



Key Instant Recall Facts

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**.

Here are some examples of facts that children should know:

$60 + 40 = 100$

$37 + 63 = 100$

$40 + 60 = 100$

$63 + 37 = 100$

$100 - 40 = 60$

$100 - 63 = 37$

$100 - 60 = 40$

$100 - 37 = 63$

$75 + 25 = 100$

$48 + 52 = 100$

$25 + 75 = 100$

$52 + 48 = 100$

$100 - 25 = 75$

$100 - 52 = 48$

$100 - 75 = 25$

$100 - 48 = 52$

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?

Children should be able to recall any pair of numbers that make 100. They should be able to answer missing number questions such as $49 + \bigcirc = 100$ or $100 - \bigcirc = 72$ with little hesitation.

Top Tips for Practising at Home

The secret to success is practising **little** and **often**. Can you practise these key facts 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. $85 + 15 = 100$), can they tell you the other three facts in the same fact family?

Use number bonds to 10 – Encourage your child to think about how they can use the number facts they already know. For example, if they know that $6 + 4 = 10$, then can they work out $60 + 40 = 100$ (6 tens + 4 tens = 10 tens)? Also, to find what to add to 72 to make 100, they know that the answer must have 8 units by using number bonds to ten.

Play games – For example, try playing 'pairs' where the cards have to add up to a given number.

Practise online – www.topmarks.co.uk/maths-games/hit-the-button is great for practising quick recall. www.conkermaths.org/cmweb.nsf/products/numberbondpairs.html has a pairs game to play.

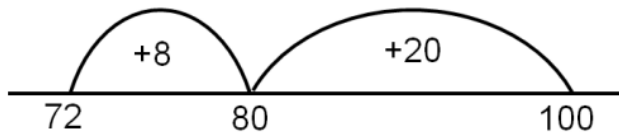
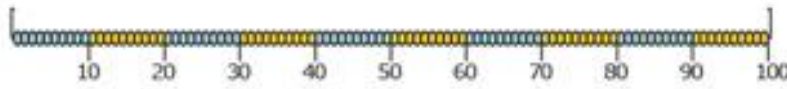
See overleaf for how this relates to learning in school

I know number bonds to 100.

Learning in School

In school, we practise number bonds regularly by counting forwards and backwards from different starting numbers and through quick response to oral questions.

We encourage the children to represent the facts they know visually. Here are some examples of visual images that we use:



| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |



Learning number bonds helps children with mental calculations such as these:

$$500 - 345$$

$$2008 - 1983$$

$$745 + 58$$

It will also help them to solve real life problems such as:

If I spend £7.28, what is the change from £10.00?

I need 400g of flour for my recipe. I have 218g left in the packet. How much more do I need to buy?



Key Instant Recall Facts

Year 4 – Autumn 2

I know the multiplication and division facts for the 6 and 12 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**.

| | | | |
|--------------------|------------------|----------------------|--------------------|
| $6 \times 1 = 6$ | $6 \div 6 = 1$ | $12 \times 1 = 12$ | $12 \div 12 = 1$ |
| $6 \times 2 = 12$ | $12 \div 6 = 2$ | $12 \times 2 = 24$ | $24 \div 12 = 2$ |
| $6 \times 3 = 18$ | $18 \div 6 = 3$ | $12 \times 3 = 36$ | $36 \div 12 = 3$ |
| $6 \times 4 = 24$ | $24 \div 6 = 4$ | $12 \times 4 = 48$ | $48 \div 12 = 4$ |
| $6 \times 5 = 30$ | $30 \div 6 = 5$ | $12 \times 5 = 60$ | $60 \div 12 = 5$ |
| $6 \times 6 = 36$ | $36 \div 6 = 6$ | $12 \times 6 = 72$ | $72 \div 12 = 6$ |
| $6 \times 7 = 42$ | $42 \div 6 = 7$ | $12 \times 7 = 84$ | $84 \div 12 = 7$ |
| $6 \times 8 = 48$ | $48 \div 6 = 8$ | $12 \times 8 = 96$ | $96 \div 12 = 8$ |
| $6 \times 9 = 54$ | $54 \div 6 = 9$ | $12 \times 9 = 108$ | $108 \div 12 = 9$ |
| $6 \times 10 = 60$ | $60 \div 6 = 10$ | $12 \times 10 = 120$ | $120 \div 12 = 10$ |
| $6 \times 11 = 66$ | $66 \div 6 = 11$ | $12 \times 11 = 132$ | $132 \div 12 = 11$ |
| $6 \times 12 = 72$ | $72 \div 6 = 12$ | $12 \times 12 = 144$ | $144 \div 12 = 12$ |

Key Vocabulary

What is 8 **multiplied by** 6?

