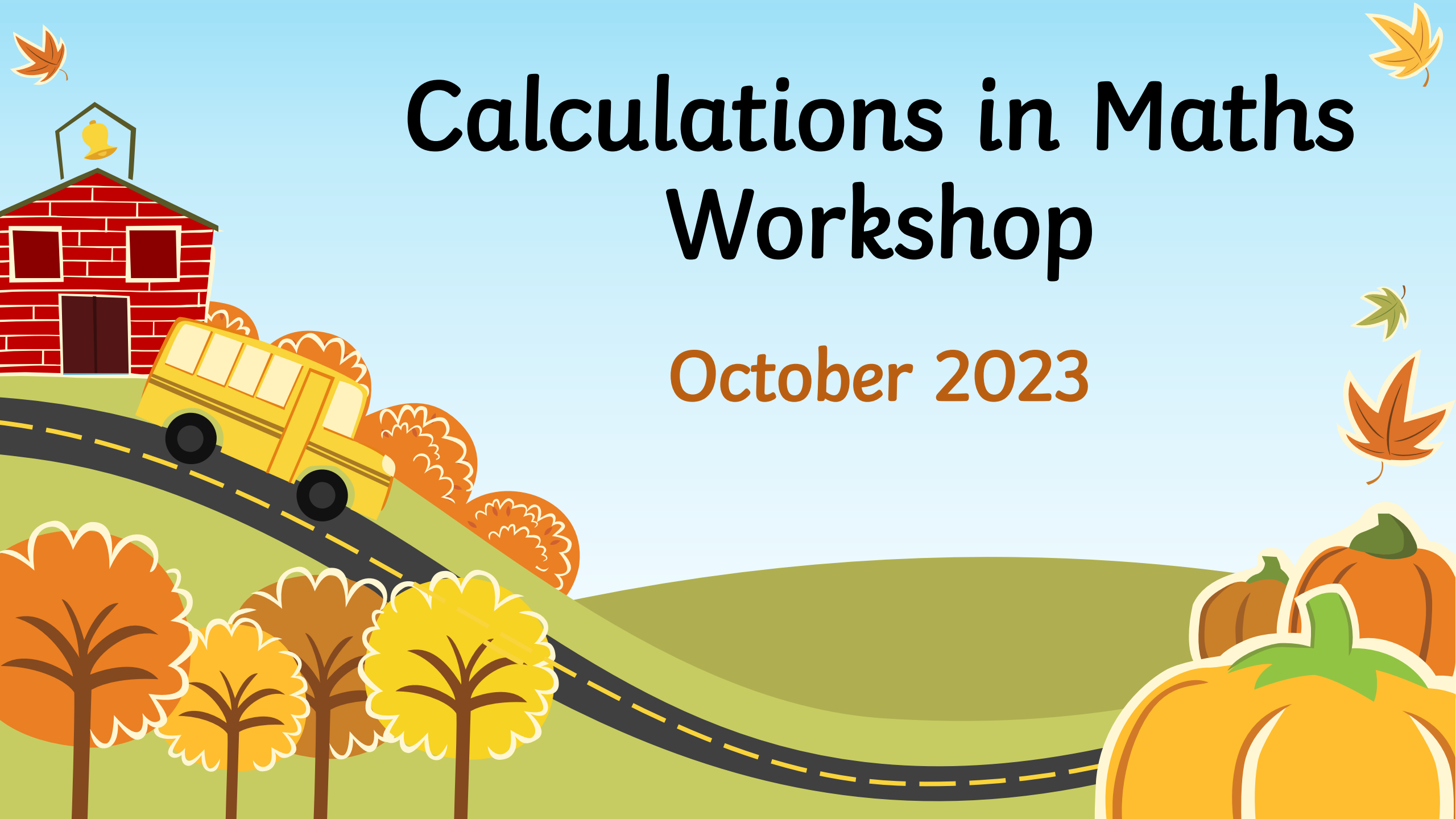


Calculations in Maths Workshop

October 2023

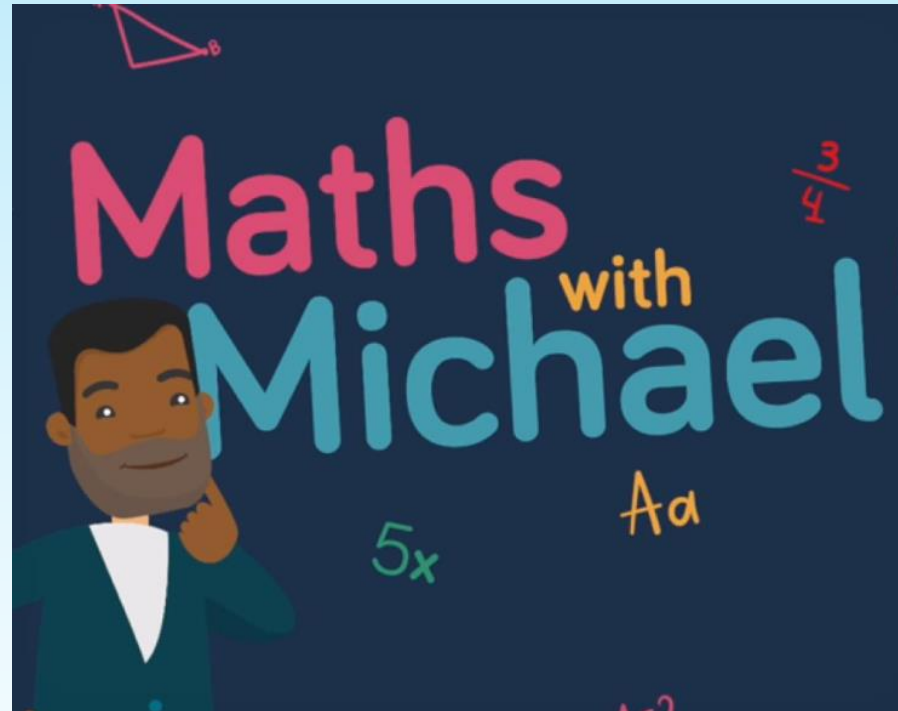




Aims of the Session

- Has Maths changed?
- Place Value
- Addition and Subtraction
- Maths with Michael
- Supporting Maths at home – apps/
real life

