

Reception

Spring Term

Parent Pack

Focus: Numbers to 20

This pack includes:

- An overview of Mathematics Mastery
 - Big Pictures
 - Key vocabulary
- Key representations for numbers to 20
 - Number games to play at home



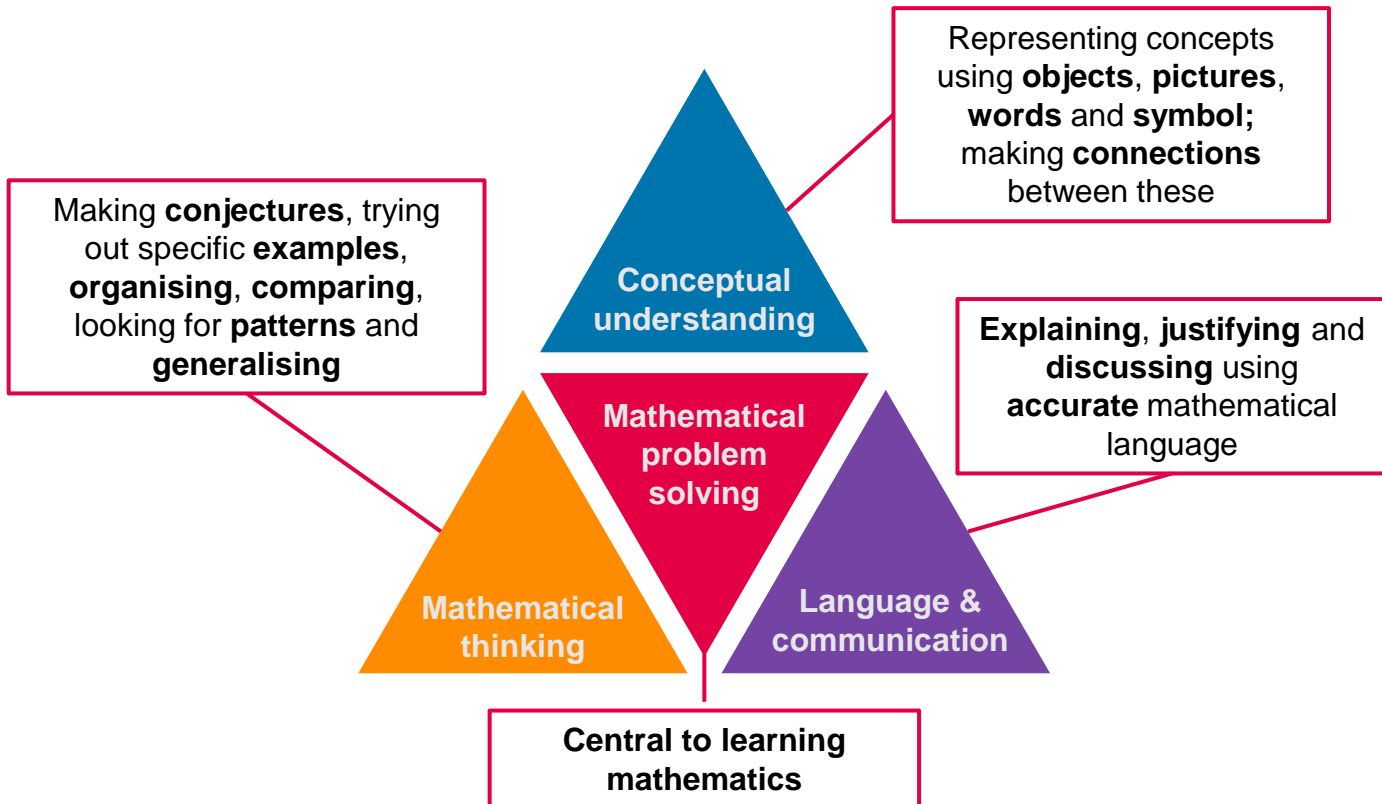
Mathematics
Mastery

Mathematics Mastery

What is 'Mastery'?

The 'mastery approach' to teaching mathematics is the underlying principle of Mathematics Mastery. Instead of learning mathematical procedures by rote, we want your child to build a deep understanding of concepts which will enable them to apply their learning in different situations. To achieve this we aim to develop pupils'

Conceptual Understanding, Mathematical Thinking and Language and Communication. (See diagram below)



Success for all

At school we believe **all** pupils can achieve success in maths. We encourage pupils to have a 'growth mindset' – a belief that effort leads to success and that challenges are opportunities to learn.

Here are a few tips to encourage your children at home with maths:

- ✓ Talk to your child about everyday maths
- ✓ Play games with them
- ✓ Value mistakes as learning opportunities
- ✓ Recognise that there is more than one way to work things out.
- ✓ Praise your child for effort over outcome.
- ✓ Avoid saying things like "I'm useless at maths".

Spring focus: Numbers to 20

This term one of our key focusses in Reception is developing understanding of numbers to 20.