What is 12 **times** 7?

What is 72 **divided by** 6?

They should be able to answer these questions in any order, including missing number questions e.g. $6 \times \bigcirc = 54$ or $\bigcirc \div 6 = 11$.

Top Tips for Practising at Home

The secret to success is practising **little** and **often**. Can you practise these key facts 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.

Songs and Chants – There are lots of good songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

You already know lots of these facts – Your child has already learnt the 2, 3, 4, 5, 6 and 10 times tables so they already know what 2x, 3x, 4x, 5x, 6x and 10x six is! Encourage them to write out their 6 times table and cross off the facts they already know from other tables. There isn't much left to learn!

Double and double again – 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 $7 \times 6 = 42$. The 6 times table can be doubled to give the 12 times table.

Buy one get three free – If your child knows one fact (e.g. $12 \times 6 = 72$), can they tell you the other three facts in the same fact family?

Practise online – Try www.bbc.co.uk/skillswise/game/ma13tabl-game-tables-grid-find. Use the patterns to complete the grid as fast as you can.

See overleaf for how this relates to learning in school

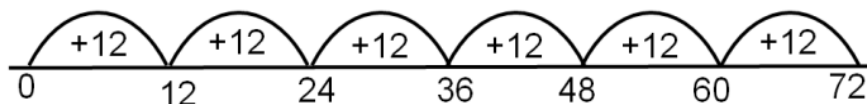
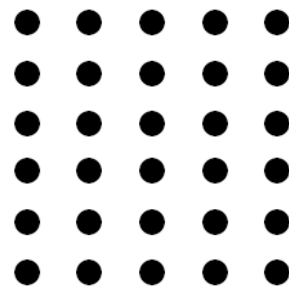
I know the multiplication and division facts for the 6 and 12 times tables.

Learning in School

In school, we start by doubling the 3 times table facts and thinking about the facts that they already know. We then count forwards and backwards in sixes and look for relationships between the 3, 6 and 12 times tables. We say the tables in order and relate them to division facts. Finally, we practise quick recall in any order (including division).

Some of the approaches we use are: saying them, singing them, drawing them, looking for patterns, making up rhymes and quick response to oral questions.

We encourage the children to represent the facts they know visually. Here are some examples of visual images that we use:



We also encourage them to make links with the facts that they already know. For example, they know that $10 \times 12 = 120$, so can they use this to work out 9×12 or 11×12 ?

Your child will be learning to solve problems involving multiplication and division such as:

120 people go to a school concert. They pay £1.35 each. How much ticket money is collected?

Programmes cost 12p each. Selling programmes raises £10.80. How many programmes are sold?

Knowing the tables facts by heart makes solving problems much easier!



Key Instant Recall Facts

Year 4 – Spring 1

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**.

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{99}{100} = 0.99$$

Key Vocabulary

How many **tenths** is 0.8?

How many **hundredths** is 0.12?

Write 0.75 as a **fraction**.

Write $\frac{1}{4}$ 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 for Practising at Home

The secret to success is practising **little** and **often**. Can you practise these key facts 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.

Relate to division – Try converting different fractions to decimals at:

www.amblesideprimary.com/ableweb/mentalmaths/fracto.html. Can your child predict what the answer is going to be? Can they see how tenths and hundredths are related to dividing by 10 or 100?

Play games – Make some cards with pairs of equivalent fractions and decimals. Use these to play the memory game or snap. Or you could make your own dominoes with fractions on one side and decimals on the other.

