#### **Place value**

- count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
- given a number, identify one more and one less
- identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
- read and write numbers from 1 to 20 in numerals and words.

Language	First Hand Experiences	Purpose / Life	Previous Knowledge
Enrichment		Skills	
Taking part in pair and group games. Counting as a class. Giving reasons for answers. Working with a partner. Answering would you rather questions about amounts.	Counting the children, when lining up at play etc. Counting our fruit, resources such as worksheets, PE equipment. Reading numbers on the playground – hopscotch. Building with construction. Draw with chalk in the playground.	Being able to count out a required number of coins when shopping. Counting each other. Preparing food or gifts etc. for a birthday party. Reading door/phone numbers. Playing board games.	<ul> <li>Counts objects, actions and sounds. (Number)</li> <li>Is able to subitise (recognise how many objects there are in a small group without counting). (Number)</li> <li>Is able to link the number symbol (numeral) with its cardinal number value. (Number)</li> <li>Can count beyond ten. (Number)</li> <li>Is able to compare numbers. (Number)</li> <li>Understands the 'one more than/one less than' relationship between consecutive numbers. (Number)</li> <li>Is able to explore the composition of numbers to 10. (Number)</li> <li>Automatically recalls number bonds for numbers 0-5 and some to 10.</li> </ul>

Reading number playground – hopscotch. Reading car num plates	<ul> <li>Automatically recalls (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some</li> </ul>
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	<ul> <li>Is able to explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally (ELG). (Numerical Patterns)</li> <li>Verbally counts beyond 20, recognising the pattern of the counting system (ELG). (Numerical Patterns)</li> </ul>

### **Addition and Subtraction**

- read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20
- add and subtract one-digit and two-digit numbers to 20, including zero
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = \_\_\_\_ 9.

Language Enrichment	First Hand Experiences	Purpose / Life Skills	Previous Knowledge
Shop role play with customers. Matching number bonds by finding the correct partner. Working in a group to order and compare numbers.	<ul> <li>Adding/Subtracting children for groups or games.</li> <li>Adding and subtracting resources.</li> <li>Finding the total of the objects.</li> <li>Chalk in the playground.</li> <li>Forest Fire, add sticks we throw in the fire. Count the bricks and add them, etc.</li> <li>Art, add brushes, add patterns (e.g. Andy Warhol).</li> <li>Birthday sweets (subtract and add).</li> </ul>	Playing board games and playground games. Adding and subtracting money to pay for things or work out how much they have saved. Finding the total of their toys.	<ul> <li>Is able to subitise (recognise how many objects there are in a small group without counting). (Number)</li> <li>Is able to link the number symbol (numeral) with its cardinal number value. (Number)</li> <li>Can count beyond ten. (Number)</li> <li>Is able to compare numbers. (Number)</li> <li>Understands the 'one more than/one less than' relationship between consecutive numbers. (Number)</li> <li>Is able to explore the composition of numbers to 10. (Number)</li> <li>Automatically recalls number bonds for numbers 0-5 and some to 10. (Number)</li> <li>Automatically recalls (without reference to rhymes, counting or other aids)</li> </ul>

<ul> <li>number bonds up to 5 (including subtraction facts) and some number</li> <li>bonds to 10, including double facts (ELG). (Number)</li> <li>Has a deep understanding of number to 10, including the composition of each number (ELG). (Number)</li> </ul>
<ul> <li>Is able to subitise (recognise quantities without counting) up to 5 (ELG). (Number)</li> </ul>
<ul> <li>(Number)</li> <li>Can compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity (ELG). (Numerical Patterns)</li> <li>Is able to explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be</li> </ul>
distributed equally (ELG). (Numerical Patterns) <ul> <li>Verbally counts beyond 20, recognising the pattern of the counting system (ELG). (Numerical Patterns)</li> </ul>

### **Multiplication and Division**

• solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

Language Enrichment	First Hand Experiences	Purpose / Life Skills	Previous Knowledge
Shop role play	Adding pairs of children by counting in	Shopping	
Cooking	twos.	Following recipes and	
Teddy bear's picnic	Counting the number of fingers by	making food e.g.	
Food arrays.	counting in tens.	doubling a recipe.	
	Birthdays, share sweets in tables.	Playing games.	
	Share equipment in tables.		
	PE lessons, make groups.		

### Fractions, decimals and percentages

- recognise, find and name a half as one of two equal parts of an object, shape or quantity
- recognise, find and name a quarter as one of four equal parts of an object, shape or quantity

Language Enrichment	First Hand Experiences	Purpose / Life Skills	Previous Knowledge
Pizza role play Halving objects in a shop Working at a craft station with others. Saying what is the same and what is different about whole and half objects.	Cutting up and measuring liquid for cooking e.g. making smoothies, making bread (GFOL). Crafts - folding paper/card for making objects such as paper planes/boats Christmas cards. Giving out equal amounts of objects/resources.	Cooking and following recipes. Crafts	<ul> <li>Can select, rotate and manipulate shapes in order to develop spatial reasoning skills. (Numerical Patterns)</li> <li>Investigates composing and decomposing shapes and recognises a shape can have other shapes within it, just as numbers can. (Numerical Patterns)</li> <li>Is able to continue, copy and create repeating patterns. (Numerical Patterns)</li> <li>Patterns)</li> </ul>

#### Measure

- compare, describe and solve practical problems for:
- lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]
- mass/weight [for example, heavy/light, heavier than, lighter than]
- capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]
- time [for example, quicker, slower, earlier, later]
- measure and begin to record the following:
- lengths and heights mass/weight
- capacity and volume
- time (hours, minutes, seconds)
- & recognise and know the value of different denominations of coins and notes
- \* sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
- & recognise and use language relating to dates, including days of the week, weeks, months and years
- & tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.

Language Enrichment	First Hand Experiences	Purpose / Life Skills	Previous Knowledge
Talking about our	Measuring the length of the piece	Telling the time and	Can compare length, weight and capacity. (Numerical Patterns)
weekend.	of paper, string, ribbon etc	being able to respond to	
Cooking.	<ul> <li>Measuring objects for baking,</li> </ul>	the language to of	
Comparing weights	crafts, etc	yesterday, tomorrow,	
using scales.	Buying presents for Christmas	etc	
Christmas parcel shop	hopping experiences (with PTA)		
	<ul> <li>Telling the time throughout the</li> </ul>	Measuring objects for	
	day.	baking, crafts, etc	
	<ul> <li>PE – fitness activities e.g. jumping</li> </ul>		
	for 1 min	Shopping	

#### Geometry

- \* recognise and name common 2-D and 3-D shapes, including:
- 2-D shapes [for example, rectangles (including squares), circles and triangles]
- 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].

Language Enrichment	First Hand Experiences	Purpose / Life Skills	Previous Knowledge
Discussing similarities	- Hold and sorting 2D and 3D	Building and creating	
and differences	shapes.	objects in craft,	
between shapes.	<ul> <li>Playing with construction</li> </ul>	engineering etc	
Feely bag shape	<ul> <li>DT – making buildings with</li> </ul>		
describing	wooden blocks, junk modelling,	Baking and cooking	
Sorting shapes by	playdough etc		
property.	- DT drawing around templates.	Designing and making	
	- Art – creating pictures with shapes.	clothes etc	
	- Making shapes with their bodies in		
	gym and dance.		
	<ul> <li>Making patterns.</li> </ul>		