

KEY INSTANT RECALL FACTS

Year 6
Autumn 1

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

By the end of this half term, children should know the following facts. The aim is for them to recall these facts instantly. See separate sheet for all times tables facts. This is a chance for Year 6 children to Consolidate their knowledge of multiplication and division facts and to increase their speed of recall. They should be able to answer these questions in a missing number questions. E.g. $6 \times \square = 42$ or $\square \div 8 = 4$

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

Key Vocabulary

What is 8 **multiplied by** 6?

What is 7 **times** 4?

What is 81 **divided by** 9?

What is the **product** of 5
and 7?

Top Tips - The secret to success is practising little and often. Use time wisely.

Can you practise these recall facts while walking to school or during a car journey? You do not need to practise them all at once; perhaps you could have a fact of the day.

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 and Queen = 12). How many questions can they answer correctly in 2 minutes? Practise regularly and see if they can beat their highest score.

Online games - Activities on www.educationcity.com www.conkermaths.org www.timestables.co.uk and www.timestables.me.uk **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 2

I can identify common factors of a pair of numbers

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.

Key Vocabulary

Factor

Common factor

Multiple

Highest common
factor

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 highest 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 $56 = 8 \times 7$

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Online games - Activities on www.educationcity.com, www.conkermaths.org www.timestables.co.uk www.timestables.me.uk and

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

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

NOTE - We do not expect children to know all the factors of a number instantly but would expect them to be able to work them out within a minute or so for numbers under 100

KEY INSTANT RECALL FACTS

Year 6
Spring 1

I know common decimals, fractions and percentage equivalences.

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	=	50%
$\frac{1}{4}$	=	0.25	=	25%
$\frac{3}{4}$	=	0.75	=	75%
$\frac{1}{10}$	=	0.1	=	10%
$\frac{3}{10}$	=	0.3	=	30%
$\frac{1}{5}$	=	0.2	=	20%
$\frac{3}{5}$	=	0.6	=	60%
$\frac{1}{100}$	=	0.01	=	1%
Etc...				

Key Vocabulary

Write 0.75 as a fraction.

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

What is $\frac{3}{4}$ as a
percentage?

Children should be able to convert between decimals, fractions and percentages for $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$ and any number of tenths and hundredths.

Top Tips - The secret to success is practising **little** and **often**. Use time wisely. Can you practise these recall facts while walking to school or during a car journey? You do not 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.

Play games - Make some cards with equivalent fractions, decimals and percentages. Use these to play the memory game or snap. Or make your own dominoes with fractions on one side and decimals on the other.

KEY INSTANT RECALL FACTS

Year 6
Spring 2

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. A prime number is a number with no factors other than one and itself. The following numbers are prime numbers: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43 and 47.

A composite number is divisible by a number other than one and 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, 40, 42, 44, 45, 46, 48, 49 and 50. Children should be able to explain how they know that a number is composite. E.g. 39 is a composite because it is a multiple of 3 and 13.

Key Vocabulary

Prime number

Composite
number

factor

multiple

Top Tips The secret to success is practising little and often. Use time wisely. Can you practise these recall facts while walking to school or during a car journey? You do not need to practise them all at once; perhaps you could have a fact of the day.

It is very 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 key 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 can they find? Please note that 1 is not a prime or composite number.



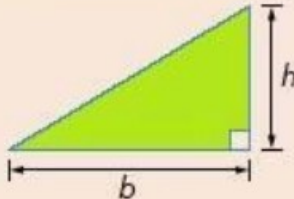
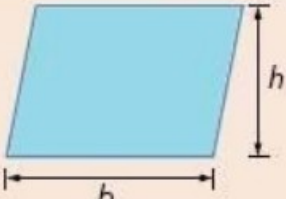
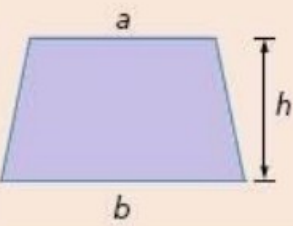
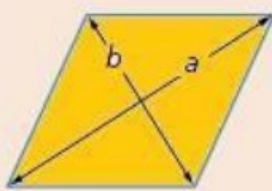

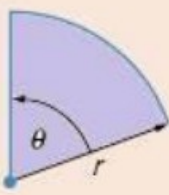
KEY INSTANT RECALL FACTS

Year 6
Summer 1

I know the formulae for finding the area of different shapes

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

The area of a shape is a measure of the size of its surface.

<p>Square Area = l^2</p> 	<p>Rectangle Area = $l \times w$</p> 	<p>Triangle Area = $\frac{1}{2} b \times h$</p> 	<p>Parallelogram Area = $b \times h$</p> 
<p>Trapezium Area = $\frac{1}{2} (a + b)h$</p> 	<p>Rhombus Area = $\frac{1}{2} a \times b$</p> 	<p>Circle Area = πr^2</p> 	<p>Sector Area = $\frac{\theta}{360} \pi r^2$</p> 

Children should also be able to recall the formula for finding the area of different shapes.

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 do not need to practise them all at once; perhaps you could have a fact of the day.

Key Vocabulary

Area
Base
Height
Pi
Radius

It is very important that your child uses mathematical vocabulary accurately. They must use language such as height, length, base, width and radius when recalling the appropriate formulae.

KEY INSTANT RECALL FACTS

Year 6
Summer 2

I know the first 5 cube numbers

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

Cube number is any number multiplied by itself three times. E.g. $n \times n \times n$. It can be written as n^3 . The first five cube numbers are:

$$1 \times 1 \times 1 = 1$$

$$2 \times 2 \times 2 = 8$$

$$3 \times 3 \times 3 = 27$$

$$4 \times 4 \times 4 = 64$$

$$5 \times 5 \times 5 = 125$$

Key Vocabulary

Cube number



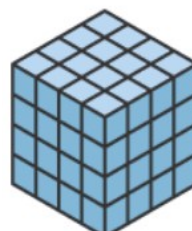
1 is the first cube number, because $1 \times 1 \times 1 = 1$



8 is the second cube number, because $2 \times 2 \times 2 = 8$



27 is the third cube number, because $3 \times 3 \times 3 = 27$



64 is the fourth cube number, because $4 \times 4 \times 4 = 64$

Children should be able to explain what a cube number is and recall the first five cube numbers quickly.

Use visual images to help children understand what a cube number is.

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