Bude Primary Academy Infants School Early Years Foundation Stage

Love Learn Thrive

Maths

Intent:

Our children will leave the Foundation Stage at Bude Primary Academy Infants school having had many opportunities to develop their understanding of number (including the composition of numbers, number bonds and subitising), numerical patterns (including odds and evens and doubling), measurement, shape and space in a broad range of contexts in which they can explore, enjoy, learn, practise and talk about numbers and shapes. We encourage pupils to understand and respond to the symbols that represent numbers and what this means in real contexts. We support children in understanding what an important role shapes and numbers play in our everyday lives and how they develop our own understanding and help us to solve problems. We approach this area by fostering a love of number and the enjoyment of solving problems.

Implementation:

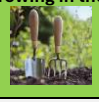
Our teaching of Maths reflects the White Rose Maths scheme, and we also use the Number Sense scheme to develop fluency. This is used as a planning tool, but we adapt according to the needs of our children. Pupils explore maths, using mathematical vocabulary to reason and explain their findings. Our curriculum allows children to better make sense of the world around them relating pattern between mathematics and everyday life. Teaches teach the skills needed to succeed in mathematics providing examples of good practice and having high expectations. Each day children take part in two whole class number activities . One linked to White Rose and the other to Numbersense, We create a rich environment, where talk for maths is a key learning tool for all pupils. There are opportunities for our children to explore and develop their mathematics throughout our learning environment, inside and outside. Adults are skilled at encouraging mathematical opportunities through children's play and will challenge where this is a focus for the child's next step.

Impact:

All children are expected to success and make strong progress from their starting points. They are competent with the skills of subitising and have developed number sense skills. Pupils can talk about number and explain what it is and isn't. They solve problems and make predictions about what might happen while using appropriate vocabulary. Our pupils apply their mathematical skills in a variety of contexts. They have a positive mind set about maths and making 'mistakes'.

This document shows

- **Termly checkpoints of the progression of skills that build towards the Maths Early Learning Goals**
- **An overview of the direct teaching within this area broken down into half terms**
- **The provision the children will experience to support their development in this area**

Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
Topic title					
Who am I? 	**What is a map ?** 	**What was it like in the past?** 	**What's growing in the garden?** 	**What's in the egg?** 	**What is on the other side of the ocean?** 
Termly Checkpoints					
Number • Begin to Subitise 1 to 3 items.		**Number** **Subitise to 4.** • Begin to subitise amounts on a dice and on a tens frame.		**Number** • Confidently subitise rather than count small groups of objects	

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• Represent 1 – 5 in a variety of ways e.g. on fingers, on a fives or tens frame, with objects, with Numicon, cubes, digits, tally, a picture, dots on dice, money. • -Some exposure to number doubles e.g. through Number blocks, one and another one makes two • -Begin to explain the composition of numbers (numbers within numbers) with support of visual aids such as tens frames, cubes, objects and Number block characters. • Begin to recognise parts within numbers. E.g. Look at 4 buttons and say "I can see a group of 2 and another group of 2" • -Begin to use a 5-frame model. **Numerical patterns** • Join in with number songs, attempting to represent numbers using fingers where appropriate. • Recite numbers to 10 or beyond. • Demonstrate understanding that we use one number for each item, when counting. • Attempt to count objects, actions, and sounds to 10 accurately. -Use and understand the term "more" in practical contexts. • Begin to link each number to 5 with its cardinal number value. • Know that the last number reached when counting is the total. • Begin to understand the concept of 1 more and 1 less with concrete objects to 5. -Order numbers 1-**5** **Shape Space and Measure** • Describe the size or shape of real-life objects using simple mathematical vocabulary, e.g. big/little, large/small round/straight. - • Time - understand first/next – • Time-able to talk about the passing of time through own experiences. • Sorting/matching - sort groups of objects according to different criteria e.g. by colour, size and shape • Pattern- Begin to continue, copy, and create AB patterns – • Shape- Select, rotate, and manipulate shapes to develop spatial reasoning skills through learning through play • Follow prepositional instructions through games and songs like Simon says, Hokey Cokey, Where's the bear?	• Represent 5-10 in a variety of ways e.g. on fingers, on a fives or tens frame, with objects, with Numicon,cubes, digits, tally, a picture, dots on dice, money. -Discuss composition of numbers to 10, showing some automatic recall of number facts. E.g. I can make 6 with 3 + 3 or 4 + 2 • Partition amounts into equal groups. • -Use a tens frame model to represent numbers to 10 and some addition and subtraction sums, with support. • Begin to recall number bonds to 5 and some corresponding subtraction facts. -Use a part, whole model with concreate objects to partition and recombine an amount. • -Combine 2 groups of concrete objects and write addition number sentences with support **Numerical patterns** • To be able to make representations of number rhymes. • Show me 5 current buns, but 1 is taken away. • Recite numbers to 20 confidently. – • Confidently count back from 10. • Begin to count back from 20 with support and visual aid such as a number line. • -Order numbers to 10 • Demonstrate understanding of the cardinal principle when counting objects. • Show accuracy when counting a group of up to 5/10 objects. -Begin to compare numbers and quantities up to 10 using and understanding the terms more than, greater than, fewer, less than in practical contexts • Understand the term equal when comparing two groups of objects • Begin to understand the concept of 1 more and 1 less using a number line, to 10. -Begin to count in 2s with support. **Shape Space and Measure** • Time - Understand yesterday/today/tomorrow. • Time-Recite days of the week and months of the year. – • Shape - Identify straight and curved sides on 2D shapes, and flat and curved faces on 3D shape • Shape- Use shapes to make pictures/models. – • Measure - use and understand the terms shorter/taller, larger/smaller. Sequence4 items according to these criteria. • Measure- measure and compare length using non-standard measures • Pattern- Continue, copy, and create AB, ABB and ABBC patterns – • Money- Begin to recognise some coins and their value. • Count 1p coins in 1s and 2p coins in jumps of 2 with support. – • Able to complete jigsaw puzzles independently.	• Subitise to 5 using familiar concept images (e.g. a tens frame, with Numicon, on a dice, and using fingers • Double numbers 1-5 confidently and begin to recall some double facts from memory. • Add 2 single digit numbers using known number facts or number line. Write addition and subtraction number sentences. • Recall number bonds to 5 automatically and some number bonds to 10. **Numerical patterns** • Recite numbers to 20 and back from 20. • Count on from a given number to 20 and back from a given number 0 - 10. -Recognise numbers 1-20 and out of order. • Show accuracy when counting a group of objects, showing 1 to 1 correspondence & confident application of the cardinal principle. -Say the number one more/less than a given number 1 - 10. • Explore sharing into equal groups in practical contexts, commenting on what they notice. • To begin to work out 1 more/1 less than a number up to 20 using a preferred method: mentally, using objects or on a number line • Exposed to counting in 5s and 10s, with support. **Shape Space and Measure** • Demonstrate understanding of everyday prepositions - in, on, under, beside, in front, behind. • Time - Use and understand before/after • Time- Have an understanding of what the day and the month is – • Shape - Select, rotate, and manipulate shapes to match a picture, fit an outline or create patterns. • Shape- Name some 3D shapes and describe their properties using mathematical language. – • Pattern - continue a simple AB, ABC pattern – • Measure- Use Mathematical language when comparing length, weight, and capacity. • Follow prepositional language e.g. put Teddy inside the box. **Early Learning Goals** • Have a deep understanding of number to 10, including the composition of each number.

