

PLAYING WITH NUMBERS

November 2021

AIMS

- Know what a child in Year R should know by the end of the year.
- Get to play with numbers with your child.
- Take away some ideas for playing with numbers at home.

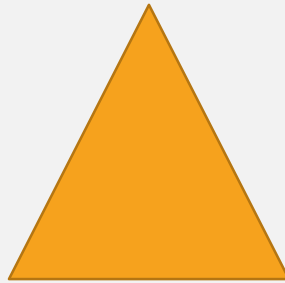
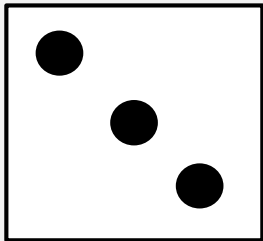
AT THE END OF EARLY YEARS...

We aim for children to know the numbers to 10

“forwards, backwards and inside out”

This gives the children the best start and a secure foundation for the start of their mathematical learning in Key Stage 1 and beyond.

1, 2, 3



3 points
3 sides

 $3 + 0 = 3$

 $2 + 1 = 3$

 $1 + 2 = 3$

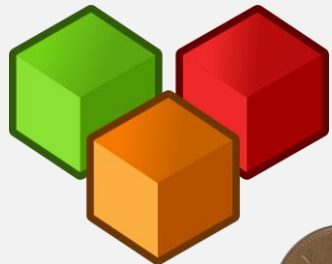
 $0 + 3 = 3$

 $3 - 0 = 3$

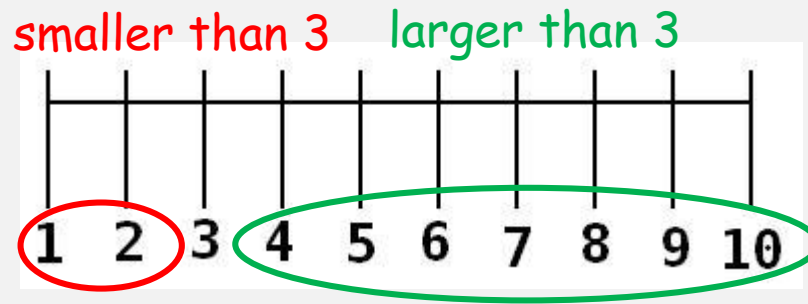
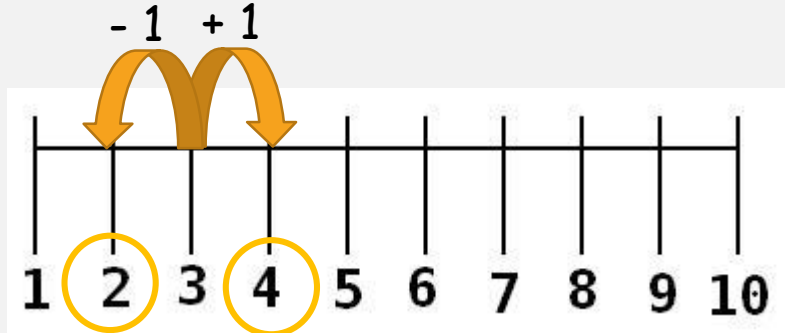
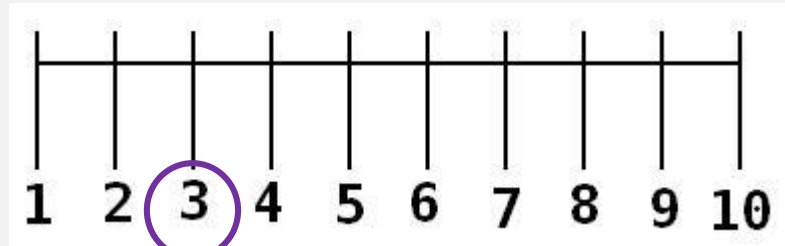
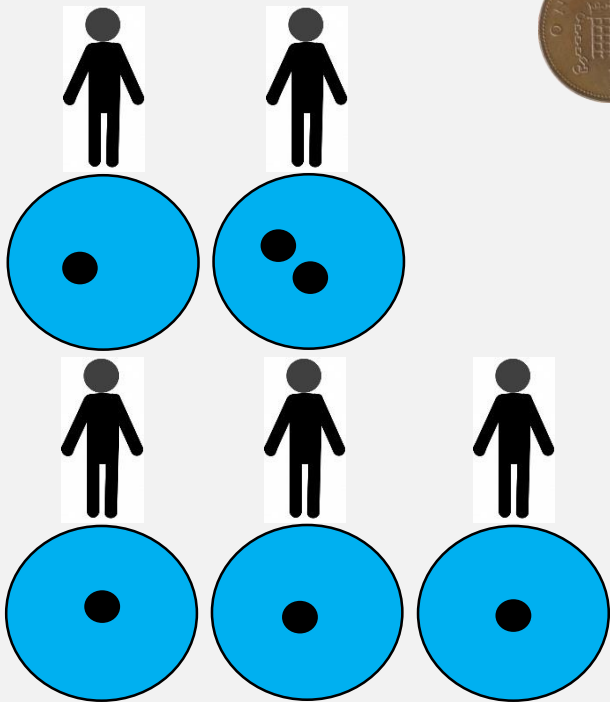
 $3 - 1 = 2$

