

Year 4 – Autumn, Half Term 1

I know the 2x, 10x and 5x tables

Fact families

3 x 2 = 6	12 x 10 = 120	9 x 5 = 45
2 x 3 = 6	10 x 12 = 120	5 x 9 = 45
6 ÷ 2 = 3	120 ÷ 10 = 12	45 ÷ 5 = 9
6 ÷ 3 = 2	120 ÷ 12 = 10	45 ÷ 9 = 5

Key Vocabulary

What is 10 multiplied by 2?

What is 10 times 2?

What is 2, 10 times?

What is 20 divided by 2?

What is 30 shared between 5?

They should be able to answer these questions in any order, including missing number questions e.g. $2 \times 0 = 20$, or $45 \div 0 = 9$.

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.

Songs and Chants – You can find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Buy one get three free – If your child knows one fact (e.g. $3 \times 5 = 15$), can they tell you the other three facts in the same fact family?

Play online games – You can practice times tables online using Times Table Rockstars or search for 'Hit the Button' to see how many you can answer within a time limit.



Year 4 - Autumn, Half Term 2

I know the 4x table and 8x table

$0 \times 4 = 0$	$0 \div 4 = 0$	$0 \times 8 = 0$	$0 \div 8 = 0$	IZ. March Iv.
1 x 4 = 4	$4 \div 4 = 1$	1 × 8 = 8	8 ÷ 8 = 1	Key Vocabulary
2 x 4 = 8	8 ÷ 4 = 2	2 × 8 = 16	16 ÷ 8 = 2	What is 8 times 4?
3 x 4 = 12	12 ÷ 4 = 3	$3 \times 8 = 24$	$24 \div 8 = 3$	What are 4 groups of 8?
4 x 4 = 16	$16 \div 4 = 4$	$4 \times 8 = 32$	$32 \div 8 = 4$	What is 8, 4 times ?
5 x 4 = 20	20 ÷ 4 = 5	$5\times8=40$	$40 \div 8 = 5$,
$6 \times 4 = 24$	$24 \div 4 = 6$	$6 \times 8 = 48$	$48 \div 8 = 6$	What is 8 multiplied by 4?
7 x 4 = 28	28 ÷ 4 = 7	$7 \times 8 = 56$	56 ÷ 8 = 7	What is 16 divided by 8?
8 x 4 = 32	$32 \div 4 = 8$	8 × 8 = 64	$64 \div 8 = 8$	
9 x 4 = 36	$36 \div 4 = 9$	9 × 8 = 72	72 ÷ 8 = 9	
10 x 4 = 40	40 ÷ 4 = 10	$10 \times 8 = 80$	$80 \div 8 = 10$	
11 x 4 = 44	44 ÷ 4 = 11	11 × 8 = 88	88 ÷ 8 = 11	
12 x 4 = 48	48 ÷ 4 = 12	12 × 8 = 96	96 ÷ 8 = 12	Example fact family

There are 15 new facts, shown in purple.

Children should know the fact families, and be able to answer missing number questions.

 $3 \times 8 = 24$

 $8 \times 3 = 24$

 $24 \div 8 = 3$

 $24 \div 3 = 8$

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.

Songs and Chants – You can find many multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Use what you already know – If your child knows that $2 \times 5 = 10$, they can use this fact to work out that $2 \times 6 = 12$.

Online games – Children could practice using 'Hit the Button' online or Times Tables Rockstars.

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



Year 4 – Spring, Half Term 1

I know the 3x, 6x and 9x table

$0 \times 3 = 0$	$0 \times 6 = 0$	$0 \times 9 = 0$
1 × 3 = 3	$1 \times 6 = 6$	1 x 9 = 9
2 × 3 = 6	$2 \times 6 = 12$	2 x 9 = 18
$3 \times 3 = 9$	$3 \times 6 = 18$	3 x 9 = 27
4 × 3 = 12	4 × 6 = 24	4 x 9 = 36
$5 \times 3 = 15$	$5 \times 6 = 30$	5 x 9 = 45
$6 \times 3 = 18$	$6 \times 6 = 36$	6 x 9 = 54
7 × 3 = 21	$7\times 6=42$	7 x 9 = 63
8 × 3 = 24	$8 \times 6 = 48$	8 x 9 = 72
9 × 3 = 27	9 × 6 = 54	9 x 9 = 81
$10 \times 3 = 30$	$10 \times 6 = 60$	10 x 9 = 90
11 × 3 = 33	$11 \times 6 = 66$	11 x 9 = 99
$12 \times 3 = 36$	$12 \times 6 = 72$	12 x 9 = 108

Key Vocabulary

What is 9 times 3?

What are 9 groups of 3?

What is 9, 3 times?

What is 3 multiplied by 9?

What is 27 divided by 3?

There are 15 new facts, shown in purple.

Children should know the fact families, and be able to answer missing number questions.

