

## Year 2 – Autumn 1

### I know number bonds 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 + 20 = 2020 + 0 = 2020 - 0 = 2020 - 20 = 01 + 19 = 2019 + 1 = 2020 - 1 = 1920 - 19 = 120 - 2 = 1820 - 18 = 22 + 18 = 2018 + 2 = 203 + 17 = 20 20 - 17 = 317 + 3 = 2020 - 3 = 174 + 16 = 20 16 + 4 = 20 20 - 4 = 1620 - 16 = 45 + 15 = 20 15 + 5 = 20 20 – 5 = 15 20 - 15 = 56 + 14 = 2014 + 6 = 2020 - 6 = 1420 - 14 = 67 + 13 = 20 13 + 7 = 20 20 - 7 = 1320 - 13 = 720 - 12 = 88 + 12 = 20 12 + 8 = 20 20 - 8 = 12 11 + 9 = 2020 - 11 = 99 + 11 = 20 20 - 9 = 1110 + 10 = 2020 - 10 = 10

Key Vocabulary What do I add to 5 to make 20? What is 20 take away 6? What is 3 less than 20? How many more than 16 is 20?

They should be able to answer these questions in any order, including missing number questions e.g.  $19 + \bigcirc = 20$  or  $20 - \bigcirc = 8$ .

#### 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.

<u>Use what you already know</u> – Use number bonds to 10 (e.g. 7 + 3 = 10) to work out related number bonds to 20 (e.g. 17 + 3 = 20).

<u>Use practical resources</u> – Make collections of 20 objects. Ask questions such as, "How many more conkers would I need to make 20?"

<u>Play games</u> – You can play number bond pairs online at <u>www.conkermaths.com</u> and then see how many questions you can answer in just one minute.



## Year 3 – Autumn 1

### I know number bonds for all 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**.

2 + 9 = 11	5 + 9 = 14	Example of a fact family	
3 + 8 = 11	6 + 8 = 14	6 + 9 = 15	
4 + 7 = 11	7 + 7 = 14	9 + 6 = 15	Key Vocabulary
5 + 6 = 11	6 + 9 = 15	15 – 9 = 6	What do I <b>add</b> to 5 to make 19?
3 + 9 = 12	7 + 8 = 15	15 – 9 = 6	What is 17 take away 6?
4 + 8 = 12	7 + 9 = 16		What is 13 less than 15?
5 + 7 = 12	8 + 8 = 16	Examples of other facts	How many more than 8 is 11?
6 + 6 = 12	8 + 9 = 17	4 + 5 = 9	What is the <b>difference</b> between
4 + 9 = 13	9 + 9 = 18	13 + 5 = 18	9 and 13?
5 + 8 = 13		19 – 7 = 12	
6 + 7 = 13		10 - 6 = 4	

This list includes the most challenging facts but children will need to learn **all** number bonds for each number to 20 (e.g. 15 + 2 = 17). This includes related subtraction facts (e.g. 17 - 2 = 15).

#### <u>Top Tips</u>

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.

<u>Buy one get two free</u> - If your child knows one fact (e.g. 8 + 5 = 13), can they tell you the other two facts in the same fact family?

<u>Use doubles and near doubles</u> – If you know that 6 + 6 = 12, how can you work out 6 + 7? What about 5 + 7?

<u>Play games</u> – There are missing number questions at <u>www.conkermaths.com</u> . See how many questions you can answer in just one minute.



## Year 4 – Autumn 1

### I know number bonds to 100.

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:

60 + 40 = 100	37 + 63 = 100
40 + 60 = 100	63 + 37 = 100
100 - 40 = 60	100 - 63 = 37
100 - 60 = 40	100 - 37 = 63
75 + 25 = 100	48 + 52 = 100
25 + 75 = 100	52 + 48 = 100
100 – 25 = 75	100 - 52 = 48
100 – 75 = 25	100 - 48 = 52
	100 40 - 52

#### Key Vocabulary

What do I **add** to 65 to make 100? What is 100 **take away** 6? What is 13 **less than** 100? **How many more** than 98 is 100? What is the **difference** between 89 and 100?

This list includes some examples of facts that children should know. They should be able to answer questions including missing number questions e.g.  $49 + \bigcirc = 100$  or  $100 - \bigcirc = 72$ .

#### 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 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.

<u>Buy one get three free</u> - If your child knows one fact (e.g. 8 + 5 = 13), can they tell you the other three facts in the same fact family?

<u>Use number bonds to 10</u> - How can number bonds to 10 help you work out number bonds to 100?

<u>Play games</u> – There are missing number questions at <u>www.conkermaths.com</u>. See how many questions you can answer in just 90 seconds. There is also a number bond pair game to play.



## Year 5 – Autumn 1

### I know decimal number bonds to 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 - 6.3 = 3.7
1-0.6=0.4	10 - 3.7 = 6.3
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

<b>Key Vocabulary</b>
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What do I **add** to 0.8 to make 1? What is 1 **take away** 0.06? What is 1.3 **less than** 10? **How many more** than 9.8 is 10? What is the **difference** between 0.92 and 10?

This list includes some examples of facts that children should know. They should be able to answer questions including missing number questions e.g.  $0.49 + \bigcirc = 10$  or  $7.2 + \bigcirc = 10$ .

#### 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.

<u>Buy one get two free</u> - If your child knows one fact (e.g. 8 + 5 = 13), can they tell you the other two facts in the same fact family?

<u>Use number bonds to 10</u> - How can number bonds to 10 help you work out number bonds to 100?

<u>Play games</u> – There are missing number questions at <u>www.conkermaths.com</u>. See how many questions you can answer in just 90 seconds. There is also a number bond pair game to play.



# Year 6 – Autumn 1

### I know the multiplication and division facts for all times tables up to $12\times12$ .

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.

This is a chance for Year 6 children to consolidate their knowledge of multiplication and division facts and to increase their speed of recall. 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  $\bigcirc \div 60 = 0.7$ 

#### 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 family of the day. If you would like more ideas, please speak to your child's teacher.

<u>Speed Challenge</u> – 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.

<u>Online games</u> – There are many games online which can help children practise their multiplication and division facts. <u>www.conkermaths.org</u> is a good place to start.

<u>Use memory tricks</u> – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.