Exploring Number

Mathematics Mastery

1 Use the digits 4, 5, 6, 7, 8, 9 can you make the following statements true?

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☐☐☐ > ☐☐☐   ☐☐☐ < ☐☐☐

ordering and place value

2

Count in equal steps of 2, starting at 2. Count until 100. How many numbers will you say?

What if you start at 1, but still count in 2s? Will you say the same amount of numbers?

What if you start at …?

How will you record your thinking?

counting and being systematic

3 Start by writing zero.
Next add either 1, 2 or 10 and record the answer.
Repeat this until you reach 20.

Play again.

How many different ways can you make 20?

What is the shortest route?
What is the longest route?

calculating

4 You need a partner and an empty tin that you cannot see through. Next find some objects that you can drop into it that make a noise (e.g. bottle tops, pasta pieces, coins).

Take it in turns to drop objects into the tin - without your partner looking! How many objects do they hear? Are they correct? What if you change each object to have a value of 2? 5? 15? 25? How many objects and what is the total? Keep changing the value of the objects.
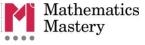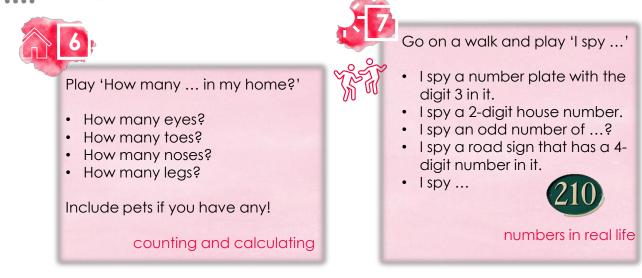
counting and calculating

5 Play 'I'm Thinking of a Number' with a partner.
Think of a number and then write clues.
For example, my number is odd. It has 2 digits. It is less than 25 but more than 17. My number is in the 3 times table.

using number facts

Did you know … ?
- About 1 in every 10 people are left handed?
- All insects have 6 legs?
- Your foot has 26 bones in it?
- If you add up all the numbers from 1 to 100 consecutively it totals 5050?
- The opposite sides of a 1-6 dice always add up to 7?
- The bi in bicycle means two because it has two wheels. What do you think the tri in tricycle means?

6 Play 'How many … in my home?'

- How many eyes?
- How many toes?
- How many noses?
- How many legs?

Include pets if you have any!

counting and calculating

7 Go on a walk and play 'I spy …'

- I spy a number plate with the digit 3 in it.
- I spy a 2-digit house number.
- I spy an odd number of …?
- I spy a road sign that has a 4-digit number in it.
- I spy …

210

numbers in real life

8 Using any combination of addition, subtraction, multiplication or division and all of the digits 2, 5, 7 and 9 what numbers can you make? You must use all of the numbers each time.

What is the biggest number? What is the smallest number?
Can you use each operation too?

calculating

9 Ask an adult to help you find the book 'One is a Snail, Ten is a Crab' on the internet.

Read or listen to the story.

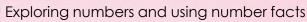Can you make your own version of this book?

exploring numbers

10 Ask someone to help you to go to the NRICH website and have a go at the task called "I'm Eight"

www.nrich.maths.org/55

8

exploring number

You have been…

☐ Exploring numbers and using number facts

☐ Counting and calculating

☐ Reasoning about numbers, including being systematic

☐ Finding numbers in real life