Example fact family

 $3 \times 9 = 27$

 $9 \times 3 = 27$

 $27 \div 9 = 3$

 $27 \div 3 = 9$

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.

Pronunciation – Make sure that your child is pronouncing the numbers correctly and not getting confused between thirteen and thirty.

Songs and Chants – 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.

Online games – Children could practice using 'Hit the Button' online or Times Tables Rockstars.

Games - You can make or buy matching pair cards and play games like snap or memory games.

Apply these facts to real life situations – How many toes are in your house? What other multiplication and division questions can your child make up?



Year 4 - Spring, Half Term 2

I know the 7x, 11x and 12x table

0 x 7 = 0	$0 \times 11 = 0$	$0 \times 12 = 0$
1 × 7 = 7	1 x 11 = 11	1 x 12 = 12
$2 \times 7 = 14$	2 x 11 = 22	2 x 12 = 24
$3 \times 7 = 21$	3 x 11 = 33	3 x 12 = 36
$4\times7=28$	4 x 11 = 44	4 x 12 = 48
5 × 7 = 35	5 x 11 = 55	5 x 12 = 60
$6\times 7=42$	6 x 11 = 66	6 x 12 72
$7 \times 7 = 49$	7 x 11 = 77	7 x 12 = 84
8 × 7 = 56	8 x 11 = 88	8 x 12 = 96
9 × 7 = 63	9 x 11 = 99	9 x 12 = 108
$10 \times 7 = 70$	10 x 11 = 110	10 x 12 = 120
11 × 7 = 77	11 x 11 = 121	11 x 12 = 132
12 × 7 = 84	12 x 11 = 132	12 x 12 = 144

Key Vocabulary

What is 8 times 7?

What are 8 groups of 7?

What is 8 multiplied by 7?

What is 56 divided by 7?

There are only 6 new facts shown in purple.

However, children can find the 7s and 12s hard to learn in other times tables. Children should know the fact families, and be able to answer missing number questions.

Example fact family

 $3 \times 7 = 21$

 $7 \times 3 = 21$

 $21 \div 7 = 3$

 $21 \div 3 = 7$

Top Tips

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Pronunciation – Make sure that your child is pronouncing the numbers correctly and not getting confused between thirteen and thirty.

Songs and Chants – 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.

Online games – Children could practice using 'Hit the Button' online or Times Tables Rockstars.

Games - You can make or buy matching pair cards and play games like snap or memory games.

Apply these facts to real life situations – How many toes are in your house? What other multiplication and division questions can your child make up?



Year 4 - Summer, Half Term 1

I know key fraction to decimal equivalents

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

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

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

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

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

$$\frac{17}{100} = 0.17$$

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

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

$$\frac{50}{100} = 0.50 = 0.5$$

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.

What fraction is equivalent to 0.5?

Children should be able to convert back and forth.

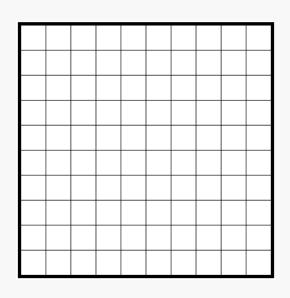
Children should recognise key equivalences, for example that sixty hundredths is equal to six tenths, which can be written 0.6

Top Tips

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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.

Discuss and draw - What does your child find tricky? Is it that sixty hundredths = six tenths? Is it that a quarter is 0.25? Using a 100-grid like this to represent 1, and shading fractions and decimals can help.





Year 4 - Summer, Half Term 2

I can multiply and divide by 10 and 100

$7\times 10=70$	$30 \times 10 = 300$	0.8 × 10 = 8
10 × 7 = 70	10 × 30 = 300	10 × 0.8 = 8
70 ÷ 7 = 10	300 ÷ 30 = 10	8 ÷ 0.8 = 10
70 ÷ 10 = 7	300 ÷ 10 = 30	8 ÷ 10 = 0.8

$$6 \times 100 = 600$$
 $40 \times 100 = 4000$ $0.2 \times 10 = 2$
 $100 \times 6 = 600$ $100 \times 40 = 4000$ $10 \times 0.2 = 2$
 $600 \div 6 = 100$ $4000 \div 40 = 100$ $2 \div 0.2 = 10$
 $600 \div 100 = 6$ $4000 \div 100 = 40$ $2 \div 10 = 0.2$

Key Vocabulary

What is 5 multiplied by 10?
What is 10 times 0.9?
What is 700 divided by 70?
hundreds, tens, ones,
tenths, hundredths

These are just some examples. Children should be able to answer these, to build their confidence in place value for larger numbers to come. Including missing number questions as well.

Top Tips

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In school we use a **Gattegno chart** (right) to help children's confidence with place value. You can use this as a visual guide, or play games using this chart where you start on a number, for example, perform lots of operations, and see if your child keeps up.

1000	2000	3000	4000	5000	6000	7000	8000	9000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09