

Maths parent guide - KS1

2022/23

Workshop overview

- ❖ Maths at Star Primary
- ❖ Teaching for Mastery approach
- ❖ Maths - No Problem! scheme of work
- ❖ Maths in KS1 - Mastering Number / MTC / SATs
- ❖ Times Table badges
- ❖ Interactive apps
- ❖ Practical tips and advice
- ❖ Questions



Maths at Star



At Star Primary, we strive to equip our children with a deep and meaningful understanding of core mathematical concepts. Depth of understanding is at the heart of all of our curriculum. Without a deep understanding, knowledge will remain in the short term memory and require regular revisiting and revising.

Through rich and motivating experiences such as Outdoor Maths Week and Rock Stars Day coupled with incentives such as our Times Tables Badges and an exciting scheme of work - we aim for every learner to genuinely enjoy the subject and learn fundamental life skills.

Teaching for Mastery approach



At Star Primary, we have adopted the Teaching for Mastery approach. This approach describes the ideal classroom practice based upon years of research which allow for pupils to acquire a deep, long-term, secure and adaptable understanding of the subject. Some of the approaches include:

- Whole class teaching - avoiding labels
- Small, logical steps
- CPA approach
- Depth and breadth over acceleration



Maths - No Problem!



All children in Reception - Year 6 are taught the national curriculum through a scheme of work called Maths - No Problem!

Maths - No Problem! is a scheme of adapted from the curriculum taught in Singapore and is fully aligned with the UK national curriculum. Singapore regularly tops international league tables for mathematics in both primary and secondary education and the UK has sought to adopt their approach.

Maths - No Problem!

Maths - No Problem! lessons have some very common features:

- Anchor task/Explore task
- Links to “real life” scenarios
- CPA approach
- Opportunities for whole class, paired and independent work
- High aspirations for all learners



Maths in KS1

Alongside the Maths - No Problem! scheme of work, the children undertake assessments such as arithmetic tests and mental maths tests.

These short, regular assessments aim to equip the children with the strategies necessary to have a strong command of the 4 operations (addition, subtraction, multiplication and division) as well as the ability to use efficient mental strategies too.



Mastering Number Programme in KS1

- Daily Maths lessons for 1 hour.
- Begins with Mastering Number starters -
 - NCETM programme for all KS1 pupils
 - Focus only on recognising numbers and values - links to Number Blocks.
 - Practical and visual for all learners



What is the same? What is different?
Which pictures are most similar?

Mastering Number 201/22 ncehtm.org.uk

6	
6	0
5	1
4	2
3	3
2	4
1	5
0	6

I can split into 2 equal parts as well! What will the parts be?

6

_____ can split into _____ and _____;
and _____ combine to make _____.

Image © 2021 Alphablocks Ltd. All rights reserved. Mastering Number 201/22 ncehtm.org.uk

34

35

39

40

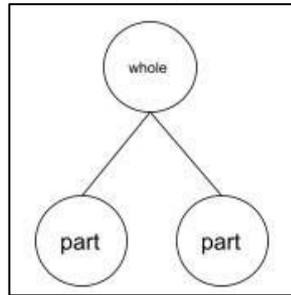
Maths in Year 1



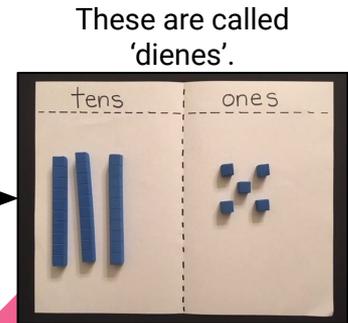
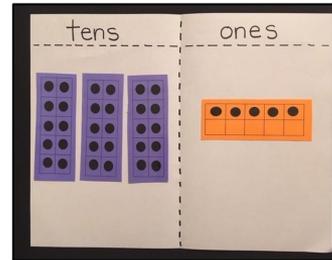
- Year 1 continues to follow the Maths No Problem approach from Reception.
- Mastering the basics of numbers and addition and subtraction - Lots of chapters to ensure children are ready for Year 2.
- Concrete (real life practical) resources are very important. Here is what we use in Year 1 throughout the year.



This is a ten frame.



