

Key Learning Opportunities

Characteristics of Learning

- To maintain a focus for an extended period of time
- To think of ideas and find new ways to do things, engaging in new experiences and making links in their learning

Personal, Social and Emotional Development

- To choose and share resources needed for the chosen activities
- To show confidence in asking adults for help

Physical Development

- To show good control and co-ordination in small movements
- To handle tools with increasing control and show a preference for a dominant hand
- To begin to use anticlockwise movement and retrace vertical lines and to form recognisable letters
- To use a pencil and hold it effectively to form recognisable numbers

Communication and Language

- To express thoughts and share ideas
- To demonstrate understanding when talking with others
- To develop own explanations by connecting ideas or events
- To use language to explain and recreate experiences, linking statements and sticking to a main theme

Literacy

- To use a growing vocabulary to describe their experiences and ideas
- To give meaning to marks which they make
- To write own name

Maths

- To order and sequence familiar events and use every day mathematical language related to time, position, size, and shape

Understanding the World

- To talk about past and present events in their own lives and in the lives of family members
- To talk about and reflect upon the things they notice about the world around them

Expressive Arts and Design

- To use what they know about materials in original ways
- To represent their own ideas using symbolic representation
- To use their imagination, along with own experiences to create settings and stories

Resources	Organisation	Intended Experiences	Role of the Adult
<p>Maths Area</p> <ul style="list-style-type: none"> -Selection of Maths story books. -Interlocking cubes -Counters -Number shapes -Sorting hoops -Natural materials (for sorting, comparing and counting) -Small world toys (for sorting, comparing and counting) -Matching cards -Number lines and number tracks -Magnetic numbers -Numeral cards -Dot cards -Shapes (2D and 3D) Number and information books Beads, cotton reels, threading materials - Measuring containers 	<ul style="list-style-type: none"> -Resources organised into pen pots and shallow trays on open shelving so that they are easily visible to the children. -Resources grouped together, sorted by type. -Regular shaped pots and trays silhouetted onto the shelves to support shape recognition and tidying up routines. -Resources clearly labelled using text and photographs and including numbers of items to support maths learning through tidying up. -Area for children to store partially completed work (wow tray) -Areas for children to store or display completed work (proud clouds) 	<p>In this area we will see children</p> <ul style="list-style-type: none"> -Play mathematical games, developing the ability to form good relationships with peers and mathematical skills. -Talk about mathematical ideas and what they notice about different objects, shapes, patterns and arrangements. -Explore sorting objects into sets based on different criteria. -Match items that are the same. -Use language to talk about different patterns they can see. -Practise rote counting, starting and stopping at different numbers. -Represent numbers using their fingers and different resources. -Recognise different ways that numbers can be represented. -Explore subitising and identifying how many objects are in a group without counting. -Identify and write numerals. -Practise matching numerals and quantities. 	<p>Play Alongside</p> <ul style="list-style-type: none"> -Observe children and take note of their key interests -Respond to their requests and suggest ideas -Consider additional stimulus and add this immediately if to hand or the following day/week -Play and model alongside children to take learning forwards, suggest ideas and show what's possible -Play alongside, or in small, organised groups to model language, correct and/or extend vocabulary, to show how to use the resources appropriately. <p>Role Model</p> <ul style="list-style-type: none"> -Model use of materials in the area to encourage interest. -Invite children to create and conduct their own investigations and talk about what they notice and what they find out. -Draw children's attention to numerals, patterns and shapes within the environment. -Model mathematical language and vocabulary. - Demonstrate counting and model counting strategies, such as moving objects as you count them and say one number name for each item. <p>Raise questions to stimulate ideas and add challenge</p> <ul style="list-style-type: none"> -Use open-ended questions to promote thinking.

-1-6 dice
-Dominoes
-Clipboards, paper, pencils
Mini whiteboards and pens

-Learning and using mathematical vocabulary.
-Exploring, copying, correcting and creating repeating patterns.
-Explore 2D and 3D shapes - talking about their properties and how the shapes can fit together, be used or split into smaller shapes.
- Investigate comparing and measuring length, height, weight and capacity.
-Recognise number sequences and place numerals in order.
-Sing number rhymes and songs and use their fingers or props to support the lyrics.
-Record their number activities and ideas using pictures, words or numbers.
-Recognise and explore ways of measuring time.
-Sequence familiar events that happen in their day.
-Identify coins and use money-related vocabulary.
-Explore number bonds for numbers up to ten in different ways, such as number rhymes, interlocking cubes and number shapes.
-Practically explore addition and subtraction in different contexts.
-Discuss and explore positional language and spatial awareness.
-Opportunities to record their mathematical thinking.
-Explore maps and talk about different routes.

