



Key Instant Recall Facts

Year 6

Autumn 1

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

By the end of this half term, children should know the following facts. The aim is for them to recall these facts instantly.

Please see separate sheet for all times table facts.

Key Vocabulary

What is 12 **multiplied by** 6?

What is 7 **times** 8?

What is 84 **divided by** 7?

They should be able to answer these questions in any order, including missing number questions e.g. $7 \times \bigcirc = 28$ or $\bigcirc \div 6 = 7$.

Children who have already mastered their times tables should apply this knowledge to answer questions including decimals e.g. $0.7 \times \bigcirc = 4.2$ or $\bigcirc \div 60 = 0.7$.

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.

Practice number facts online:

<https://www.topmarks.co.uk/maths-games/hit-the-button>



Key Instant Recall Facts

Year 6

Autumn 2

I can identify common factors of a pair of numbers and I can identify prime numbers up to 50

By the end of this half term, children should know the following facts. The aim is for them to recall these facts instantly.

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

E.g. 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.

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

The greatest common factor of 24 and 56 is 8.

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 $56 = 8 \times 7$. This will be useful when working with fractions!

Key Vocabulary

factor

common factor

multiple

greatest common factor

prime number

composite number

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, 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

Top Tips

There are many online games to practise finding the greatest common factor, for example: www.fun4thebrain.com/beyondfacts/gcfsketch.html

Choose two numbers. Take it in turns to name factors. Who can find the most? 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 50. 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?



Key Instant Recall Facts

Year 6

Spring 1

I can convert between fractions, decimals and percentages.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts instantly.

$$\frac{1}{2} = 0.5$$

$$\frac{1}{4} = 0.25$$

$$\frac{3}{4} = 75\%$$

$$\frac{1}{10} = 0.1$$

$$\frac{1}{5} = 0.2$$

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

$$\frac{9}{10} = 0.9$$

$$\frac{1}{100} = 0.01 = 1\%$$

$$\frac{7}{100} = 0.07 = 7\%$$

$$\frac{21}{100} = 0.21 = 21\%$$

$$\frac{75}{100} = 0.75 = 75\%$$

$$\frac{99}{100} = 0.99 = 99\%$$

Please note that this list is not exhaustive!

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**?

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: start with tenths before moving on to hundredths.

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 fractions on one side and decimals on the other.

Practice number facts online:

<https://www.topmarks.co.uk/maths-games/hit-the-button>



Key Instant Recall Facts

Year 6

Spring 2

I know conversion facts for measures and can use these to convert between measurements

By the end of this half term, children should know the following facts. The aim is for them to recall these facts instantly.

100cm = 1m
1000m = 1km
How many cm in a km?
1000g = 1kg
1000kg = 1 tonne
5miles = 8km
1kg = 2.2lb

Key Vocabulary

Conversions

How many **mm** in one **m**?

How many **km** in **35 miles**?

Children should know these facts and how to convert measurements using them.

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.

Measuring at home – encourage children to help when discussing how much is needed for recipes, decorating, DIY etc. What about if we were to invite the whole street? How would this change our amount? What might we measure in then?

Distances on journeys – What measurement do our signposts show? Could we convert that to km? Discuss the opposite conversion if driving abroad.

Practice number facts online:

<https://www.topmarks.co.uk/maths-games/hit-the-button>



Key Instant Recall Facts

Year 6

Summer Term

I know the divisibility rules divisibility rules

By the end of this term, children should know the following facts. The aim is for them to recall these facts instantly.

Rules of Divisibility		
Divisible by	Conditions	Examples
2	Last digit is 0, 2, 4, 6, or 8	752, 300678, 890
3	Sum of the digits is divisible by 3	5673 $5+6+7+3 = 21$ $21 \div 3 = 7$
4	Last two digits is divisible by 4	7624 $24 \div 4 = 6$
5	Last digit is 0 or 5	670, 735
6	Number is divisible by 2 and 3	8862 $8+8+6+2 = 24$ $24 \div 3 = 8$
7	Double the value of the last digit and subtract the result from the rest of the number. The answer is divisible by 7.	385 $38 - (2 \times 5) = 28$ $28 \div 7 = 4$
8	Last three digits of a number is divisible by 8.	1800 $800 \div 8 = 100$
9	Sum of the digits is divisible by 9	378 $3 + 7 + 8 = 18$ $18 \div 9 = 2$
10	Last digit is 0	8740

A song to help you remember the divisibility rules:

<https://www.youtube.com/watch?v=RIRRJ88rASE&t=32s>

Practice number facts online:

<https://www.topmarks.co.uk/maths-games/hit-the-button>