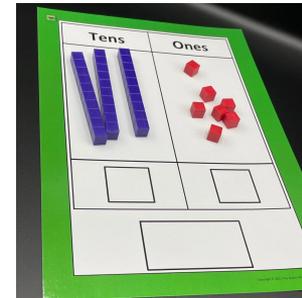
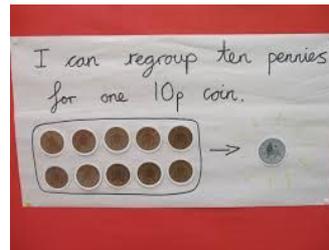
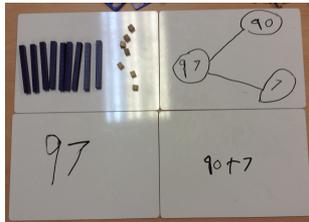
This is a whole part part.



Maths in Year 2



- Year 2 continues to follow the Maths No Problem approach from Year 1 - developing their prior knowledge from year 1.
- SATs - First exams that the children encounter - 2 Papers - Arithmetic and Reasoning.
- Building upon the basics of numbers and addition and subtraction - exposure to different methods.
- Concrete (real life practical) resources are very important for understanding. Here is what we use in Year 2 throughout the year.



Simple Adding

Lesson 1

Explore

Lulu is helping Miss Fathima put books away in the class library.
How many books are there altogether?



Let's get into a circle and show this problem with our cubes!

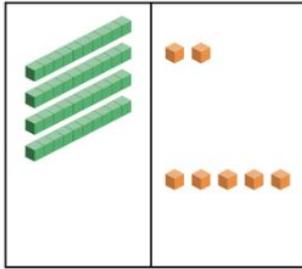


My friend said she would put the 5 extra books on any pile because the total would be the same.
Is this true?

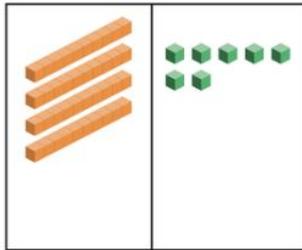
Where would be best to put the 5 extra books to make counting easier? With the pile of 10 books or the pile of 2 books?

Key vocabulary: altogether, ones, tens, addition equation, add, plus, equals, number line, number bond, partitioning a number, column, column method

3



Make it using dienes.



We can show $42 + 5$ another way.

Start by adding the ones.

$$\begin{array}{r}
 \text{tens} \quad \text{ones} \\
 4 \quad 2 \\
 + \quad 5 \\
 \hline
 \end{array}$$



Lay out your column method on your W.B.

Then add the tens.

$$\begin{array}{r}
 \text{tens} \quad \text{ones} \\
 4 \quad 2 \\
 + \quad 5 \\
 \hline
 \end{array}$$



What do we add next?



Let's have our place value chart and dienes to show this alongside our whiteboards.

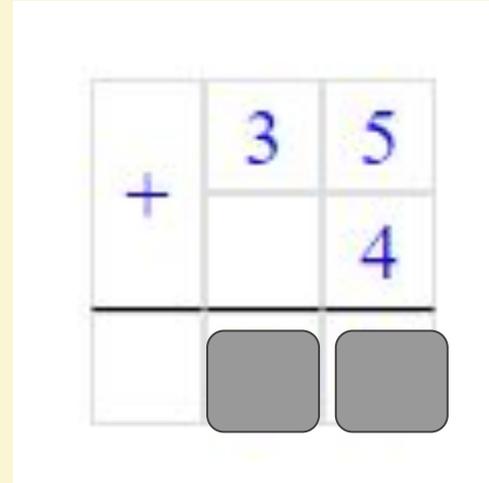
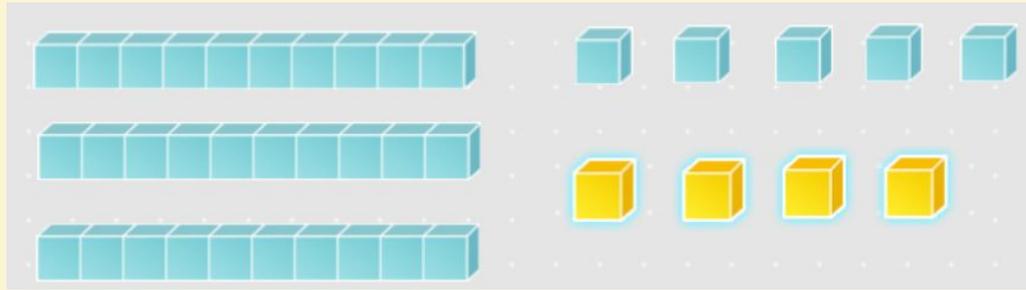
tens	ones



Key vocabulary: altogether, ones, tens, addition equation, add, plus, equals, number line, number bond, partitioning a number, column, column method

Let's try another example:

$35 + 4 =$



Let's have our place value chart and dienes to show this alongside our whiteboards.

