## Key Instant Recall Facts Year 5 - Spring 1

## I can recall square numbers up to 144 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.

| A square number is |
| :---: |
| a number multiplied |

by itself:
$1 \times 1=1$
$2 \times 2=4$
$3 \times 3=9$
$4 \times 4=16$
$5 \times 5=25$
$6 \times 6=36$
$7 \times 7=49$
$8 \times 8=64$
$9 \times 9=81$
$10 \times 10=100$
$11 \times 11=121$
$12 \times 12=144$

These facts are related to the square roots: $\sqrt{ } 1=1$ $\sqrt{ } 4=2$ $\sqrt{ } 9=3$ $\sqrt{ } 16=4$

$$
\sqrt{ } 25=5
$$

$$
\sqrt{ } 36=6
$$

$$
\sqrt{ } 49=7
$$

$$
\sqrt{ } 64=8
$$

$$
\sqrt{ } 81=9
$$

$$
\sqrt{ } 100=10
$$

$$
\sqrt{ } 121=11
$$

$$
\sqrt{ } 144=12
$$

Top Tips
The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school orduring a car journey? Youdon'tneedto practise them allatonce: perhaps you could have a fact of the day.

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

# Key Instant Recall Facts Year 5 - Spring 1 

## I can identify prime numbers up 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 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:
$4,6,8,9,10,12,14,15,16,18,20$

> 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

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school orduring a car journey? You don'tneedto practise them all atonce: perhaps you could have a fact of the day.
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?

## Key Instant Recall Facts Year 5 - Spring 2

## I can convert between decimals, fractions 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.

| $\frac{1}{2}=0.5$ | $=50 \%$ | $\frac{1}{100}=0.01=1 \%$ | Key Vocabulary |
| :---: | :---: | :--- | :--- | :--- |
| $\frac{1}{4}=0.25$ | $=25 \%$ | $\frac{7}{100}=0.07=7 \%$ | How many tenths is |
| $\frac{3}{4}=0.75$ | $=75 \%$ | $\frac{21}{100}=0.21=21 \%$ | $0.8 ?$ |
| $\frac{1}{10}=0.1$ | $=10 \%$ | $\frac{75}{100}=0.75=75 \%$ | How many |
| $\frac{1}{5}=0.2$ | $=20 \%$ | $\frac{99}{100}=0.99=99 \%$ | hundredths is 0.12? |
| $\frac{3}{5}=0.6$ | $=60 \%$ |  | Write 0.75 as a |
| $\frac{9}{10}=0.9$ | $=90 \%$ |  | fraction. Write $1 / 4$ as a |
|  |  |  | decimal. |

## Top <br> Tips

The secret to success is practising little and often. Use time wisely. Can you practice?
these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could start with tenths before moving onto 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.
https://www.topmarks.co.uk/maths-games/daily10 - Level 6 Fractions - decimal equivalents

