Supporting Your Child with Maths

Year 6

Booklet 1: November

These booklets have been designed to help you support your child as they build and develop their skills on a **strong foundation** of key mathematical concepts.

The maths curriculum covers a wide range of concepts but is built on **confidence and fluency of key facts**. When a child is fluent with these facts and skills their confidence grows and they are more able to **apply** them to a range of problems.

The booklets include specific guidance for your child's year group on skills and methods used as well as ideas for games to play and ways to practise key ideas.

Wherever we can, we want to make this practice **fun** and **practical**.

Lots of opportunities to **talk** about the maths and to show that we, as adults, **enjoy** it too.

Did you know?

- Parents' maths knowledge has **no** impact on how successful their children will be
- Parents' attitude towards maths has a **profound** impact on their children's success

Did you know?

Mathematical understanding has a bigger impact on success in adulthood than reading and writing

If you have any questions or would like to know more, please contact your child's teacher or Mrs Gibbons, the maths leader.

Learn It!

Year 6 – Phase 1 (Sep- Nov)

I know the multiplication and division facts for all times tables up to 12 × 12 .

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

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 × ◯ = 28 or ◯ ÷ 6 = 7.

Use What You Already Know!
Times Table Facts and x and ÷ 10, 100

Children who have already mastered their times tables should apply this knowledge to answer questions including decimals e.g. 0.7 × ◯ = 4.2 or ◯ ÷ 60 = 0.7

Top Tips

Speed Challenge – 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.

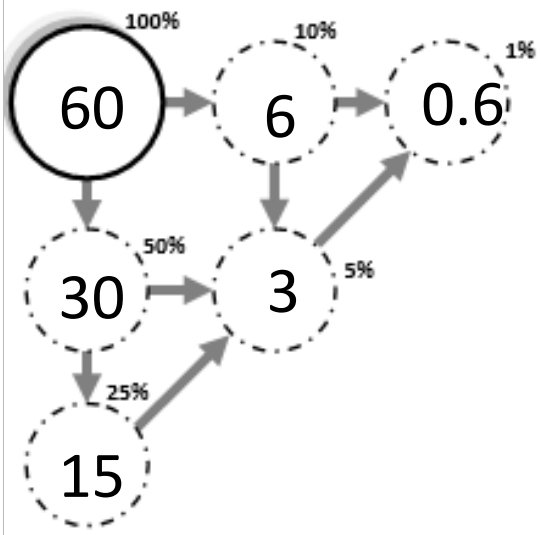
Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Practise It!

Year 6 Phase 1 (Sep- Nov)

I can use known percentage facts to find related facts

Complete the bubble diagram then choose and use the facts to calculate other percentages.



30% = 3 x 10% so 3 x 6 = 18

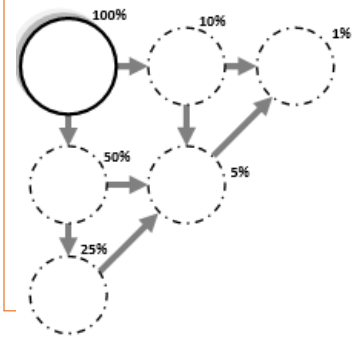
15% = 10% + 5% so 6 + 3 = 9

95% = 100% - 5% so 60 – 3 = 57

Key Skills

- Doubling/halving
- X and ÷ by 10, 100
- Accurate adding and subtracting

- Initially children will draw out the “bubbles”.
- They will be encouraged to notice that any percentage can be made using these starting points.
- They will notice that to move to the right numbers are divided by 10 and to move down numbers are halved and vice versa.
- As they become more confident, they will only record the “bubbles” they need.
- Children can use the patterns to work out the original number when given a percentage.



If 50% is 30. What was the original number?

So if 50% is 30 what is 100%?

30 x 2 = 60

Try It!

Year 6 Phase 1 (Sep- Nov)

Try These

Calculate 55% of 640

Calculate **24%** of **525**

30% of 60 is ☐

30% of ☐ is 60

20% of Megan's number is **64**

What is **50%** of Megan's number?

Calculate **5%** of **£3600**

If you know **40%** of a number, explain how you could work out the original number.

Put Out the Flags

Tim and Beth both have a string of flags. They have red flags, white flags, blue flags, and union jacks.

They both counted how many of each colour they had.

Tim's flags are 50% blue, 35% red, 10% white and 5% union jacks.

Beth's flags are 40% blue, 32% red, 20% white and 8% union jacks.

They both have as few flags as is possible with those percentages.

Who has the most flags?

Who has the most red flags?

Who has the most blue flags?

How many union jacks do they have between them?

If instead you know that Tim and Beth have 10 union jacks between them how many flags do they have altogether?

If you fancy a challenge!

Solution can be found on the Nrich website.