#### HOW DO WE TEACH IT?





How we teach maths in Early Years Autumn '21

#### Our Aims:

- To give a brief overview of maths in Early Years and how it fits into our planning
- To share what this looks like in the classroom in a little more detail
- To see how maths progresses through the school

## For the Early Learning Goals, children need to:

- Have a deep understanding of number to 10, including the composition of each number
- Automatically recall number bonds up to 5 (including subtraction facts) and some number bonds to 10, including doubles facts

#### Children also need to be able to:

- Verbally count beyond 20, recognising the patterns of the counting system
- Compare quantities up to 10 in different contexts
- Explore and represent patterns within numbers up to 10, including evens and odds and double facts.

#### What you'll see in your child's class:





#### One number a week?

- Each week, children will have a planned, adultled session to introduce a new number
- Children will learn about what the number looks like, how to make the number (addition and subtraction) and also money, shape, time and weight-related maths.

### So, for number 3 ...

... children would not only learn what number 3 looks like, but would also learn that:

- 2 + 1 and 3 + 0 make 3
- A cylinder has 3 faces; 1 curved and 2 flat
- 3p is very small, but £3 is far more!
- 3g is very light, but 3kg isn't!
- 3 o'clock is almost home time! (But it's also when we are in bed at night.)

## So, already, children will know a lot of maths!



#### How children learn maths: USING PRACTICAL (CONCRETE RESOURCES)



"Students who use concrete materials develop more precise and more comprehensive mental representations, often show more motivation and on-task behavior, understand mathematical ideas, and better apply these ideas to life situations."

# Starting with the "real thing" ... (including outdoor learning)



## Then REPRESENTATIONS of the 'real' thing...









## And finally... place value rods and counters





**Column Subtraction with Place Value Counters** 





### Which resource when?

- Children vary in their level of experience so the teacher will choose the best resource to help the child.
- Later, children can choose for themselves when they need a concrete resource to help them and which one.





We use language like **REPRESENTATIONS**, PART-**PART WHOLE and BAR** MODEL as part of our everyday maths.

#### Images to support understanding of Maths Number Bonds- Part-Part-Whole Relationships





#### Images to support understanding of Maths The 'bar' model

Abi has 2 plant pots.

She plants 7 seeds in each pot.



How many seeds does she plant altogether?









## So, as children get older, these representations are part of their maths learning.

Write numbers in the boxes to make this correct.



And finally ... if you read our Newsletters, you might STILL be wondering what SUBITISE means ... ???

#### How many altogether?



#### How many altogether?



How many? Hmm. That one's not as easy, is it? Subitizing is 'learning to see a number – rapidly and accurately, and without the need to count'. It's amazing how we take this for granted, isn't it?



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#### THANK YOU FOR LISTENING!





#### Please feel free to ask us, if there's anything you are unsure about.