 $3 - 2 = 1$

 $3 - 3 = 0$



3



Say the number names.

Count the correct amount of objects pointing to each one.

Recognise the number.

Know what double the number is.

Share the number of objects between different groups.

Recognise different representations of the number e.g. spots on a dice.

Make connections to the number and other things they know, e.g. number of sides on a shape.

Know what the number is before and after it.

Know 1 more and 1 less than the number.

Know what the numbers are larger than and smaller than the number.

Know number bonds to the number e.g. two numbers that add up to it.

Know subtraction facts for that number e.g. $3 - 0 = 3$

WHAT WE LEARN
ABOUT EACH
NUMBER TO 10

EARLY LEARNING GOALS FOR MATHS

NUMBER

- Have a deep understanding of number to 10, including the composition of each number;
- Subitise (recognise quantities without counting) up to 5;
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.




NUMERICAL PATTERNS

- Verbally count beyond 20, recognising the pattern of the counting system;
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.




FOR IDEAS FOR PLAYING WITH NUMBERS AT HOME....

15 ideas for learning about numbers...

<p>1 Money! Money! Look at coins and notes. Talk about their value, shape, size and colour. Count them too!</p>	<p>2 Share it out! Count some toys or food and share them between the family. How many do they each have?</p>	<p>3 Towers Use lego or duplo to build number towers. Compare the towers, talk about more and less or add them together.</p>	<p>4 Number Walk Spot numbers around the house or on a walk. Are there any patterns?</p>	<p>5 Dominoes Make your own dominoes. Match them to numbers, find doubles, add the dots together from either side or play the game.</p>
<p>6 Mirror play! Count how many in front of a mirror then how many altogether. Can you find out doubles?</p>	<p>7 Shops Set up a shop with things to buy and sell. You could write receipts and price tags.</p>	<p>8 Pegs How many can you peg on to your teddy? Your top? Your socks? Who can peg the most?</p>	<p>9 Shapes Find 2D and 3D shapes around the home. Talk about how many sides, points or faces they have?</p>	<p>10 Play a game on ICT Games: https://www.ictgames.com/mobilePage/index.html</p>
<p>11 Stairs or Steps Count forwards and backwards as you go up and down the stairs. You could add number cards as you count. You could do this at the park.</p>	<p>12 Board Games Play games involving counting, using dice or recognising numbers like snakes and ladders.</p>	<p>13 Play a game on Top Marks: https://www.topmarks.co.uk/maths-games/5-7-years/counting</p>	<p>14 Obstacle Course Make an obstacle course and count how long it takes to complete it. You could use a stop watch and compare the time.</p>	<p>15 Treats! Ever have some fruit stars? Sort them by colour or shape and compare how many in each group.</p>

Playing Cards	Dice	Money
 <ul style="list-style-type: none"> Counting pictures Counting objects Recognising numbers by playing snap and pairs Ordering and comparing numbers Making up number games 	 <ul style="list-style-type: none"> Recognising quantities Counting objects to match dots Adding totals of 2 or more dice Making up number games 	 <ul style="list-style-type: none"> Counting Recognising numbers Adding (finding a total or buying 2 or more items) Taking away (change)

6 things you may have at home to play with numbers

Egg Boxes	Lego, Duplo, bricks and blocks.	Real or play food
 <ul style="list-style-type: none"> Counting objects into Moving objects around to show numbers in different ways 	 <ul style="list-style-type: none"> Counting Comparing amounts Sharing Adding and taking away bricks 	 <ul style="list-style-type: none"> Counting Sharing Finding half of a number Talking about more and less



Top Tips for playing with Numbers

