

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:

37 + 63 = 100
63 + 37 = 100
100 - 63 = 37
100 - 37 = 63
48 + 52 = 100
52 + 48 = 100
100 - 52 = 48
100 - 48 = 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.

Buy one get three free - 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 4 - Autumn 2

## I know the multiplication and division facts for the 6 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**.

$6 \times 1 = 6$	$1 \times 6 = 6$	$6 \div 6 = 1$	$6 \div 1 = 6$
6 × 2 = 12	2 × 6 = 12	12 ÷ 6 = 2	12 ÷ 2 = 6
$6 \times 3 = 18$	$3 \times 6 = 18$	18 ÷ 6 = 3	18 ÷ 3 = 6
$6 \times 4 = 24$	$4 \times 6 = 24$	$24 \div 6 = 4$	$24 \div 4 = 6$
$6 \times 5 = 30$	5 × 6 = 30	30 ÷ 6 = 5	$30 \div 5 = 6$
$6 \times 6 = 36$	$6 \times 6 = 36$	$36 \div 6 = 6$	36 ÷ 6 = 6
$6 \times 7 = 42$	$7 \times 6 = 42$	$42 \div 6 = 7$	$42 \div 7 = 6$
$6 \times 8 = 48$	8 × 6 = 48	48 ÷ 6 = 8	48 ÷ 8 = 6
$6 \times 9 = 54$	9 × 6 = 54	54 ÷ 6 = 9	54 ÷ 9 = 6
6 × 10 =	10 × 6 =	60 ÷ 6 =	60 ÷ 10 =
60	60	10	6
6 × 11 =	11 × 6 =	66 ÷ 6 =	66 ÷ 11 =

#### **Key Vocabulary**

What is 8 multiplied by 6?

What is 6 times 8?

What is 24 divided by 6?

They should be able to answer these questions in any order, including missing number questions e.g.  $6 \times 6 = 72$  or  $6 \times 6 = 72$  or  $6 \times 6 = 72$ .

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

<u>Songs and Chants</u> – You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

<u>Double your threes</u> – Multiplying a number by 6 is the same as multiplying by 3 and then doubling the answer.  $7 \times 3 = 21$  and double 21 is 42, so  $7 \times 6 = 42$ .

<u>Buy one get three free</u> – If your child knows one fact (e.g.  $3 \times 6 = 18$ ), can they tell you the other three facts in the same fact family?

<u>Warning!</u> – When creating fact families, children sometimes get confused by the order of the numbers in the division number sentence. It is tempting to say that the biggest number goes first, but it is more helpful to say that the answer to the multiplication goes first, as this will help your child more in later years when they study fractions, decimals and algebra.

E.g.  $6 \times 12 = 72$ . The answer to the multiplication is 72, so  $72 \div 6 = 12$  and  $72 \div 12 = 6$ 



Year 4 - Spring 1

## I know the multiplication and division facts for the 9 and 11 times tables.

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

9 × 1 = 9	$9 \div 9 = 1$	11 × 1 = 11	11 ÷ 11 = 1
9 × 2 = 18	$18 \div 9 = 2$	$11 \times 2 = 22$	22 ÷ 11 = 2
9 × 3 = 27	$27 \div 9 = 3$	11 × 3 = 33	33 ÷ 11 = 3
9 × 4 = 36	$36 \div 9 = 4$	$11 \times 4 = 44$	$44 \div 11 = 4$
9 × 5 = 45	$45 \div 9 = 5$	$11 \times 5 = 55$	55 ÷ 11 = 5
9 × 6 = 54	$54 \div 9 = 6$	$11 \times 6 = 66$	66 ÷ 11 = 6
9 × 7 = 63	$63 \div 9 = 7$	$11 \times 7 = 77$	$77 \div 11 = 7$
9 × 8 = 72	$72 \div 9 = 8$	11 × 8 = 88	88 ÷ 11 = 8
9 × 9 = 81	81 ÷ 9 = 9	$11 \times 9 = 99$	99 ÷ 11 = 9
9 × 10 = 90	90 ÷ 9 = 10	11×10 = 110	110÷11 = 10
9 × 11 = 99	99 ÷ 9 = 11	11×11 = 121	121÷11 = 11
9 × 12 = 108	108 ÷ 9 =	11×12 = 132	132÷11 = 12
	12		

#### **Key Vocabulary**

What is 8 multiplied by 6?