Sentence stem: First we add the...Next we add the...

tens	ones



Guided Practice

Add.

1 (a) $26 + 3 = \square$



(b) $6 + 32 = \square$



2 (a)

	tens	ones
	4	5
+		3
<hr/>		
	\square	\square
<hr/>		

(b)

	tens	ones
	8	2
+		7
<hr/>		
	\square	\square
<hr/>		

Complete Worksheet 1: pages 25–26

Key vocabulary: altogether, ones, tens, addition equation, add, plus, equals, number line, number bond, partitioning a number, column, column method

Simple Adding

1

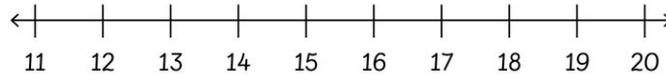


is adding by counting on.

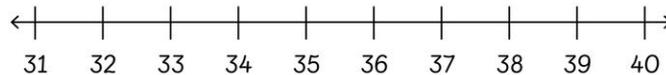
Can you help her by filling in the blanks?

Use the number
lines to help you.

(a) $14 + 5 = \square$



(b) $35 + 3 = \square$



2

Can you help  add by filling in the blanks?

(a) $70 + 6 = \square$

(b) $34 + 2 = \square$

(c) $41 + 8 = \square$

(d) $7 + 51 = \square$

3

Add.

(a)

tens	ones
	
	

	tens	ones
	2	3
+		4
<hr/>		
<hr/>		

(b)

tens	ones
	
	

	tens	ones
	4	5
+		3
<hr/>		
<hr/>		

(c) $63 + 2 = \square$



(d) $3 + 54 = \square$

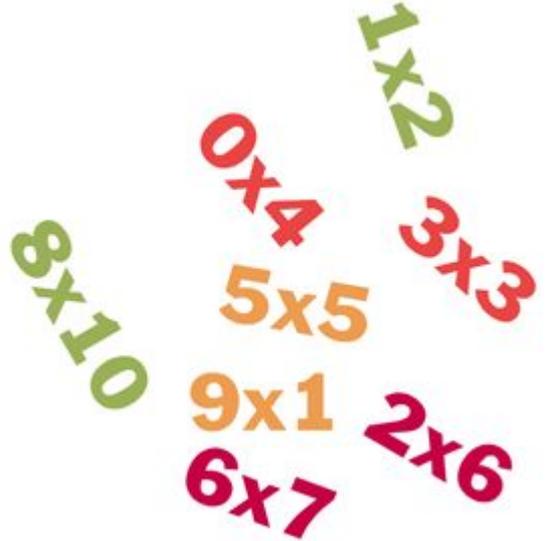


Multiplication Times Tables Check - Year 4

The government have made it statutory for all primary schools to administer an assessment called the Multiplication Times Tables check in the summer term in year 4.

“The purpose of the MTC is to determine whether pupils can recall their times tables fluently, which is essential for future success in mathematics. It will help schools to identify pupils who have not yet mastered their times tables, so that additional support can be provided.” -

<https://www.gov.uk/government/collections/multiplication-times-tables-check>



Multiplication Times Tables Check - Year 4

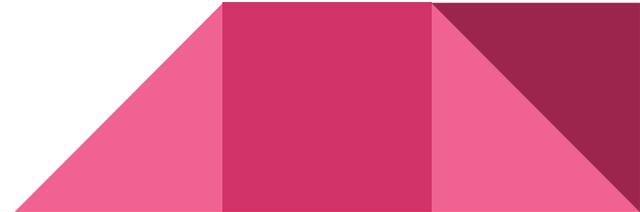
In this assessment, the children are asked a series of questions on all times tables from x2 - x12. The government expectation is that all pupils are fluent in these times tables by the end of year 4.

We have devised a times table map so that times tables are secure ahead of the MTC:

Year Group	All children to know by the end of the year
Year 1	x2, x10
Year 2	x3, x4, x5
Year 3	x6, x8, x11
Year 4	x7, x9, x12
Years 5 and 6	Revise multiplication and division facts of all times tables

Why does the Year 4 MTC matter now?