Practise online – There are many good games to play to practise these equivalents. Here are a few to try:

www.sheppardsoftware.com/mathgames/fractions/FractionsToDecimals.htm

mrnussbaum.com/death-decimals/

www.interactivestuff.org/match/maker.phtml?featured=1&id=8

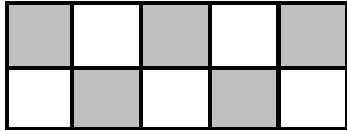
See overleaf for how this relates to learning in school

I can recognise decimal equivalents of fractions.

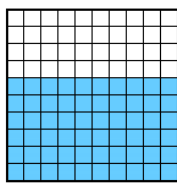
Learning in School

In school, we represent fractions and decimals visually in different ways to help the children to see the equivalent values for themselves.

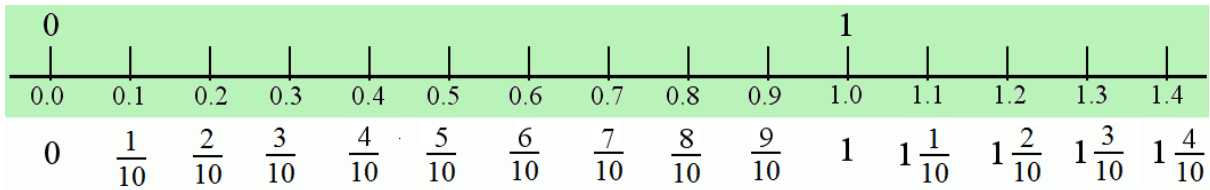
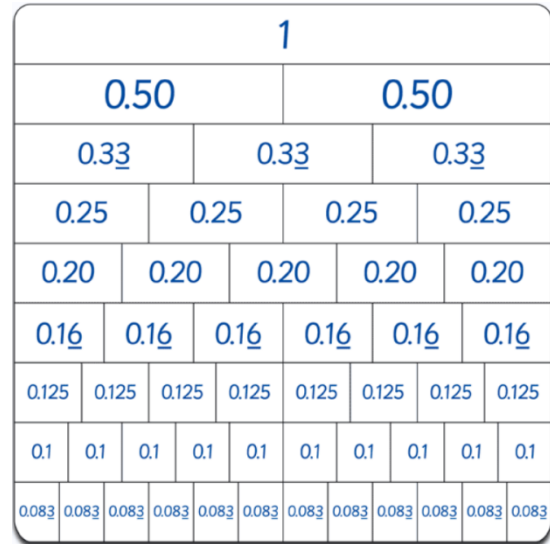
Here are some examples of visual images that we use:



0.6
six tenths



0.60
sixty hundredths



| | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|-----|
| 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 | 0.1 |
| 0.11 | 0.12 | 0.13 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 | 0.2 |
| 0.21 | 0.22 | 0.23 | 0.24 | 0.25 | 0.26 | 0.27 | 0.28 | 0.29 | 0.3 |
| 0.31 | 0.32 | 0.33 | 0.34 | 0.35 | 0.36 | 0.37 | 0.38 | 0.39 | 0.4 |
| 0.41 | 0.42 | 0.43 | 0.44 | 0.45 | 0.46 | 0.47 | 0.48 | 0.49 | 0.5 |

Your child will be learning to solve problems involving fractions such as:

A £1 stamp costs $\frac{1}{100}$ of its face value to make.

How much does it cost to make 1 stamp?

How much would it cost to make 10000 stamps?

A cereal manufacturer decides to give £0.04 to charity from every £1 it makes.

What fraction of its profit is it going to give to charity?

One day the company makes £1000. How much money does it give to charity on that day?



Key Instant Recall Facts

Year 4 – Spring 2

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**.

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

Key Vocabulary

What is 9 **multiplied by** 6?

What is 8 **times** 11?

What is 72 **divided by** 9?

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 for Practising at Home

The secret to success is practising **little** and **often**. Can you practise these key facts 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.

Look for patterns – These times tables are full of patterns for your child to find. How many can they spot?

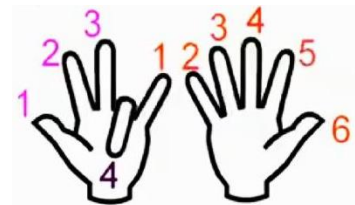
Use your ten times table – Multiply a number by 10 and subtract the original number (e.g. $7 \times 10 = 70$, subtract 7 is 63). What do you notice?