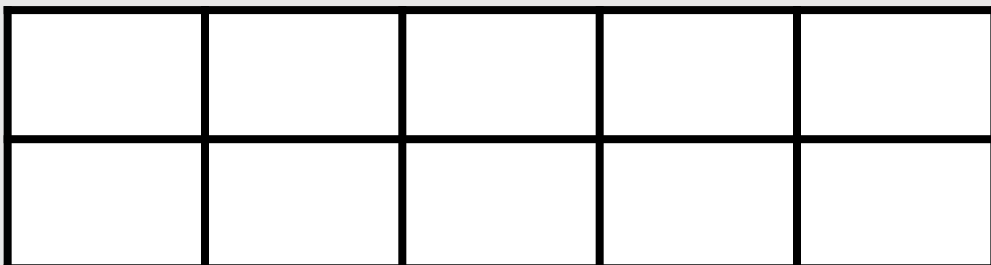
Reception - Spring Curriculum Map

Numbers within 10	Addition and subtraction within 10	Numbers within 15	Grouping and sharing	Numbers within 20	Doubling and Halving
<ul style="list-style-type: none"> Count up to ten objects Represent, order and explore numbers to ten One more or fewer, one greater or less 	<ul style="list-style-type: none"> Explore addition as counting on and subtraction as taking away 	<ul style="list-style-type: none"> Count up to 15 objects and recognise different representations Order and explore numbers to 15 One more or fewer 	<ul style="list-style-type: none"> Counting and sharing in equal groups Grouping into fives and tens Relationship between grouping and sharing 	<ul style="list-style-type: none"> Count up to 10 objects Represent, order and explore numbers to 15 One more or fewer 	<ul style="list-style-type: none"> Doubling and halving Relationship between

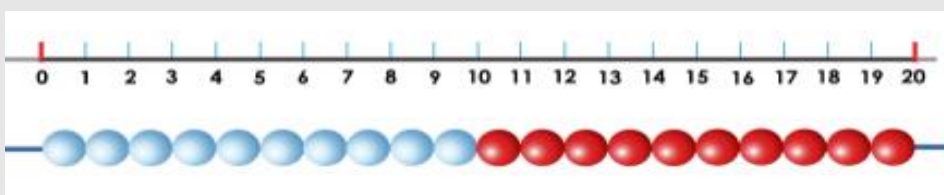
Key vocabulary for Reception – Numbers 1 – 20

zero (0) one (1) two (2) three (3) four (4) five (5) six (6) seven (7)
 eight (8) nine (9) ten (10) eleven (11) twelve (12) thirteen (13)
 fourteen (14) fifteen (15) sixteen (16) seventeen (17) eighteen (18)
 nineteen (19) twenty (20) first (1st) second (2nd) third (3rd) fourth (4th)
 fifth (5th) sixth (6th) seventh (7th) eighth (8th) ninth (9th) tenth (10th) last
 how many count more fewer greater less same different next
 before after between