Has Maths changed?

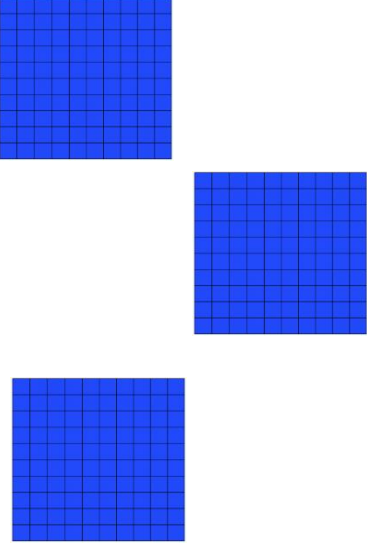
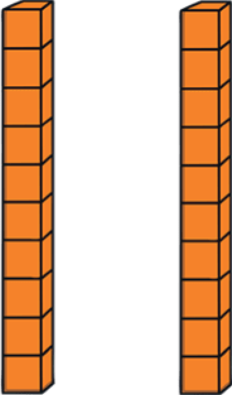
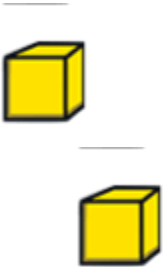


40 seconds – 3 minutes

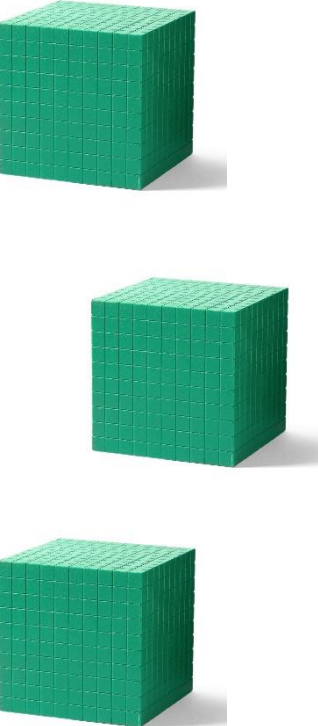
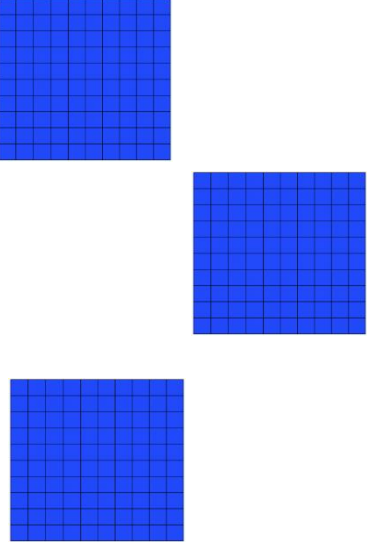
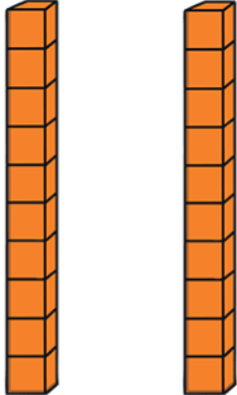

