



## How to help your child with their fluency in Maths, Year 2

### The National Curriculum

This statutory document aims: **For children to become fluent in the fundamentals of mathematics**, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and are able to recall and apply their knowledge rapidly and accurately.

### **What is mathematical fluency?**

Fluency consists of three elements: **Efficiency, accuracy** and **flexibility**.

**Efficiency** is about not struggling with too many steps or losing sight of the logic of the problem. An efficient strategy is one that a student can carry out easily, keeping track of steps and make use of intermediate results to solve the problem.

**Accuracy** depends on several aspects of the problem-solving process, among them careful recording, knowledge of number facts and other important number relationships and checking results.

**Flexibility** requires knowledge of more than one approach to solving a particular kind of problem, such as two-digit multiplication. Students need to be flexible in order to choose an appropriate strategy for the numbers involved, and also to be able to use one method to solve a problem and another method to check the results.

Fluency requires more of pupils than memorising a single procedure.

**They need to understand what they are doing and why they are doing it.**

### Why support your child's mathematical fluency?



Helping your child to develop their mathematical fluency will lay the foundations for them becoming confident mathematicians and help to support their financial wellbeing in adult life. No-one is born a good or bad mathematician, all pupils have the ability to develop their mathematical fluency and confidence.

## How to support your child's mathematical fluency:

### Reading books

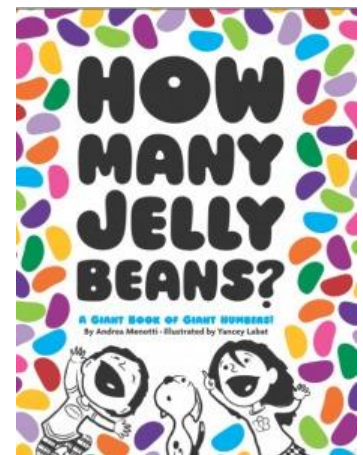
Take the opportunity when reading picture books to count objects, or to discuss the position of things. Compare the amount of objects you can see on different pages.

You can ask questions such as;

"How many more will they need until they reach 100?, How much money have they spent?, What would double that amount be?"

There are some excellent and enjoyable books which have a mathematical focus such as;

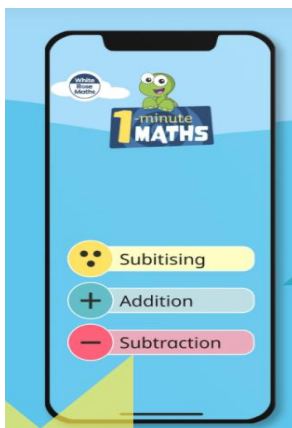
- 'The great pet sale' by Mick Inkpen
- '365 penguins' by Jean-Luc Fromental
- 'How many jellybeans?' by Andrea Menotti



### Counting

- Count from 0 in 2's up to 20
- Count from 0 in 5's up to 50
- Count from 0 in 10's up to 100
- Count in 3's up to 36.
- Count in 1's across ten barriers for example from 19 to 43.
- Challenge, Can you do this backwards now?

### Using games



'1 minute fluency' app by White Rose (free.)

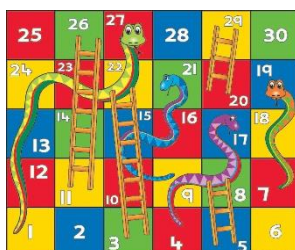
Dominoes – add the dots on the dominoes, can you spot another domino with the same amount of spots?

Adding up spots on a die or pair of dice.

Playing a board game and moving on the correct amount of steps.

Using snakes and ladders to see how many more squares until 100.

Play 'Times tables rockstars' to encourage multiplication and division fluency.



## Walking to School

On the way to school look out for numbers up to 100, such as 64 or 78 on house doors, number plate, bus stops etc. Talk about how the numbers can be partitioned into tens and ones.

Which is the biggest number you can find on your journey? Can you find the total of two of the numbers?



## In the Kitchen

Show your child the numbers on your measuring jugs and scales; get him/her to help you to weigh things and measure out quantities when baking and preparing dinner.

Show your child the weights and measures on packets, bottles and tins. Let them feel the weights and order them.

## Time

Throughout the day, talk to your child about what time – how many minutes in an hour and hours in a day. When telling the time make a point of showing them the clock and explaining why. Look at o'clock, half past, quarter to, quarter past and 5 minute intervals together. Give your child a watch to wear and ask him/her the time. Count in fives to support this. Explain how there are 60 minutes in an hour so  $\frac{1}{2}$  an hour is 30 minutes,  $\frac{1}{4}$  of an hour is 15 minutes. Recap the months of the year in order and practise spelling them.



## Money

Look at the money your child has in a purse or piggy bank. Talk about the different values of coins and notes.

When you go to the shops allow your child to buy one thing less than £1 with cash. Ask them how many tens and how many ones the price has.

Talk about when an item is good value for money when you are shopping and why it is good value.

After you have been shopping, choose 6 some different items costing less than £1. Make price labels for each one e.g: 48p, 79p. You can then find the totals of two items.

Which two items would have the highest total? Which two would have the lowest? Find the difference between two prices.

**Please remember...** that everyone has the potential to be a good mathematician. As adults you will all have very varied experiences of Maths at school and your personal feeling towards the subject. Maths at the federation of Follifoot and Spofforth schools is a positive and life enhancing experience. We really hope you will use these ideas to rekindle an enjoyment of maths in your lives.