The ten frame is used to support early number skills

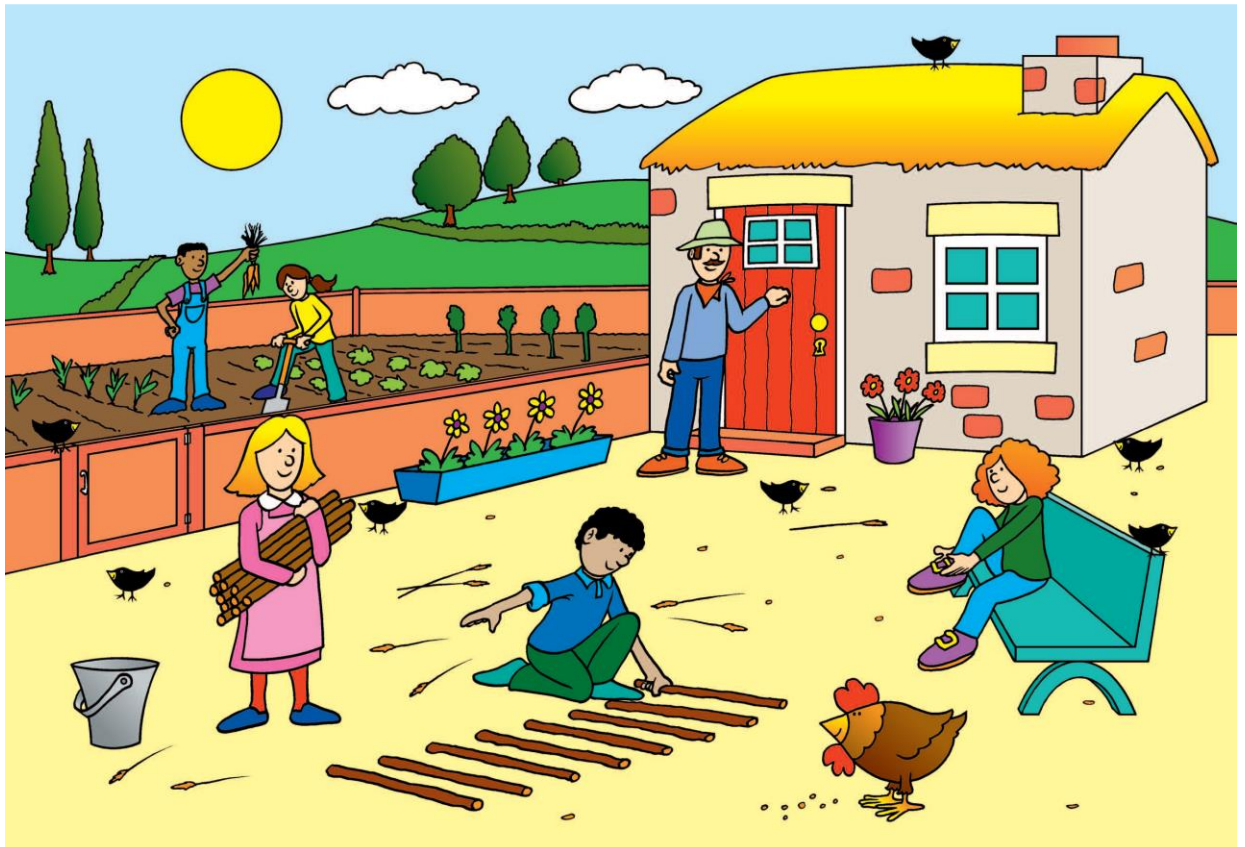


The bead string and number line further supports number sense



Big Pictures

What maths can you see? Discuss with your child at home using the key vocabulary on the previous page.

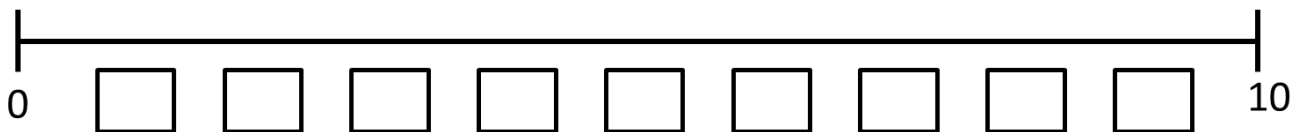


Try this at home – workshop games

Number line fun

- Draw a line each and mark 0 and 10 at either end or use the template number line with given intervals.
- Roll the dice and decide where that number would go and write it in.
- Then it's your partners turn.
- The first to get all numbers from 1-9 wins.

Watch out! If you get a repeat number it will mean you have to wait until next time!



more less before after between order
1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th

5 questions!

- Secretly write down a number between 0 and 20 and don't show your partner.
- Your partner needs to ask you questions using the star words greater than and less than. For example, "Is it less than 18?"
- The aim of the game is to try and guess the number after asking 5 questions.

Example

- 1) Is it less than 18? Yes
- 2) Is it more than 5? Yes
- 3) Is it between 10 and 15? Yes
- 4) Is it more than 12? Yes
- 5) Is it less than 14? No

Guess: 14

Tip: have a number line out whilst playing. Ask children to refer to the number line before they ask their next question

more than less than between

Variations: The game can be simplified by using numbers 0 – 5, 0 – 10 or 0 – 15 instead of 0 – 20

Try this at home – more ideas

Number of the week

Pick a number of the week. Where can you see examples of that number in your house, when you're outside or on your way to school? What songs do you know that use that number? What stories do you know that use that number? What is one more or one less than that number?

How many ways

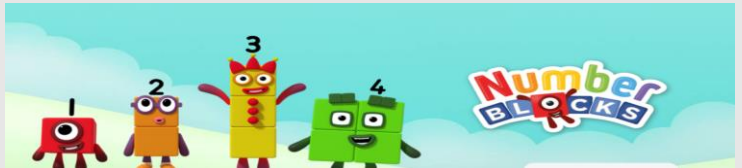
Select a number. Can you draw that number? Can you find that amount of objects? Can you show the number on a number line? Can you show me on your fingers? Can you show me on your fingers in a different way? How else can you show that number?

Exploring ordinal numbers

- Discuss the order of events that happened e.g. What happened first? What happened second?
- Gather a range of objects and ask, which is first? Which is fourth? etc.
- Discuss who came first in an activity or game e.g. Who came third in the game? Who was the last one to arrive?

Useful Website – Number blocks

<https://www.bbc.co.uk/cbeebies/shows/numberblocks>



Dice games

Playing with dice can be a great way to support your children with number bonds. If you don't have a pair of dice, try these online dice:

<http://dice.virtuworld.net/>

<https://rollthedice.online/en/cdice/0-9-dice>

Sharing

Share up to twenty items into equal groups. For example sharing sweets between two people or creating groups of ten out of twenty objects.

Questions to support thinking

- What do you think would happen if....
- What's the same? What's different?
- How do you know that?
- What do you notice?
- Can you see a pattern? What would come next?
- What else could go in this set? What couldn't?