Place Value

2487694



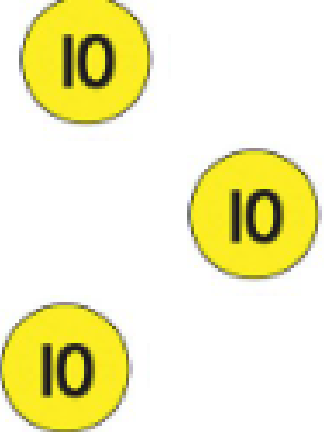
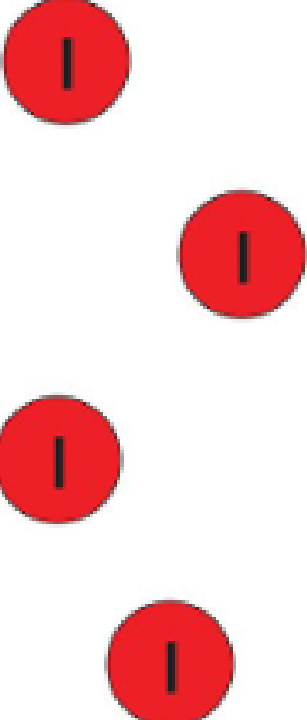
Place Value

Hundreds 100	Tens 10	Ones 1
		

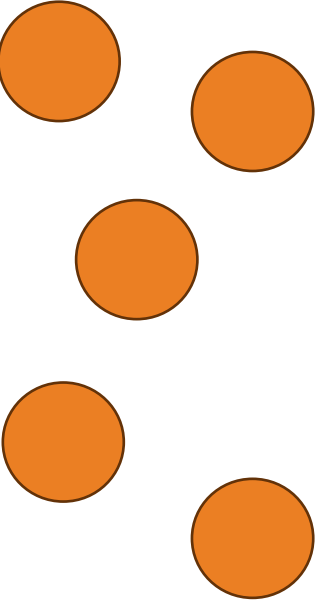
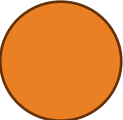
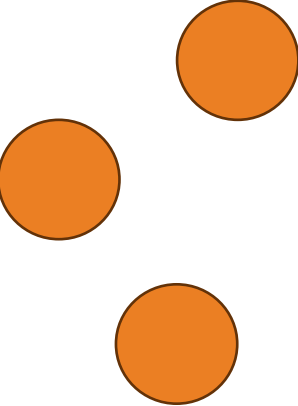
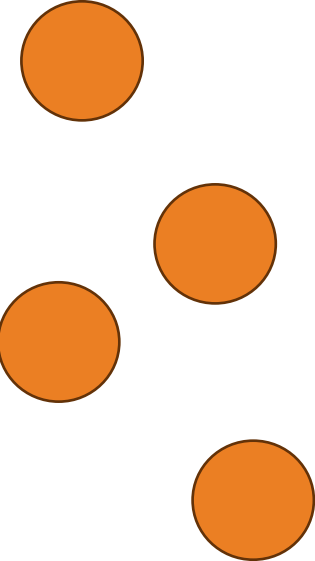
Place Value

