



Why did we choose Maths No Problem at the William Alvey and have now been using it for over 10 years?

Well, we've often heard from parents:

“This is not how I was taught it at school”.

Maths No Problem is a resource that brings maths to life, makes it fun and approaches the work in small, manageable steps where children can build upon their prior learning with each school year. It is a tiered approach, and all concepts are familiar to the child as they develop their mathematical skills. It is a more visual way to learn than you were probably taught and in the early stages we encourage the language ‘number stories’ instead of word problems! We tell the story.

“Maths is black and white, so it’s hard for a child.”

Maths No Problem and our teachers actively encourage discussion around ideas about how to solve. The children in the class learn to use such skilled mathematical reasoning and dialogue that they aren't afraid to investigate and learn from one another. Every child participates and every child's ideas are valued so that no child feels left behind, no matter their ability level.

“I hated maths at school.”

If you're telling your child that, then the chances are that this becomes learnt behaviour, much like a passed on fear of spiders! If you show you're willing and enthused to try the children will too. From reception, the children become familiar with the character names and the imagery used throughout the school.

“I can't do the maths homework.”

You can watch these videos by Dr Yeap (Dr Yeap explains it all – <https://mathsnoproblem.com/en/parent-videos/> as he explains concepts that you may not be familiar with. Your child can try their best with their homework. Our teachers welcome honesty and will be pleased to provide support in class to address any areas of difficulty.

“Maths is boring”

Our teachers try their best to include games, real life experiences and friendly competitions. Each lesson includes an element of teamwork, partner work and discussion and we often use practical resources to enhance their understanding and engagement. We never want a child to feel worried about maths and our children show resilience, determination and have fun in our lessons.

“You don't need maths; you can just use a calculator”.

You can also use a dictionary for writing, but if you don't have the key skills of spelling and punctuation, you can't write successfully! This is much the same for maths. We focus on reasoning, fluency and mastery so that your child will find the basics of maths, secondary school maths, budgeting their finances and succeeding in the future world of work more achievable.

How our lessons are taught at the William Alvey School

In reception, the children are introduced to the characters and the format in a range of practical task and stories with some worksheets for written evidence.

From Year 1 right up to Year 6, each of our maths lessons follows the same pattern to help children focus, learn, explore, discuss, try and apply.

- The Explore task is often one question that the children have a go at solving- it introduces the concepts for the day. Mini whiteboards, discussion and materials to support are often present. The children give ideas and methods they already know to help them and may find new ways to solve the problem. Here a few examples.**

Fractions as Division

Lesson 2

Explore

How can Hannah and Ravi share 1 marshmallow twist equally?

How much of the marshmallow twist do we each get?

Estimating Length

Lesson 3

Explore

How can Miss Potter estimate the length of her desk without using a ruler?

I know the length of the pencil and the rug.

How can I use this information to estimate the length of the desk?

Rounding Numbers

Lesson 12

Explore

Ravi and his family are shopping while on holiday in Indonesia.

Rp. 263 499

Rp. 124 016

Rp. 100 000 is about £5.50.

Rp. 509 381

Rp. 816 791

Approximately how many Indonesian Rupiah (Rp.) is each item?

- Mastering - The teacher will then often introduce a set way that parents will be more familiar with (like the column method) in a focus session. Children are encouraged to try different ways and learn which is most efficient and works best for them. The children give ideas and methods they already know and build upon them. This develops their reasoning skills and mathematical fluency and language.**

Master

1

The minute hand is pointing to 12. Charles is brushing his teeth at 8 o'clock.

At 8 o'clock, the hour hand is pointing to 8.

The minute hand is pointing to 6. Lulu is brushing her teeth at half past 8.

At half past 8, the hour hand is between 8 and 9.

Master

1

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

Hannah and Ravi get $\frac{1}{2}$ of the marshmallow twist each.

Divide the marshmallow twist into 2 equal pieces.

- Guided practice is then used with partner work or small groups and the teacher can further identify children who may require support with their reasoning skills or application of taught methods.**

Guided Practice

1 Share 1 sandwich equally between 4 children.

$1 \div 4 =$

Each child gets of a sandwich.

Guided Practice

1 Measure the length of each line of the boat. Complete the table.

Line	Length in mm	Length in cm and mm	Length in cm (decimal or mixed number)
AB			
AC			
CB			
AD			
PQ			
PR			
SQ			
RS			

Activity Time

Work in pairs.

1 Guess how many times you can clap in 15 seconds.

2 Ask your partner to time 15 seconds on the .

3 Count how many times you can clap in 15 seconds.

4 Take turns to repeat **1** to **3**.

Compare how long each person takes to count to 50.

What other activities can you do in 15 seconds?

I took more time than you did.

You counted faster!

4. Then it is time for independent work. The children work their way through a work sheet that is tiered in approach so that children will build upon their confidence and abilities as they work through the questions.

Volume and Capacity

Chapter 18

Name: _____ Class: _____ Date: _____

Worksheet 1

Comparing Volume

- 1 Circle the containers that are full.
Cross out (X) the containers that are empty.



- 2 Compare using more than, less than or equal to.



The amount of milk in bottle A is the amount of milk in bottle B.

The amount of milk in bottle B is the amount of milk in bottle C.



Doubling Machine

Week 5

Journal 1

2	Double	<input type="text"/>
3	Double	<input type="text"/>
4	Double	<input type="text"/>
5	Double	<input type="text"/>

Name: _____ Class: _____ Date: _____

Worksheet 2

Adding without Renaming

- 1 Add.

(a)
$$\begin{array}{r} 2 & 1 & 3 & 4 \\ + & 4 & 2 & 1 & 3 \\ \hline \end{array}$$

(b)
$$\begin{array}{r} 5 & 3 & 8 & 1 \\ + & 2 & 6 & 1 & 4 \\ \hline \end{array}$$

(c)
$$\begin{array}{r} 3 & 3 & 2 & 2 \\ + & 6 & 2 & 6 & 1 \\ \hline \end{array}$$

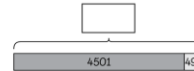
(d)
$$\begin{array}{r} 5 & 2 & 2 & 5 \\ + & 1 & 4 & 7 & 4 \\ \hline \end{array}$$

- 2 Find the sum of:

(a) 3061 and 4113

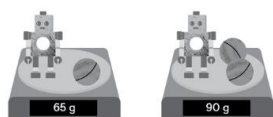


(b) 4501 and 495



5. There are mind work out activities to extend the thinking of children if they do complete the worksheet. Learning is not capped, and every child has access to these tasks and will sometimes get to it, and sometimes they won't. That's just the way it is. Teachers mark work as soon as they can. Quite often, it is live marked or marked shortly afterwards so that, using a quality first teaching approach, we can swiftly identify areas to recap with an individual child or small group.

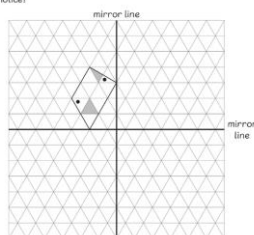
Mind Challenge



What is the mass of 1 ball in grams?
What is the mass of 1 robot in grams?

Mind Challenge

Reflect the shape below in the vertical mirror line.
Then, reflect the shape below and its image in the horizontal mirror line.
What do you notice?



Mind Challenge

Jacob has some money in his pocket.
He has two notes and six coins.
He pays for the two items below and is left with 8p.
Which notes and coins did Jacob have in his pocket to begin with?

