



## How to help your child with fluency in Maths in Early Years

(to be used alongside ideas from the 'Early Years booklet')

### The Early Years Curriculum

Maths is an essential part of our Early Years curriculum. Children learn about maths through play and their daily experiences, the more meaningful to them and hands on it is the better. In school we ensure our settings environment (both indoors and out) is full of mathematical opportunities and has exciting things for children to explore, sort, compare, count, calculate and describe. This can be done at home too. You can support your child's learning by encouraging them to be creative, critical thinkers, problem solvers and to have a go.



We focus on numbers 1-10 and help the children learn to count and have a deep understanding of numbers to 10, the relationships between them and patterns within them. Through using the NCTEM scheme developed through the programme Numberblocks, we follow a concise plan which the children engage with and are familiar with. We practise, repeat and rehearse numbers, counting beyond 10 regularly. Alongside number we teach shape, space and measure, focussing on mathematical language, real life situations and play.

### 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.

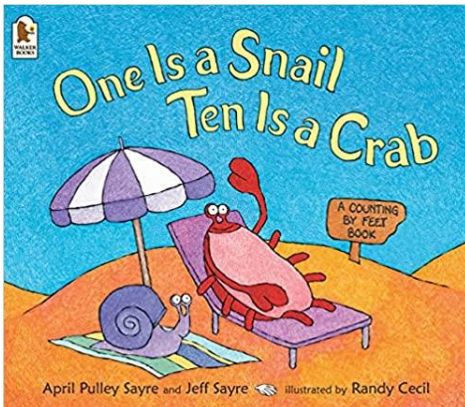
**Flexibility** requires knowledge of more than one approach to solving a particular kind of problem, such as two-digit multiplication. Students need to be flexible in order to choose an appropriate strategy for the numbers involved, and also to be able to use one method to solve a problem and another 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 apples can you see?", "What if I add one more?", "Where is the puppy?", "What is under the tree?", "Which is the biggest? Which is the smallest?"

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

- The great pet sale by Mick Inkpen
- The ten little series by Mike Brownlow there are Ten little dinosaurs, Ten little robots etc
- Nursery rhymes by Miles Kelly
- Count the dragons, knights, castles & crowns by Prince Jones press
- Ten in the bed' Penny Dale
- Shapes in buildings' Rebecca Rissman
- Ten tiny gingerbread men Tiger Tales

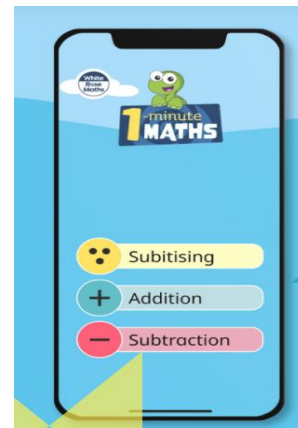
#### **Songs and Rhymes**

- Five little men in a flying saucer
- 5 little ducks
- 10 green bottles
- 5 currant buns
- 5 little speckled frogs
- One Potato
- Hickory Dickory Dock
- One, two, three, four, five once I caught a fish alive
- Two little Blackbirds
- One, two buckle my shoe



### **Using games**

- '1 minute fluency' app by White Rose (free).
- Dice, adding up spots on dice
- Playing hopscotch and jumping in twos and ones.
- Playing a board game and counting on steps.
- Snap and matching games.
- Simon says- e.g. Simon says jump five times.
- Jigsaws



### **Walking to School**



On the way to school, you could support your child's developing one to one correspondence by counting objects such as red cars, cats you see etc.

Also look at the environment around you and spot shapes e.g. windows, pavements. See how many squares, rectangles, round shapes and cylinders you can spot. Which did you see the most of?

Choose a shape for the week e.g. a square. How many of these can your child spot on the way to school or setting?

Look at door numbers of your friends, relatives and where you live – what does it say? Can they spot their favourite number or their age number?

Compare sizes of objects such as finding a bigger car, a smaller leaf etc. Find a twig to measure.

### **In the Kitchen**

Set the table for a meal are there enough plates etc?

Use number language, e.g. 'one', 'two', 'three', 'lots', 'fewer', 'hundreds', 'how many?' and 'count' objects.

Demonstrate the language for shape, position and measures in discussions, e.g. 'sphere', 'shape', 'box', 'in', 'on', 'inside', 'under', 'long, longer', 'longest', 'short', 'shorter', 'shortest', 'heavy', 'light', 'full' and 'empty'. Play 'Spot the shape' with your children, naming the shapes of the tins and packets and where they are, can they find a cylinder tin?

Compare the mass of objects.

When halving and quartering food, ask your child to tell you how many pieces there are and compare the pieces which are the same, bigger or than each other.

Measure capacity together by pouring drinks.

### **Time**

Talk about the passing of time – seasons, months of the year, days of the week.

Talk about morning, afternoon and evening activities.

Talk about the current time, what they do at certain times in the day and how long away that will be. E.g. Now it is the morning and after lunch it will be the afternoon.

### **Money**

Play shops and ask your child to 'buy' an apple or two tins. Ask them to give you some coins for the items. Show them the different coins that you have.



### **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.