thousands	hundreds	tens	ones
			

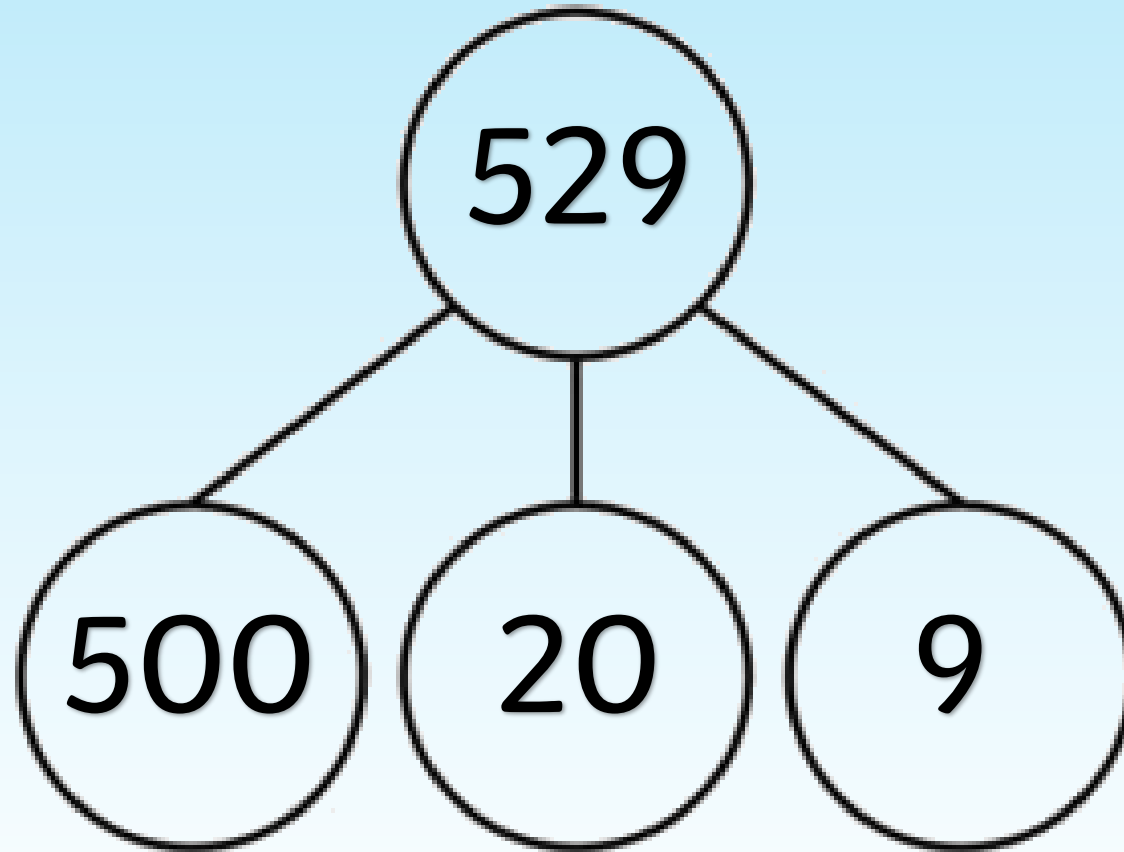
Place Value

thousands	hundreds	tens	ones
 5	 1	 3	 4

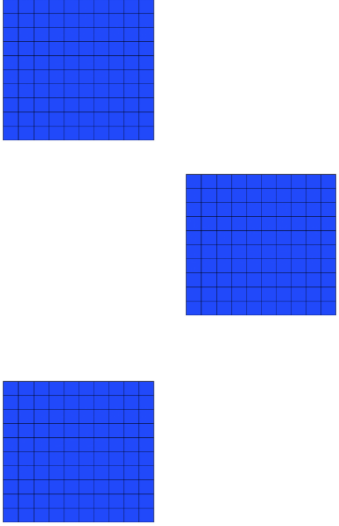
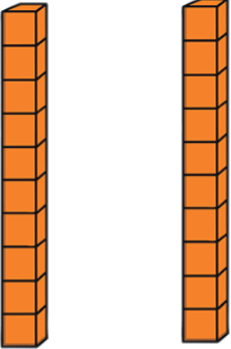
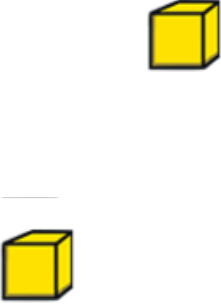
Place Value