-Talk about mathematical ideas and what they notice about different objects, shapes, patterns and arrangements.

Key Questions

- How did you...?
- Show me how you...
- What will you need for...?
- I wonder what would happen if...
- What do you notice when we...?
- What do you think about your...?
- How much more do you have?
- How many are there?
- Can you find the number to match this set?
- I think that I should put six objects into this bowl. Am I correct?
- How many... can you see/find?
- Did you need to count these dots or could you recognise the amount without counting?
- Which one is the heaviest?
- Who is taller?
- Can you make a repeating pattern?
- Is this pattern correct? How do you know?
- What should come next? Why do you think that?
- Which number is missing?
- Which shape has more sides?
- What can you tell me about this shape?
- How is this shape the same/ different to this shape?
- What shape is this?
- How many do we have altogether?
- Which set has more/fewer?
- Can you find a set that has the same?
- What do you think will happen if:
 - we add one more counter to the ten-frame;
 - we take one counter away;
 - we tried to make the number seven in another way?

Use appropriate language linked to key learning

-Talk about different patterns they can see.
-Sing number rhymes and songs and use their fingers or props to support the lyrics.

Inside

Continuous Provision Area	Key learning opportunities linked to mathematics
Block Area	<ul style="list-style-type: none"> - To explore properties of shapes, both 2D and 3D - To compare shapes in a variety of ways - length, shape, properties and to recognise similarities - To recognise, create and describe patterns - To use everyday language to talk about size, position and distance - To compare quantities and lengths
Creative Area	<ul style="list-style-type: none"> -To compare, estimate and measure using materials -To use a developing range of vocabulary to describe size, shape, space and measure -Manipulating
Domestic Role Play	<ul style="list-style-type: none"> - To use a developing range of vocabulary to describe size, shape, space and measure
Malleable Area	<ul style="list-style-type: none"> -To group and count objects -To develop and embed number recognition -To compare, estimate and measure -To use a developing range of vocabulary to describe size, shape, space and measure
Reading Area	<ul style="list-style-type: none"> - To recognise and talk about numbers and number patterns in stories - To recognise and describe patterns in books
Small Construction Area	<ul style="list-style-type: none"> - To explore properties of shapes, both 2d and 3d - To recognise, create and describe patterns - To use everyday language to talk about size, position and preposition - To practise sorting, matching and selecting shape for purpose - To have an awareness of everyday shapes - To compare quantities and practise counting skills - Explore symmetry
Writing Area	<ul style="list-style-type: none"> - To order and sequence familiar events and use every day mathematical language related to time, position, size, and shape



Outside

Continuous Provision Area	Key learning opportunities linked to mathematics
Construction and Building	<ul style="list-style-type: none"> -To explore the properties of 3d shapes -To compare shapes in a variety of way: length, properties, similarities, and purpose -To use everyday language to talk about size, position, distance, and weight
Gardening and Growing	<ul style="list-style-type: none"> -To show awareness of similarities of shapes and patterns in the environment -To use position language -To count for a purpose -To identify and read numerals
Mud Kitchen	<ul style="list-style-type: none"> -To recognise and use numerals on scales. -To use number to order, count, compare, estimate, and measure. -To use positional language. -To use a developing range of vocabulary to describe capacity, size, shape, comparison and measurement.
Playing Games	<ul style="list-style-type: none"> -To show an interest in shape and space and measure -To show an interest in similarities and differences -To use positional language -To count up to 10, forwards and backwards, counting on 1 and back 1 -To read and write numerals
Sand	<ul style="list-style-type: none"> -To use number to order, count, compare, estimate and measure -To use position language -To use a range of vocabulary to describe capacity, weight, size, shape and comparison -To recognise, create and describe patterns
Water Investigation	<ul style="list-style-type: none"> -To recognise and use numbers on scales -To use number to order, count, compare, estimate and measure -To use position language -To use a developing range of vocabulary to describe capacity, estimate and measure