SPRING BANK PRIMARY SCHOOL
YEAR FIVE KEY INSTANT RECALL FACTS

AUTUMN HALF TERM ONE

I can find factor pairs of a number..

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

Children should now know all multiplication and division facts up to 12 x 12. When given a number in one of those times tables, they should be able to state a factor pair which multiply to make this number (product).

Some examples:

24 = 4 x 6	42 = 6 x 7
24 = 8 x 3	25 = 5 x 5
56 = 7 x 8	84 = 7 x 12
54 = 9 x 6	15 = 5 x 3

Key Vocabulary

Can you find a **factor** of 28?
Find 2 numbers whose **product** is 20.
I know that 6 is a **factor** of 72 because 6 multiplied by 12 is 72.

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.

Think of the question – One player thinks of a times table question (e.g. 4 x 12) and states the answer. The other player has to guess the original question.

Online Games – http://www.mathplayground.com
https://www.topmarks.co.uk/Search.aspx?q=factors

SPRING BANK PRIMARY SCHOOL
YEAR FIVE KEY INSTANT RECALL FACTS

AUTUMN HALF TERM TWO

I can recognise prime numbers to 20.

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 only two factors- itself and one. The aim is for children to recall the prime numbers to 20 instantly.

Key Vocabulary

- Prime number
- Composite number
- Factor
- Multiple

The following 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. Eg. 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 20. 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?

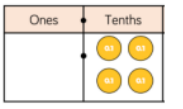
SPRING BANK PRIMARY SCHOOL
YEAR FIVE KEY INSTANT RECALL FACTS

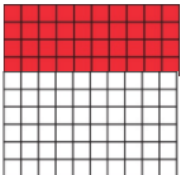
SPRING HALF TERM ONE

I can recognise equivalent fractions and decimals

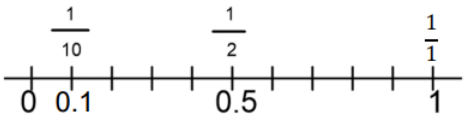
By the end of this half term, children should know the following facts. The aim is for them to recall these facts instantly.

Some examples:





$0.4 = \frac{4}{10}$



Fraction	Decimal
$\frac{1}{2}$	0.5
$\frac{1}{4}$	0.25
$\frac{3}{4}$	0.75
$\frac{1}{10}$	0.1
$\frac{2}{10}$	0.2
$\frac{3}{10}$	0.3

Key Vocabulary

How many **tenths** is 0.8?

How many **hundredths** is 0.12?

Write 0.75 as a **fraction.**

Write 1/4 as a **decimal.**

Top Tips

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Dominos - write the fraction and decimal the domino is showing

Bingo - make your own fraction to decimal bingo game

Pairs game - make your own fraction and decimal card matching game

Online games -

https://www.mathplayground.com/ASB_Puppy_Chase_Decimals.html

https://www.transum.org/software/SW/Starter_of_the_day/Students/Pairs.asp?Topic=15

https://mrnussbaum.com/death-to-decimals-and-the-adventures-of-fraction-man-online-game#google_vignette

SPRING BANK PRIMARY SCHOOL
YEAR FIVE KEY INSTANT RECALL FACTS
SPRING HALF TERM TWO

I know decimal bonds of 1 and 10.

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

Some examples:

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 – 3.7 = 6.3
1 – 0.6 = 0.4	10 – 6.3 = 3.7
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

Key Vocabulary

What do I add to 0.8 to make 1?
What is 1 take away 0.6?
What is 1.3 less than 10?
How many more than 9.8 is 10?
What is the difference between 8.9 and 10?

They should be able to answer questions in any order, including missing number questions.

Top Tips

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Buy one get three free – If your child knows one fact (e.g. 0.7 + 0.3 = 1), can they tell you the other three facts in the same fact family?
Use number bonds to 10 – How can your number bonds to 10 help you work out number bonds to 1?

SPRING BANK PRIMARY SCHOOL
YEAR FIVE KEY INSTANT RECALL FACTS
SUMMER HALF TERM ONE

I can recall metric conversions.

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

Some examples:

1 kilogram = 1000 grams
2 kilograms = 2000 grams
3 kilograms = 3000 grams
1 kilometre = 1000 metres
1 metre = 100 centimetres
1 metre = 1000 millimetres
1 centimetre = 10 millimetres
1 litre = 1000 millilitres
2 litres = 2000 millilitres

Key Vocabulary

Convert - To change the expression without changing the size or amount.

Metric units - Units of measurement using the powers of 10.

They should also be able to apply these facts to answer questions.
For example: How many metres in 1 ½ km?

Top Tips

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Look at prefixes - Can your child work out the meanings of *kilo-*, *centi-* and *milli-*? What other words begin with these prefixes?
Be practical - Do some baking and convert the measurements in the recipe.
How far? - Calculate some distances using unusual measurements. How tall is your child in mm? How far away is London in metres?

SPRING BANK PRIMARY SCHOOL
YEAR FIVE KEY INSTANT RECALL FACTS
SUMMER HALF TERM TWO

I can recall square numbers to 12 X 12 and their square roots

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

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

Key Vocabulary

What is 7 squared?
What is 7 multiplied by itself?
What is the square root of 144?
Is 30 a square number?

Children should also be able to recognise whether a number below 150 is a square number or not.

Top Tips

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Cycling squares – At http://nrich.maths.org/1151 there is a challenge involving square numbers. Can you complete the challenge and then create your own examples?
Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.