

Number Sense Games

From Prep-Two our big ideas in number are 'Trusting the Count' and 'Place Value Understanding'. Number Sense enables people to read, interpret, evaluate and work with numbers in a variety of everyday contexts.

Playing games that encourage children to manipulate numbers, model place value and build simple mental computation is a great way to support your child at home.

Counting Swap

<https://youtu.be/TmVKNKrmSRg>

Concepts covered: Place value, comparing/ordering numbers

Equipment: Deck of cards

Number Snake

<https://www.lovemaths.me/number-f-2>

Concepts covered: Ordering numbers, counting

Equipment: Deck of cards

Greater Than

<https://youtu.be/Zt0GEswfkfc>

Concepts covered: Place value, comparing/ordering numbers

Equipment: 0-9 dice (3 dice for 3 digit numbers, 4 dice for 4 digit numbers etc.), paper and pens

Tens	Ones

Hundreds	Tens	Ones

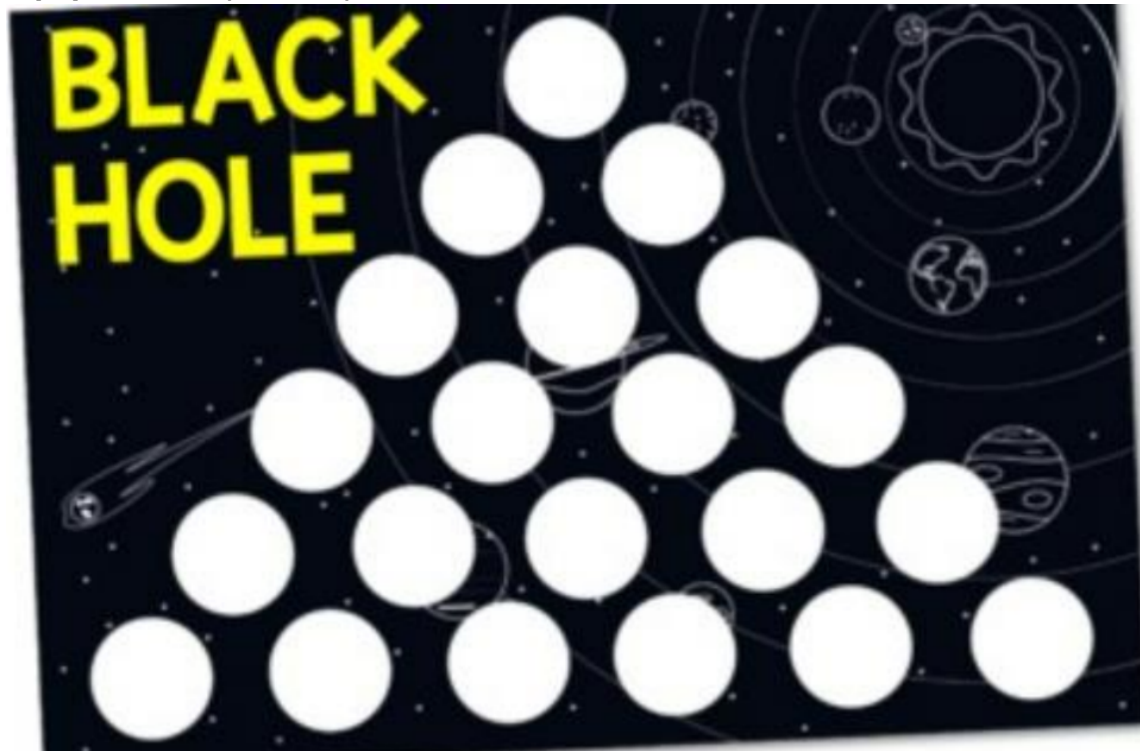
Black Hole

<https://youtu.be/KofkJ5QDbw8>

Concepts covered:

- Addition/subtraction

Equipment: Paper and pen



Tug of War

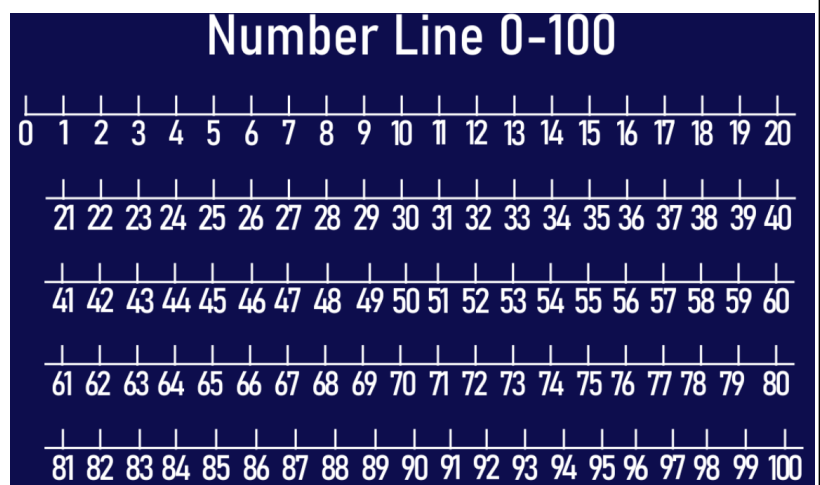
<https://nrich.maths.org/5897>

Concepts covered:

- Place value
- Comparing/ordering numbers
- Addition & subtraction

Equipment:

