## I can partition numbers, to 5, into two groups.

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

## Zero and five make five. One and four make five. Two and three make five.

## Key Vocabulary

Use the stem sentence:
$\qquad$ make $\qquad$

For example, ' 2 and 3 make 5.'

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.

Use practical resources, for example -

- Use items around the house to find different ways of making 5. e.g. one blue sock and four red socks. ‘ One and four make five.'
- Make up stories with items around the home, e.g. there are 2 cars in the car park and 3 more cars arrive, how many cars altogether? 'Two and three make five.'
- Asking questions during daily routines e.g. you have 1 sausage on your plate and I have four sausages on my plate, how many sausages altogether? 'One and four make five.'

Key Instant Recall Facts Year One - Spring 1

## I know number bonds for each number to 10.

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

| $0+10=10$ | $2+8=10$ | $4+6=10$ |
| :--- | :--- | :--- |
| $10+0=10$ | $8+2=10$ | $6+4=10$ |
| $10-10=0$ | $10-8=2$ | $10-6=4$ |
| $10-0=10$ | $10-2=8$ | $10-4=6$ |
| $1+9=10$ | $3+7=10$ | $5+5=10$ |
| $9+1=10$ | $7+3=10$ | $10-5=5$ |
| $10-9=1$ | $10-7=3$ |  |
| $10-1=9$ | $10-3=7$ |  |

Key Vocabulary
What is 7 add $3 ?$
What is 2 plus $8 ?$
What is 10 take away
$2 ?$
What is 1 less than
$10 ?$

They should be able to answer these questions in any order, including missing number questions e.g. $6+\square=10$ or $10-\square=3$

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.
Use practical resources, for example -
Your child has six carrots on their plate and you give them four more. Can they predict how many they will have now?

Make a poster - We use Numicon at school. You can find pictures of the Numicon shapes online - your child could make a poster showing the different ways of making 10.

Play Games - You can play number bond pairs online such as Hit the Button, https://www.topmarks.co.uk/maths-games/hit-the-button. See how many questions you can answer in just one minute.

## I know doubles and halves of 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.

| $0+0=0$ | $1 / 2$ of $0=0$ |  |
| :--- | :--- | :--- |
| $1+1=2$ | $1 / 2$ of $2=1$ | $11+11=22$ |
| $2+2=4$ | $1 / 2$ of $4=2$ | $12+12=24$ |
| $3+3=6$ | $1 / 2$ of $6=3$ | $13+13=26$ |
| $4+4=8$ | $1 / 2$ of $8=4$ | $14+14=28$ |
| $5+5=10$ | $1 / 2$ of $10=5$ | $15+15=30$ |
| $6+6=12$ | $1 / 2$ of $12=6$ | $16+16=32$ |
| $7+7=14$ | $1 / 2$ of $14=7$ | $17+17=34$ |
| $8+8=16$ | $1 / 2$ of $16=8$ | $18+18=36$ |
| $9+9=18$ | $1 / 2$ of $18=9$ | $19+19=38$ |
| $10+10=20$ | $1 / 2$ of $20=10$ | $20+20=40$ |

Key Vocabulary What double 9 ?

## What is half of 14 ?

## 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.

Use what you already know - Encourage your child to find the connection between the 2 times table and double facts.

Ping Pong - In this game, the adult says 'Ping', and the child says 'Pong'. Then the adult says a number and the child doubles it. For a harder version, the adult can say 'Pong'. The child replies 'Ping' and then halves the number given.

Play games - See how many questions you can answer in just one minute by playing the doubling and halving games on www.hitthebutton.co.uk

## I know the multiplication and division facts for the $\mathbf{8}$ times table.

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

| $8 \times 1=8$ | $1 \times 8=8$ | $8 \div 8=1$ | $8 \div 1=8$ |
| :--- | :--- | :--- | :--- |
| $8 \times 2=16$ | $2 \times 8=16$ | $16 \div 8=2$ | $16 \div 2=8$ |
| $8 \times 3=24$ | $3 \times 8=24$ | $24 \div 8=3$ | $24 \div 3=8$ |
| $8 \times 4=32$ | $4 \times 8=32$ | $32 \div 8=4$ | $32 \div 4=8$ |
| $8 \times 5=40$ | $5 \times 8=40$ | $40 \div 8=5$ | $40 \div 5=8$ |
| $8 \times 6=48$ | $6 \times 8=48$ | $48 \div 8=6$ | $48 \div 6=8$ |
| $8 \times 7=56$ | $7 \times 8=56$ | $56 \div 8=7$ | $56 \div 7=8$ |
| $8 \times 8=64$ | $8 \times 8=64$ | $64 \div 8=8$ | $64 \div 8=8$ |
| $8 \times 9=72$ | $9 \times 8=72$ | $72 \div 8=9$ | $72 \div 9=8$ |
| $8 \times 10=80$ | $10 \times 8=80$ | $80 \div 8=10$ | $80 \div 10=8$ |
| $8 \times 11=88$ | $11 \times 8=88$ | $88 \div 8=11$ | $88 \div 11=8$ |
| $8 \times 12=96$ | $12 \times 8=96$ | $96 \div 8=12$ | $96 \div 12=8$ |