What happens if you add your original number instead? (e.g. $7 \times 10 = 70$, add 7 is 77).

What do you already know? – Your child will already know many of these facts from learning the 2, 3, 4, 5, 6, 8, 10 and 12 times tables. It might be worth practising these again!

Nine times table trick – You can use your fingers to instantly find answers to the 9 times table. There is a great explanation of this at:

www.oxfordowl.co.uk/for-home/maths-owl/fun-activities/age-7-9--5



$$9 \times 4 = 36$$

Practise online – resources.woodlands-junior.kent.sch.uk/maths/timestable/interactive.htm has lots of links to tables games to play.

See overleaf for how this relates to learning in school

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

Learning in School

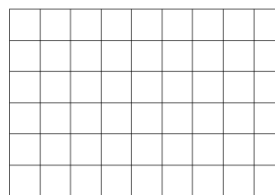
In school, we start by thinking about the facts that the children have already learnt. If they cross these off on a multiplication grid, they soon realise that they don't have many facts to learn!

We start with counting forwards and backwards. We then say the tables in order and relate them to division facts. Finally, we practise quick recall in any order (including division).

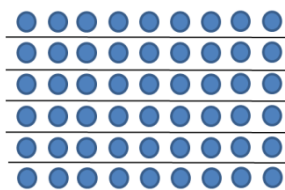
Some of the approaches we use are: saying them, singing them, drawing them, looking for patterns, making up rhymes, timed challenges and quick response to oral questions.

We encourage the children to represent the facts they know visually. Here are some examples of visual images that we use:

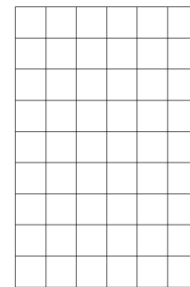
| X | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|----|----|----|----|----|----|----|----|----|-----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |



$$9 \times 6 = 54$$



$$54 \div 9 = 6$$



$$6 \times 9 = 54$$

We also work on the rules of multiplication so the children learn to become flexible in their approach to problems. Knowing the tables facts by heart makes understanding these rules much easier!

Commutative law: $4 \times 11 = 11 \times 4$

Associative law: $(3 \times 2) \times 5 = 3 \times (2 \times 5)$

Distributive law: $37 \times 9 = (30 \times 9) + (7 \times 9)$



Key Instant Recall Facts

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**.

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

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. $7 \times \bigcirc = 28$ or $\bigcirc \div 6 = 7$.

Top Tips for Practising at Home

The secret to success is practising **little** and **often**. Can you practise these key facts 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.

Songs and Chants – There are lots of good songs and chants online. If your child creates their own song, this can make the times tables even more memorable. Try thinking of a rhyming word for each answer.

Which facts do you already know? – Your child has already learnt the 1, 2, 3, 4, 5, 6, 8, 9, 10, 11 and 12 times tables so the only fact that is new to them is $7 \times 7 = 49$.

Order of difficulty – Ask your child to order these facts from the easiest to the most challenging. Can they explain why some facts are easier to remember? Focus on practising the most challenging facts so they move up the list!

Five six seven eight – Fifty-six is seven times eight ($56 = 7 \times 8$).

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

Practise online – Try this game: www.conkermaths.org/cmweb.nsf/products/timestablesballoons.html

See overleaf for how this relates to learning in school

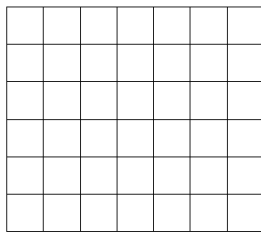
I know the multiplication and division facts for the 7 times table.

Learning in School

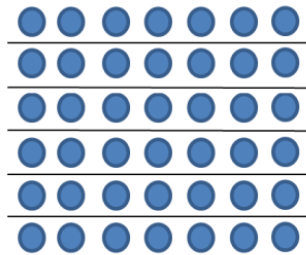
We practise counting forwards and backwards in sevens. We then say the tables in order and relate them to division facts. Finally, we practise quick recall in any order (including division).