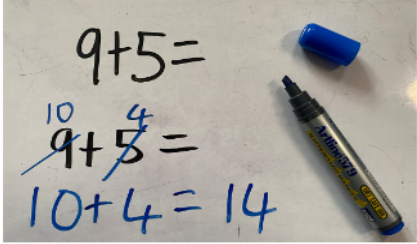
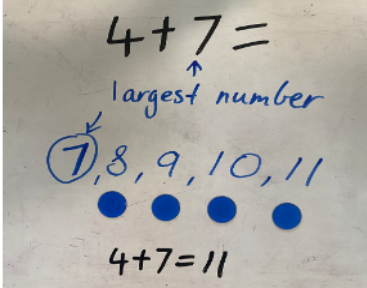
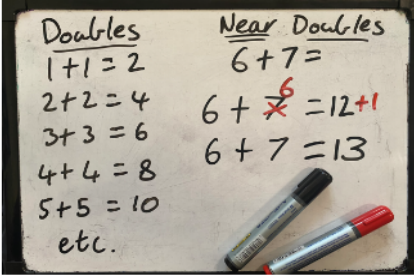
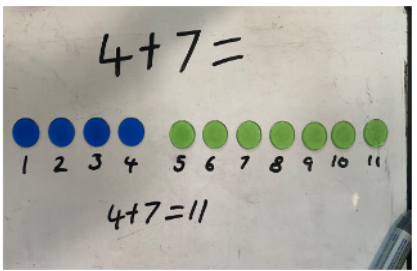
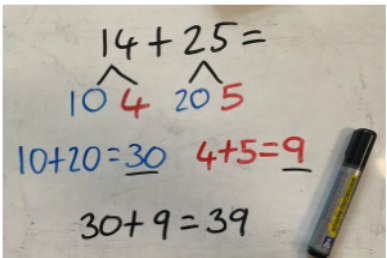
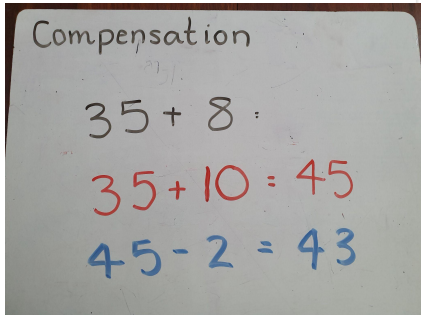
- Number line 0-20 or 0-100



Addition Strategies

There are many appropriate addition strategies for students to use when solving addition problems. Teaching the vertical algorithm that you would be familiar with is not to be rushed. It is important to build students' understanding of what is happening to each number when adding groups (building number sense and place value) rather than relying on a formula shortcut.

Addition Strategies

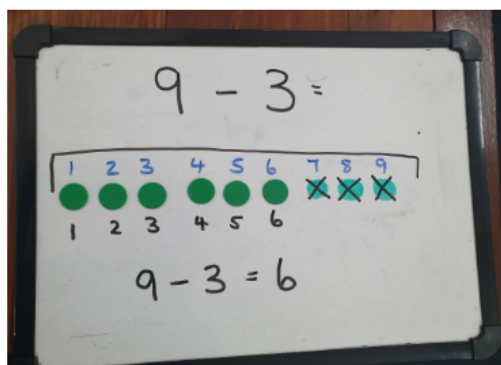
<p>Make to 10 or next 10</p> 	<p>Count on from the largest number</p> 	<p>Doubles and near doubles</p> 
<p>Count all</p> 	<p>Split strategy/Add the parts/Partitioning</p> 	<p>Compensation</p> 

Subtraction Strategies

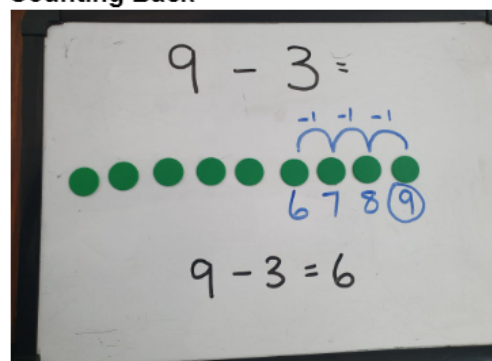
Subtraction is often a more challenging concept for children to grasp. Subtraction strategies can be thought of as the reverse of addition. Using concrete materials, number lines and 100's charts and help support building understanding. Children need opportunities to explore operations in real world contexts. It is often helpful for student to "think of addition" for subtraction eg. $15 - 8$ can be thought of as 8 and what make 15?

Subtraction

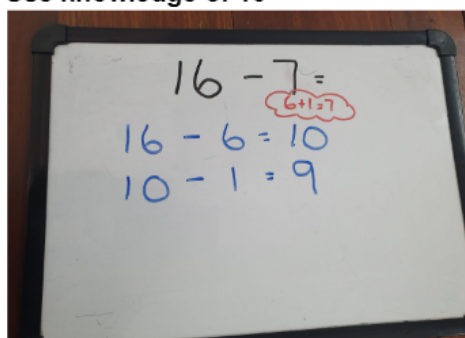
Model all, take away and count all



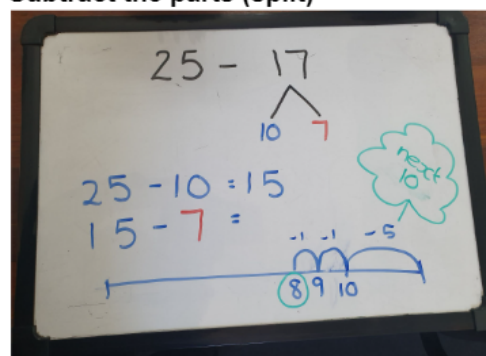
Counting Back



Use knowledge of 10



Subtract the parts (split)



Compensation

$$35 - 8$$

$$35 - 10 = 25$$

$$25 + 2 = 27$$

