

Day 1

 This week you need to cut a piece of paper into nine pieces and number them 1 to 9.



- Shuffle the number cards and deal yourself three.
- How many even numbers can you make using some or all of your three cards?

Hint: For even numbers think of counting in twos (2, 4, 6, 8, 10...) For example, with the numbers 6, 7 and 2 here are some of the **even** numbers you can make:

number	Even humbers
6,7,2	6+2=8 6-2=4

- Record **all** the calculations that make even numbers
- Now shuffle the cards and deal yourself three again. How many even numbers can you make this time? Record the calculations that make even numbers.
- Now choose three number cards which you think will give you the most even numbers. Record the calculations.
- What do you notice?

Notes for adults working with groups of children

- Children may need resources to support the addition and subtraction e.g. Numicon, bead strings...
- Help the children to work systematically so that they know they have found all possibilities.
 For example, they could start with each pair of single numbers (such as 6 and 2, then 7 and 2, then 7 and 6) and consider if adding or subtracting will result in even numbers.
- Ask the children to explain their choice of three numbers.



Day 2

- Shuffle the number cards and deal yourself three.
- How many odd numbers can you make using some or all of your three cards?

For example, with the numbers 6, 3 and 9 here are **some** of the odd numbers you can make:

- 0.3 + 6 = 9
- 9 + 6 = 15
- 0.6 3 = 3
- Record all the calculations that make odd numbers.
- Now shuffle the cards and deal yourself three again. How many odd numbers can you make this time? Record the calculations that make odd numbers.
- Now choose three number cards which you think will give you the most odd numbers. Record the calculations.
- What do you notice?

Notes for adults working with groups of children

- Children may need resources to support the addition and subtraction e.g. Numicon, bead strings...
- Help the children to work systematically so that they know they have found all possibilities. For example, they could start with each pair of single numbers (such as 6 and 3, then 9 and 3, then 9 and 6) and consider if adding or subtracting will result in odd numbers.
- Ask the children to explain their choice of three numbers.



Day 3

- Shuffle the number cards and deal yourself three.
- How many numbers bigger than 10 can you make using some or all of your three cards?

For example, with the numbers 2, 7 and 5 here are **some** of the numbers bigger than 10 you can make:

- \circ 5 + 7 = 12
- \circ 7 + 5 + 2 = 14
- Record all the calculations that make numbers bigger than 10.
- Now shuffle the cards and deal yourself three again. How many numbers bigger than 10 can you make this time? Record the calculations that make these numbers.
- Now choose three number cards which you think will give you the most numbers bigger than 10. Record the calculations.
- What do you notice?

Notes for adults working with groups of children

- Children may need resources to support the addition and subtraction e.g. Numicon, bead strings...
- Ask the children to explain their choice of three numbers.



Day 4

- Shuffle the number cards and deal yourself three.
- How many numbers smaller than 10 can you make using some or all of your three cards?

For example, with the numbers 7, 3 and 5 here are **some** of the numbers smaller than 10 you can make:

- \circ 5 + 3 = 8
- 0.7 5 = 2
- Record all the calculations that make numbers smaller than 10.
- Now shuffle the cards and deal yourself three again. How many numbers smaller than 10 can you make this time? Record the calculations that make these numbers.
- Now choose three number cards which you think will give you the most numbers smaller than 10. Record the calculations.
- What do you notice?

Notes for adults working with groups of children

- Children may need resources to support the addition and subtraction e.g. Numicon, bead strings...
- Ask the children to explain their choice of three numbers.



Day 5

- Shuffle the number cards and deal yourself three.
- How many numbers between 5 and 15 can you make using some or all of your three cards?

Hint: Between 5 and 15 means bigger than 5 but smaller than 15. For example, with the numbers 5, 7 and 1 here are **some** of the numbers between 5 and 15 you can make:

$$\circ$$
 5 + 7 + 1 = 13

$$0.7 - 1 = 6$$

- Record all the calculations that make numbers between 5 and 15.
- Now shuffle the cards and deal yourself three again. How many numbers between 5 and 15 can you make this time? Record the calculations that make these numbers.
- Now choose three number cards which you think will give you the most numbers between 5 and 15. Record the calculations.
- What do you notice?

Notes for adults working with groups of children

- Children may need resources to support the addition and subtraction e.g. Numicon, bead strings...
- Ask the children to explain their choice of three numbers.