What is 6 times 8?

What is 24 divided by 6?

They should be able to answer these questions in any order, including missing number questions e.g.  $9 \times \bigcirc = 54$  or  $\bigcirc \div 9 = 11$ .

## **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>Look for patterns</u> – These times tables are full of patterns for your child to find. How many can they spot?

<u>Use your ten times table</u> – Multiply a number by 10 and subtract the original number (e.g.  $7 \times 10 - 7 = 70 - 7 = 63$ ). What do you notice? What happens if you add your original number instead? (e.g.  $7 \times 10 + 7 = 70 + 7 = 77$ )

What do you already know? - Your child will already know many of these facts from the 2, 3, 4, 5, 6, 8 and 10 times tables. It might be worth practising these again!



Year 4 - Spring 2

## I can recognise decimal equivalents of fractions.

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

$$\frac{1}{2} = 0.5$$

$$\frac{1}{10} = 0.1$$

$$\frac{1}{100} = 0.01$$

$$\frac{1}{4} = 0.25$$

$$\frac{2}{10} = 0.2$$

$$\frac{7}{100} = 0.07$$

$$\frac{3}{4} = 0.75$$

$$\frac{5}{10} = 0.5$$

$$\frac{21}{100} = 0.21$$

$$\frac{6}{10} = 0.6$$

$$\frac{75}{100} = 0.75$$

$$\frac{9}{10} = 0.9$$

#### **Key Vocabulary**

How many **tenths** is 0.8?

How many **hundredths** is 0.12?

Write 0.75 as a fraction?

Write ¼ as a decimal?

Children should be able to convert between decimals and fractions 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 KIRFs while walking to school or during a car journey? You don't need to practise them all at once: start with tenths before moving on to hundredths. If you would like more ideas, please speak to your child's teacher.

<u>Play games</u> - 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.



Year 4 – Summer 1

## 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 × 7 = 56	56 ÷ 7 = 8	$56 \div 8 = 7$
$7 \times 9 = 63$	$9 \times 7 = 63$	$63 \div 7 = 9$	$63 \div 9 = 7$
7 × 10 =	10 × 7 =	70 ÷ 7 =	70 ÷ 10 =
70	70	10	7
$7 \times 11 =$	$11 \times 7 =$	77 ÷ 7 =	77 ÷ 11 =

#### **Key Vocabulary**

What is 7 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.  $7 \times 12 = 7 \times 12 =$ 

## **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>Songs and Chants</u> – You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

<u>Order of difficulty</u> – Ask your child to order these facts from the easiest to the most challenging. Can they explain why some facts are easier to remember? Then focus on practising the most challenging facts.

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



Year 4 – Summer 2

## I can multiply and divide single-digit numbers by 10 and 100.

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

7 × 10 = 70	30 × 10 = 300	$0.8 \times 10 = 8$
$10 \times 7 = 70$	$10 \times 30 = 300$	$10 \times 0.8 = 8$
70 ÷ 7 = 10	300 ÷ 30 = 10	8 ÷ 0.8 = 10
70 ÷ 10 = 7	300 ÷ 10 = 30	8 ÷ 10 = 0.8
6 × 100 = 600	40 × 100 = 4000	$0.2 \times 10 = 2$
100 × 6 = 600	$100 \times 40 = 4000$	$10 \times 0.2 = 2$
600 ÷ 6 = 100	4000 ÷ 40 = 100	$2 \div 0.2 = 10$
600 ÷ 100 = 6	4000 ÷ 100 = 40	2 ÷ 10 = 0.2

# Key Vocabulary What is 5 multiplied by 10? What is 10 times 0.9? What is 700 divided by 70? hundreds, tens, units tenths, hundredths

These are just examples of the facts for this term. Children should be able to answer these questions in any order, including missing number questions e.g.  $10 \times \bigcirc = 5$  or  $\bigcirc \div 10 = 60$ .

## **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.