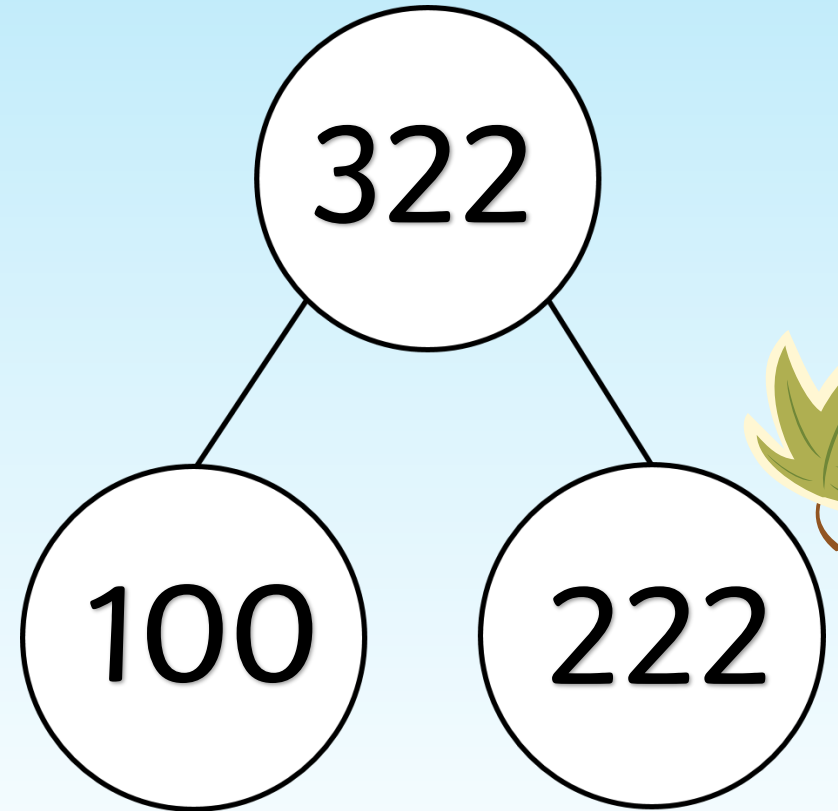
thousands	hundreds	tens	ones
			
5	1	3	4

Place Value



Place Value

Hundreds 100	Tens 10	Ones 1
		



Place Value

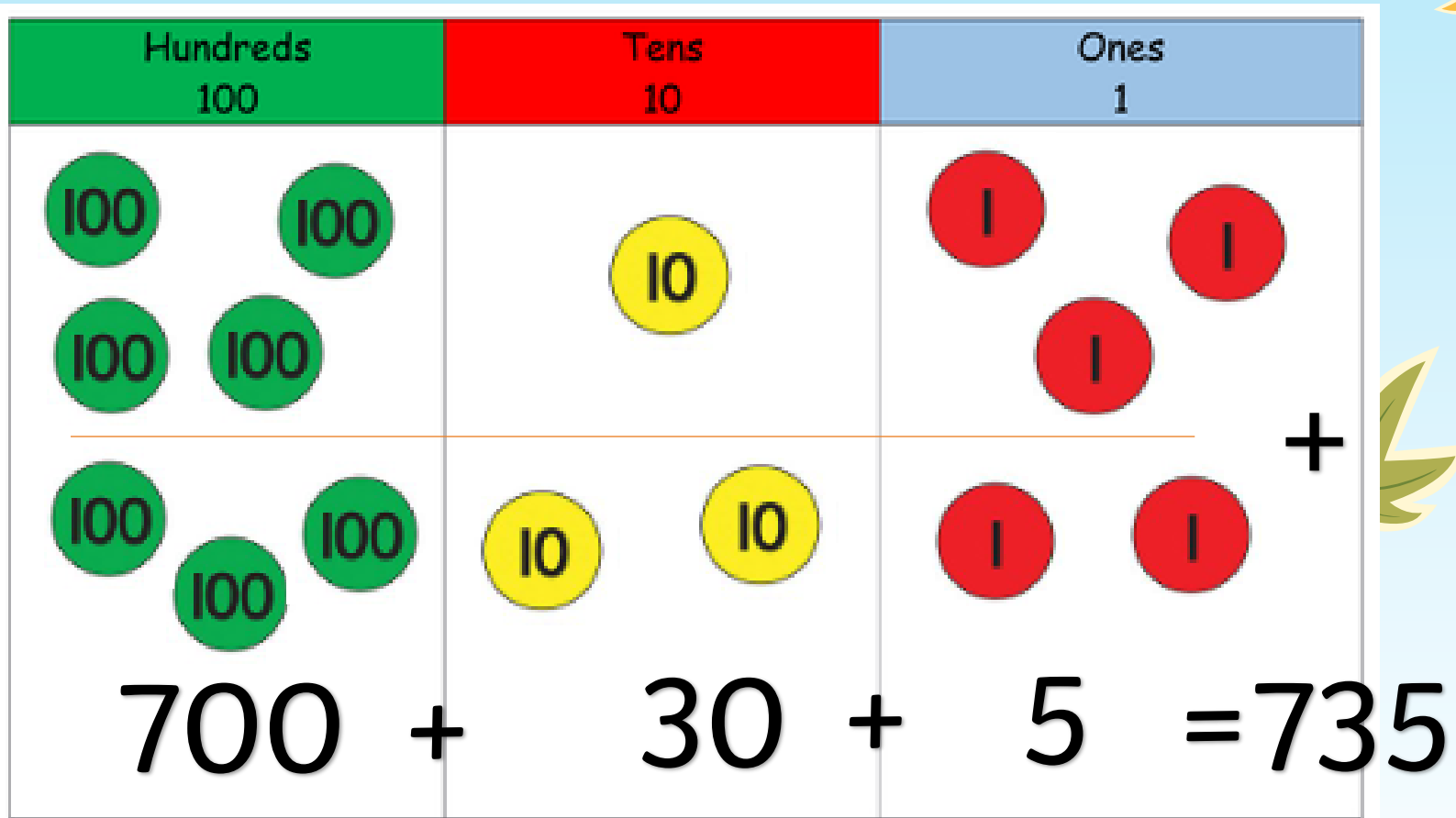


286

3759

Addition

$$\begin{array}{r} 413 + \\ 322 \\ \hline \\ \hline \end{array}$$



Addition

$$\begin{array}{r} 413 + \\ \underline{322} \\ \hline \end{array}$$

400	10	3	
300	20	2	+
700	+	30	+
		5	=735

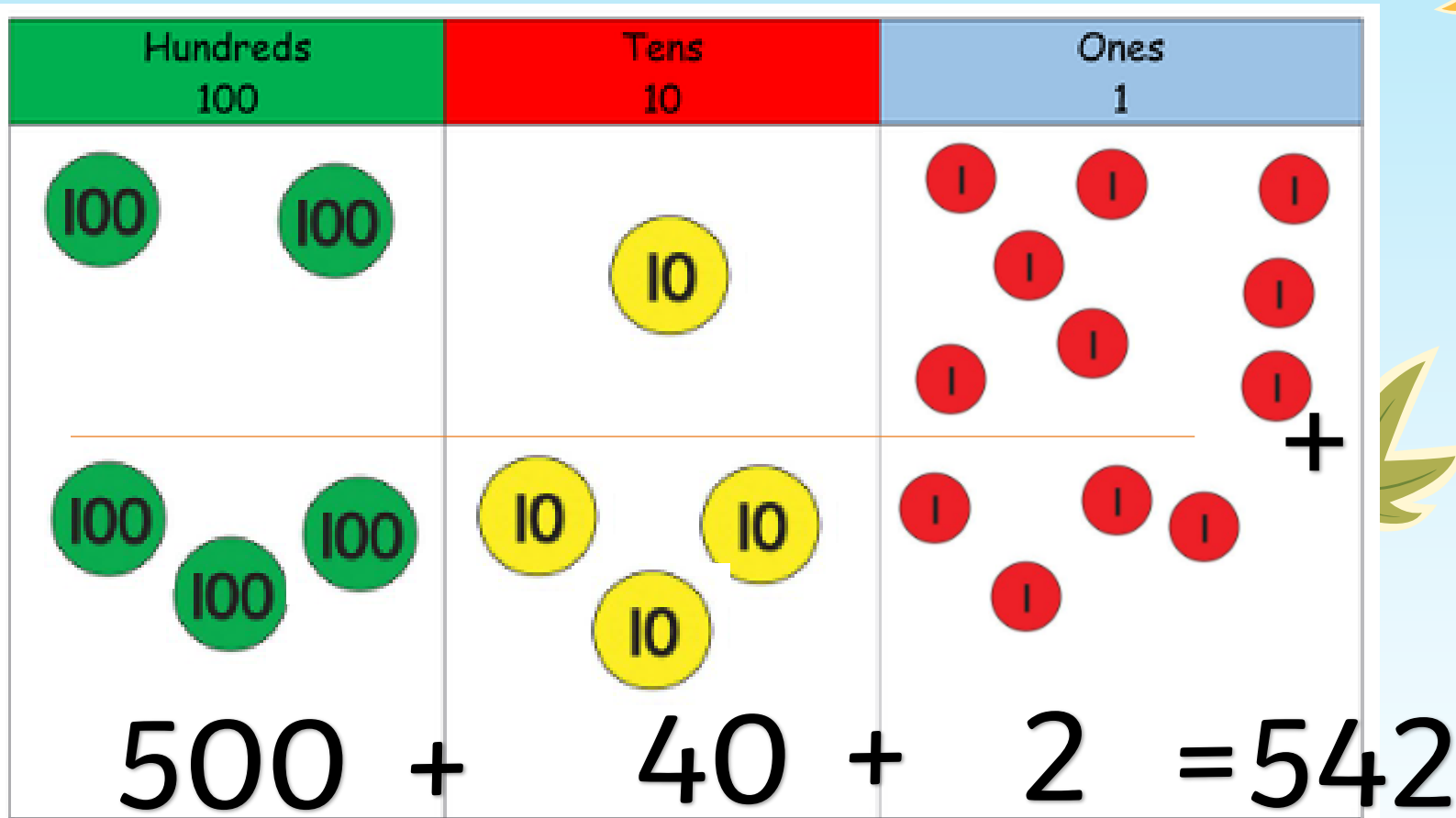
Addition

$$\begin{array}{r} 413 + \\ \underline{322} \\ \hline \end{array}$$

Hundreds 100	Tens 10	Ones 1
4	1	3
3	2	2 +
7	3	5

Addition

$$\begin{array}{r} 218 + \\ 324 \\ \hline \end{array}$$



Addition

$$432 +$$

$$\underline{213}$$

$$257 +$$

$$\underline{129}$$

NOW

IT'S YOUR TURN!

Subtraction

753-

528

—

Hundreds 100	Tens 10	Ones 1

Subtraction

456-

212

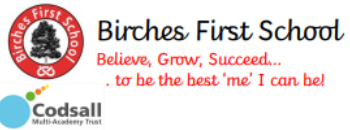
463-

129

NOW