Key Vocabulary
What is 8 multiplied by
$6 ?$
What is 8 times $8 ?$
What is 24 divided by
$8 ?$

They should be able to answer these questions in any order, including missing number questions e.g. $8 \times \bigcirc=32$ or $\bigcirc 8=7$

## 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.
Use what you already know - Your child will already know many of these facts from the 2, 4, 5 and 10 times tables.
Songs and Chants - There are some some catchy songs available on You Tube to help children remember multiplication facts. One we enjoy in school is https://www.youtube.com/watch?v=IZ4ooLN7Bmo
Double your fours - Multiplying a number by 8 is the same as multiplying by 4 and then doubling the answer. $4 \times 3=12$ and double 12 is 24 , so $8 \times 3=24$. Play games - See how many questions you can answer in just one minute by playing a game at www.hitthebutton.co.uk

## I know the multiplication and division facts for the 7 times table.

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

| $7 \times 1=7$ | $1 \times 7=7$ | $7 \div 7=1$ | $7 \div 1=7$ |
| :--- | :--- | :--- | :--- |
| $7 \times 2=14$ | $2 \times 7=14$ | $14 \div 7=2$ | $14 \div 2=7$ |
| $7 \times 3=21$ | $3 \times 7=21$ | $21 \div 7=3$ | $21 \div 3=7$ |
| $7 \times 4=28$ | $4 \times 7=28$ | $28 \div 7=4$ | $28 \div 4=7$ |
| $7 \times 5=35$ | $5 \times 7=35$ | $35 \div 7=5$ | $35 \div 5=7$ |
| $7 \times 6=42$ | $6 \times 7=42$ | $42 \div 7=6$ | $42 \div 6=7$ |
| $7 \times 7=49$ | $7 \times 7=49$ | $49 \div 7=7$ | $49 \div 7=7$ |
| $7 \times 8=56$ | $8 \times 7=56$ | $56 \div 7=8$ | $56 \div 8=7$ |
| $7 \times 9=63$ | $9 \times 7=63$ | $63 \div 7=9$ | $63 \div 9=7$ |
| $7 \times 10=70$ | $10 \times 7=70$ | $70 \div 7=10$ | $70 \div 10=7$ |
| $7 \times 11=77$ | $11 \times 7=77$ | $77 \div 7=11$ | $77 \div 11=7$ |
| $7 \times 12=84$ | $12 \times 7=84$ | $84 \div 7=12$ | $84 \div 12=7$ |

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

## Key Vocabulary

What is 7 multiplied by 6 ? What is 7 times 8 ? What is 84 divided by 7 ?

## 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.
Play games - See how many questions you can answer in just one minute by playing a game at www.hitthebutton.co.uk
Buy one, get three free - If your child knows one fact (e.g. $7 \times 6=42$ ), can they tell you the other three facts in the same fact family
(e.g. $6 \times 7=42,42 \quad 6=7,42 \quad 7=6$ )

# Key Instant Recall Facts Year Five - Spring 1 

## 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.

$$
\begin{aligned}
& 1 \text { kilogram }=1000 \text { grams } \\
& 2 \text { kilograms }=2000 \text { grams } \\
& 3 \text { kilograms }=3000 \text { grams } \\
& 1 \text { kilometre }=1000 \text { metres } \\
& 1 \text { metre }=100 \text { centimetres } \\
& 1 \text { metre }=1000 \text { millimetres } \\
& 1 \text { centimetre }=10 \text { millimetres }
\end{aligned}
$$

## 1 litre $=1000$ millilitres

2 litres $=2000$ millilitres etc...
They should also be able to apply these facts to answer questions.
E.g. How many metres in 1.5 km?

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? If you would like more ideas, please speak to your child's teacher.

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 Manchester in metres?

## BOUNDARY

## Key Instant Recall Facts

Year Six - 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.
$1 / 2=0.5=50 \%$
$1 / 4=0.25=25 \%$
$3 / 4=0.75=75 \%$
$1 / 10=0.1=10 \%$
$3 / 10=0.3=30 \%$
$1 / 5=0.2=20 \%$
$3 / 5=0.6=60 \%$
$1 / 100=0.01=1 \%$
Key Vocabulary
Write 0.75 as a fraction.
Write $1 / 4$ as a decimal.
What is $3 / 4$ as a
percentage?

## Etc...

Children should be able to covert between decimals, fractions and percentages for $1 / 2,1 / 4,3 / 4$ 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 KIRFs while walking to school or during a car journey? If you would like more ideas, please speak to your child's teacher.

Play Games - Make some games 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.

Online games - A game from Maths Frame that would help with this is https://mathsframe.co.uk/en/resources/resource/120/match fractions decimals and percentages\#.UCdcd2MsCEY

