly and see if they can beat their high score.

Online games – There are many games online which can help children practise their multiplication and division facts. We encourage children to use Times Table Rockstars or you can search for ‘Hit the Button’.

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Key Instant Recall Facts

Year 6 – Autumn, Half Term 2

I can identify common pairs

The factors of a number are all numbers which divide it with no remainder.

The factors of 24 are 1, 2, 3, 4, 6, 8, 12, and 24.

The factors of 56 are 1, 2, 4, 7, 8, 14, 28 and 56.

The common factors of two numbers are the factors they share.

So the common factors of 24 and 56 are 1, 2, 4 and 8.

The greatest common factor of 24 and 56 is 8.

Key Vocabulary

factor

common factor

multiple

greatest common factor

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

E.g. 8 is a common factor of 24 and 56 because $24 = 8 \times 3$ and $56 = 8 \times 7$.

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There are many online games to practise finding the greatest common factor, for example:

<http://www.fun4thebrain.com/beyondfacts/gcfsketch.html>

Choose two numbers. Take it in turns to name factors. Who can find the most?

Key Instant Recall Facts

Year 6 – Spring, Half Term 1

I can recall metric conversions

$$\frac{1}{2} = 0.5 = 50\% \quad \frac{1}{10} = 0.1 = 10\% \quad \frac{1}{100} = 0.01 = 1\%$$

$$\frac{1}{4} = 0.25 = 25\% \quad \frac{2}{10} = 0.2 = 20\% \quad \frac{17}{100} = 0.17 = 17\%$$

$$\frac{3}{4} = 0.75 = 75\% \quad \frac{5}{10} = 0.5 = 50\% \quad \frac{50}{100} = 0.5 = 50\%$$

$$\frac{1}{5} = 0.2 = 20\% \quad \frac{9}{10} = 0.9 = 90\% \quad \frac{99}{100} = 0.99 = 99\%$$

$$\frac{3}{5} = 0.6 = 60\%$$

Children should be able to move fluently between decimal, fraction and percentage equivalents. For example they should know that 0.21 is 21 hundredths. They should also be able to simplify fractions confidently: 3/15 can be simplified to 1/5 etc.

Key Vocabulary

How many **tenths** is 0.8?

How many **hundredths** is 0.12?

Write 0.75 as a **fraction**.

Write $\frac{1}{4}$ as a **decimal**.

What is 0.37 as a **percentage**?

Top Tips

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Play games - Make some cards with pairs of equivalent fractions and decimals. Use these to play the memory game or snap. Or make your own dominoes with a mixture of fractions, decimals and percentages.

Key Instant Recall Facts

Year 6 – Spring, Half Term 2

I can identify prime numbers up to 50

A **prime number** is a number with no factors other than itself and one. In multiplication and division, they are the building blocks of all other whole numbers. The following numbers are prime numbers:

2, 3, 5, 7, 11, 13, 17, 19, 23, 27, 29, 31, 37, 41, 43, 47

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, 22, 24, 25, 26, 27, 28, 30, 32, 34, 35, 36, 38, 39, 40, 42, 44, 45, 46, 48, 49, 50

Key Vocabulary

Prime number

Composite number

Factor

Multiple

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

E.g. 15 is composite because it is a multiple of 3 and 5.

Top Tips

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It's really important that your child uses mathematical vocabulary accurately. Choose a number between 2 and 50. How many correct statements can your child make about this number using the vocabulary above?

Make a set of cards for the numbers from 2 to 20. How quickly can your child sort these into prime and composite numbers? How many even prime numbers can they find? How many odd composite numbers?