IT'S YOUR TURN!

Calculation Policy



Approaches to Maths including School Calculations Policy



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Updated March 2022

Column method-involving regrouping

Continue to develop understanding of partitioning and place value.

Practically make both numbers on a place value grid.

Add up the ones and exchange 10 ones for one ten.

This can also be done with Base 10 to help children clearly see that 10 ones equal 1 ten and 10 tens equal 100.

As children move on to decimals, money and decimal place value counters can be used to support learning.

Children can draw a pictorial representation of the columns and place value counters to further support their learning and understanding.

To ensure consistency and avoid confusion, any tens that need to be exchanged should be shown BELOW the answer, not above. The addition symbol should be positioned to the right of the calculation to avoid issues with any place holders.

Expanded column method first - to clearly show the exchange

$$\begin{array}{r} 20 + 5 \\ \text{below } 40 + 8 \\ \text{the } 60 + 13 = 73 \\ \text{addition.} \end{array}$$

Moving onto compact column method

$$\begin{array}{r} 536 \\ + 85 \\ \hline 621 \\ 11 \end{array}$$

As the children move on, introduce decimals with the same number of decimal places and different. Money can be used here.

$$\begin{array}{r} 72.8 \\ + 54.6 \\ \hline 127.4 \\ 11 \end{array}$$

Knowledge Organisers

YR2 PLACE VALUE KNOWLEDGE ORGANISER

Key Concepts

- Recognising the place value of each digit in a two digit number
- Read and write numbers up to 100 in numerals and in words
- Compare and order numbers from 0 up to 100
- Partitioning tens and ones
- Understanding place value charts
- Counting in 2s, 3s, 5s and 10s