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• -Name 2D shapes and explain their properties using mathematical language e.g. sides, corner				• Begin to use and understand prepositional language such as in front of, behind of.				• 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. • 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			
Autumn 1		**Autumn 2**		**Spring 1**		**Spring 2**		**Summer 1**		**Summer 2**	
Getting to know you Baseline assessment	**Just like me!** Match and sort Compare amounts Compare size, mass and capacity; Exploring pattern	**It's me 1, 2, 3!** Representing 1, 2, 3 Comparing 1, 2, 3 Composition1, 2, 3 Circles and triangles Positional language	**Light and dark** Representing numbers to 5; One more, one less; Shapes with 4 sides; Time	**Alive in 5!** Introducing zero Comparing numbers to 5 Composition of 4 and 5 Compare Mass Compare Capacity	**Growing 6, 7, 8** 6, 7 and 8 Making pairs Combining 2 groups Length and height Time	**Building 9 and 10** 9 and 10 Comparing numbers to 10 Bonds to 10 3D shape Pattern		**To 20 and beyond** Building numbers Counting patterns (Beyond 10) Spatial reasoning. Match, rotate and manipulate	**First Then Now** Adding more Taking away Spatial Reasoning Compose and decompose	**Find my pattern** Doubling Sharing and Grouping Even and Odd, Spatial reasoning Visualise and build	**On the Move** Deepening understanding Patterns and relationships; Spatial reasoning Mapping
comparing size  sorting and matching  Counting and matching to 3		Following a path (mapping skills)   Positional Language 		learn all about shapes   		 A book where there is 1 less seed from 10 as they grow  Jasper's beanstalk -Days of the week and sequencing  Cockatoos counting up to 10		 Counting down from 10.  Maths vocabulary related to measure.  All about the number 6 and matching numbers.		 Early introduction to concept of multiplication  Early introduction to concept of division	
When Goldilocks went to the house of the bears Big animals. Tell the time song; Seasons of the year		Shape song CBeebies Old MacDonald had a shape 5 little ducks, 5 little aliens, 5 little monkeys, 5 little hippos balancing, 5 currant buns, 5 little apples, 5 little speckled frogs		Shape song CBeebies Old MacDonald had a shape 10 green bottles 10 fat sausages 1,2,3,4,5 once I caught a fish alive Over in the meadow.		10 in the bed 1, 2, buckle my shoe Number bonds song 3D shape song (BBC)		Lots of counting on and back songs. Make up our own maths songs. Counting to 20 songs.		She'll be coming round the mountain (adapted) The journey home from Grandpa's There was a farmer had a cow (odd and even)	

Provision

2 daily interactive whole class teaching session. Specific resources put into continuous provision to enable children to revisit the days learning in a meaningful context . Adults supporting maths development in continuous provision with focus on particular skill each week,

Counting and Number Recognition: Number cards, Counters, Number lines, Counting sticks, Loose parts, Interactive whiteboard activities, Mini whiteboards

Shape, Space, and Pattern: Shape sorters, Shape puzzles, 2D and 3D shapes, Pattern blocks, Building blocks

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Comparing and Ordering: Sorting and classifying bins, Balance scales
Addition and Subtraction: Counting bears, Part-part-whole models, Dice, Spinners
Capacity – water tray sand tray
Money and Simple Transactions: Role play shop, Coin sorting trays
Time and Routine: Daily calendar, Sand timers
Outdoor Continuous Provision: Number hunts, Hopscotch grids, Large blocks water tray sand tray scoring games
Fine Motor and Manipulative Play: Play dough mats, Tweezers, Sorting trays
Books and Story Sacks with Mathematical Themes: Math storybooks, Number rhymes
Interactive Displays and Wall Activities: Number of the week display, Counting wall