- Fluency - All children need this to approach the more challenging aspects of maths in the future.
- MTC is a predictor for future maths success.
- Helps everyone identify what times tables need to be learned.
- Times Table Rockstars is introduced in Year 2 - Preparation for the children.
 - 'Soundcheck' is a good way to practise.



Times Tables Badges

We want to incentivise our children to want to become fluent in their times tables. One of the ways in which we do so is by awarding times table badges.

Here are the times tables which need to be fluent in order to earn the badges:



KS1 Times Tables Badges

Bronze badge: x2

Silver badge: x2, x5 and x10

Gold badge: x2, x3, x4, x5 and x10

Interactive apps

All children in KS1 have a login for two interactive maths apps - Mathletics and Times Tables Rock Stars. These apps allow children to work on their number fluency in a way which is fun, motivating and enjoyable.



Mathletics

Mathletics allow pupils to access practice tasks across their year group specific curriculum.

In addition to this, the “Live Mathletics” function gives our pupils the opportunity to answer quick fire questions against their classmates or pupils at schools across the world!



Mathletics

By completing tasks, the children earn points which they can spend on designing their avatar. The crazier the hat the better!

Furthermore, if they collect enough points over a week - they can also earn certificates.

In addition, if they achieve enough points in any 24hr period to rank in the top 100 Mathletics users around the world - they will earn a place in the Mathletics Hall of Fame!



Mathletics certificates:

Bronze - 1000 points earned in a week.

Silver - Once 5 bronze certificates are achieved, the children earn a silver certificate.

Gold - Once 4 silver certificates are achieved, the children then earn the much coveted gold certificate!

Times Tables Rock Stars



TTRS is a carefully sequenced programme of daily times tables practice.

The children focus on key times tables for different periods of the year and consolidation weeks are also factored in. This programme ensures children get practice in key times tables in an interactive and motivating way.

Teaches can set challenges such as class or year group “battles” and the children can become a “Rock Hero” if they earn enough points!

Practical tips and advice

1. Start with an positive outlook

Have you ever caught yourself say “I can’t do maths” or “I was terrible at maths in school”? You may be saying it in jest but there’s a chance your children may take these comments to heart.

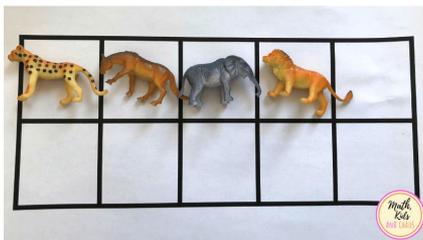
Being positive about the subject can go a very long way!

Maths is a life skill for their future! Don’t be afraid to ask for advice from class teachers about how to help your child.



Practical tips and advice - Maths is everywhere!

Here are resources you could use at home:



Home made resources of ten frames and beans, pasta as cubes.



<https://www.topmarks.co.uk/maths-games/5-7-years/counting>

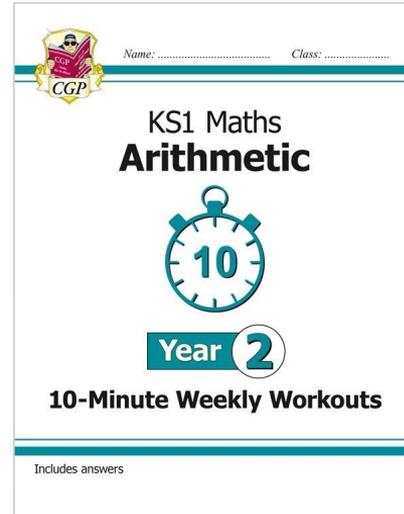
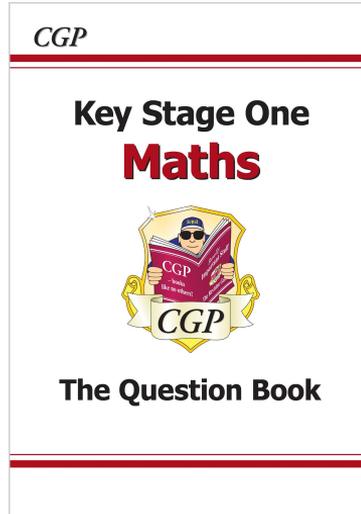


Home made resources of whole part part and using practical objects.



Practical tips and advice - Maths is everywhere!

Here are resources you could use at home:



Here are some books that you can purchase if you would like to.

There is a range of books on the website for you look.

Questions?



Contact information

If you have any further questions, please feel free to email us at:

info@star.newham.sch.uk

Please make the title of your email: FAO Maths Team