Some of the approaches we use are: saying them, singing them, drawing them, looking for patterns, making up rhymes, timed challenges and quick response to oral questions.

We encourage the children to represent the facts they know visually. Here are some examples of visual images that we use:



$$7 \times 6 = 42$$



$$42 \div 7 = 6$$

| X | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|----|----|----|----|----|----|----|----|----|-----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

The aim is that the children are familiar with all times tables up to 12 x 12 by the end of Year 4. They will continue to practise quick recall of these facts throughout the rest of Key Stage 2 so that they achieve instant recall.

This term, we are starting to use the times tables facts to solve problems involving larger numbers. They begin by using a grid:

$$146 \times 7 =$$

| | | | | |
|---|-----|-----|----|--------|
| x | 100 | 40 | 6 | |
| 7 | 700 | 280 | 42 | = 1022 |

As they become more confident and flexible with multiplying larger numbers, they move on to the more formal vertical written method for short multiplication:

| | | |
|---|---------------------------------|--|
| $\begin{array}{r} 146 \\ \times \quad 7 \\ \hline 700 \\ 280 \\ \underline{42} \\ 1022 \end{array}$ | leading to... \longrightarrow | $\begin{array}{r} 146 \\ \times \quad 7 \\ \hline 1022 \\ 134 \end{array}$ |
|---|---------------------------------|--|

Knowing the tables facts by heart makes these calculations much easier!



Key Instant Recall Facts

Year 4 – Summer 2

I can multiply and divide 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**.

$7 \times 10 = 70$

$10 \times 7 = 70$

$70 \div 7 = 10$

$70 \div 10 = 7$

$30 \times 10 = 300$

$10 \times 30 = 300$

$300 \div 30 = 10$

$300 \div 10 = 30$

$0.8 \times 10 = 8$

$10 \times 0.8 = 8$

$8 \div 0.8 = 10$

$8 \div 10 = 0.8$

$6 \times 100 = 600$

$100 \times 6 = 600$

$600 \div 6 = 100$

$600 \div 100 = 6$

$40 \times 100 = 4000$

$100 \times 40 = 4000$

$4000 \div 40 = 100$

$4000 \div 100 = 40$

$0.2 \times 10 = 2$

$10 \times 0.2 = 2$

$2 \div 0.2 = 10$

$2 \div 10 = 0.2$

Key Vocabulary

What is 0.5 **multiplied by** 1?

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 half term. Children should be able to use their knowledge of number bonds to answer these questions in any order, including missing number questions e.g. $10 \times \bigcirc = 5$ or $\bigcirc \div 10 = 60$.

Top Tips for Practising at Home

The secret to success is practising **little** and **often**. Can you practise these key facts 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.

Buy one get three free – If your child knows one fact (e.g. $0.2 \times 10 = 2$), can they tell you the other three facts in the same fact family?

Use what you already know – If your child knows that $3 \times 10 = 30$, how can they use this to calculate 30×10 or 0.3×10 ?

Move the digits – Remember that to multiply by 10, all the digits move one place to the **left** and to divide by 10, the digits move one place to the **right**. You could make digit cards and practise moving them using this template: www.greatmathsteachingideas.com/2012/02/16/a-kinaesthetic-resource-for-multiplying-and-dividing-by-10-100-and-1000/.

Practise online – See how many decimal number bonds you can answer in a minute at: www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html.

See overleaf for how this relates to learning in school

I can multiply and divide numbers by 10 and 100.

Learning in School

The children will practise multiplying and dividing by 10 or 100 by using their knowledge of place value and moving the digits left to make the number 10 or 100 times larger and right to make the number 10 or 100 times smaller.

This will help them to solve multiplication problems involving larger numbers, as well as word problems such as:

Divide thirty-one point five by ten.

Ten times a number is eighty-six. What is the number?

A tea shop has 27 trays of shortbread. Each tray of shortbread is divided into 20 pieces. How many pieces of shortbread are there?

David sells his old PS2 games for £10 each. He has 23 games. How much money will he make?

Pens cost 15p each. How much would it cost to buy one each for a class of 30 children?

If a pack of ten pencils costs 95p, how much does each pencil cost?