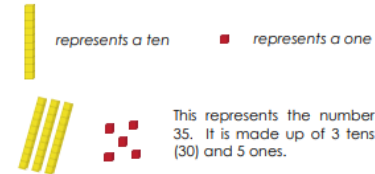
Key Vocabulary

- represents
- greater than/less than
- more than
- fewer
- most
- least
- equal to
- tens and ones
- place value

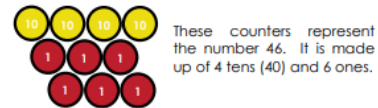


Numbers to 100

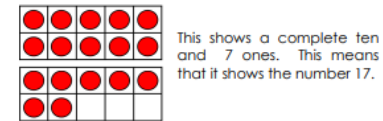
A two-digit number is made up of tens and ones.
Base 10 can be used to represent numbers.



Numbers can also be represented with place value counters.

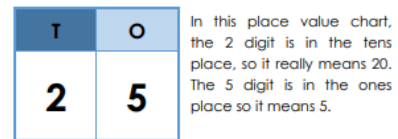
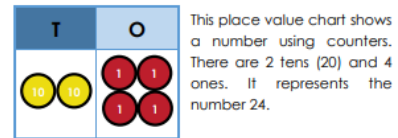
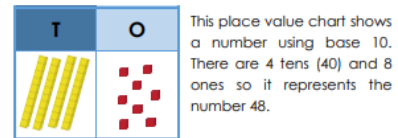


Numbers can also be shown in a ten frame.



Place Value Charts

Place value helps us know the value of a digit, depending on its place in the number.



Maths with Michael

1 We are going to make the number 29 in different ways.

2 Ask your child to fill a ten frame by putting 1 counter in each box. When the ten frame is full, ask them "how many counters are there?"

3 Now ask your child to fill another ten frame. Ask them "how many counters are there now?" Show them that there are 2 tens which is 20 counters.

4 Take another ten frame and ask "how many more counters do we need to make 29? They may need to count in 1s from 21 to 29 to realise that they need 9 more counters.

5 Ask "What number is represented?" Explain that there are 2 tens (completed ten frames) and 9 ones. This is the number 29

6 Draw a part-whole model with two parts. Write 29 in the whole and ask your child what the parts could be.

7 Draw another part-whole model with three parts. Ask your child what the parts could be. Ask them to show you where each part is on the ten frames.

8 Ask your child to make 29 using straws. Get them to bundle 20 of the straws into 2 groups of 10. If you don't have straws, you could use pencils or strips of paper.

Now Try These

15 32 40

Try representing each of the numbers using ten frames, counters, part-whole models and straws. What does this tell you about each number?

White Rose Maths

Printouts – Place Value Chart

Tens	Ones

<https://whiteroseeducation.com/parent-pupil-resources/maths/maths-with-michael>

Supporting Maths at Home

MATH IS EVERYWHERE!

WSKG

Use what's around your busy family to support learning—Wherever you are!
Start with these questions:

WAITING IN LINE



What buttons do you touch to make 56?

Where is aisle 4?

Can you find the 3 on my watch?
What number comes before 7?



Which candy is shaped like a cylinder?

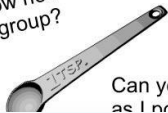


What candy is BELOW the lollipop?



Do you know how many carrots are in this group?

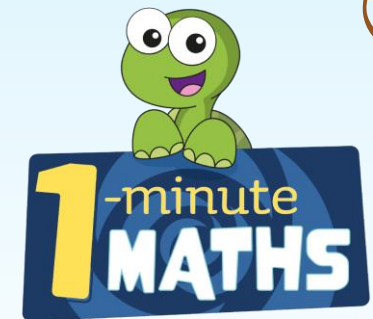
COOKING DINNER




Can you count the teaspoons as I pour the oil?



How many forks do we need on the table for everyone to eat?
Can you make a pattern with forks, knives, and spoons?



The slide features a light blue background with several stylized leaves scattered around. In the top-left corner, there is a green leaf. In the top-right corner, there are two orange leaves. In the middle-left and middle-right areas, there are more green and orange leaves. At the bottom, there are rolling green hills, and a single orange leaf is visible in the bottom-right corner.

Any questions?

Thank you for
coming. We hope
you found it useful.