

Mathematics at Heymann

ELG: Number

Children at the expected level of development will:

- 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.

Nursery	Reception
Building blocks to achieve • Develop fast recognition of up to 3 objects, without having to count them individually (subitise) • Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). • Show 'finger numbers' up to 5 • Link numerals and amounts to 5	Building blocks to achieve • Count objects, actions and sounds in everyday situations • Subitise up to 5 • Understand number can be represented in a variety of ways • Match numeral to cardinal value • Recall number facts within 5 automatically
Continuous provision: • Counting books in reading corner • Number lines and number tracks – eg self-registration • Numbered resources (e.g., 4 pencils in a pot) • Numicon and Numicon boards • Objects to sort and count - compare bears/linking camels/small vehicles/pom poms etc. • Interactive number display (1-5) displaying numbers in different ways. • Large dice with both dots and numbers to play and create games with (e.g., jump this number of times) • Containers to empty and fill (e.g., egg boxes/empty chocolate boxes) • Stacking activities (cups/towers)	Continuous provision: • Sing counting songs – forwards and backwards songs • Counting books in reading corner • Counting games – eg hide and seek outside, What's the time Mr Wolf? • Dominoes • Dice games/board games with numerals • Pairs games • Cubes and other manipulatives • Numicon and numicon boards • 5 and 10 frames • Objects to count both natural and man-made • Games with buckets and throwing a number of bean bags or balls • Number displays in classroom showing ways to represent quantities to 10 • Number lines and number tracks – eg self-registration, • Objects to match – eg socks • Objects to sort – eg buttons, shapes, beads, compare bears etc • Cards representing numbers in different ways to compare, order and sort • Double-sided counters

	• Dot plates • Numbers on pots for scissors, hole punches, pencils etc
Role of adult: • Counting routines instilled into daily practice (children that are here/at tables/in the line/wearing red today/etc) • Fruit/milk selection counted each day – how many people have apples/oranges/nothing? • Model one to one counting, saying numbers in order • Sing counting songs – forwards and backwards songs • Ask children to give you..... 3 paint brushes.....etc • Counting things that cannot be seen (e.g. bleeping the door to go outside) • Playing and modelling simple counting games (hopscotch/board games/pairs etc) • Referring to familiar numbers – e.g. 2 shoes/2 hands/5 fingers to aid subitising concept • Subitising games – e.g 3 bowls with different amounts of objects under quickly show and ask ‘find the tricky 2’ ‘find the wonderful one’ ‘find the thrilling 3’ • Helping children become familiar with subitising- when playing e.g. ‘have you got 2?’ – thumbs up/thumbs down- model by counting how many at the end • Adult modelling/verbalising numbers whenever possible e.g., ‘can you pick up those 4 cars please’	Role of adult: • Count daily children in line, at tables, in groups, chairs at tables, etc saying the number in the count – cardinal number. Counting everyday routines • Model one to one counting, saying numbers in order • Ask children to give you..... 3 paint brushes.....etc • Prompt children to subitise – eg I don’t think we need to count those we can see they are in a square shape, there are 4. • Explore the composition of numbers to 10 using objects, fingers, dots on dice etc. Model on 5 frames and ten frames • Model conceptual subitising: “Well, there are three here and three here, so there must be six.” Emphasise the parts within the whole: “There were 8 children in the room. Two have got their coats on and 6 haven’t yet. • Model partitioning in practical games. For example, throw 5 beanbags, aiming for a hoop. How many go in and how many don’t? • Weekly focus on one number to 10 • Play hiding games with a number of objects in a box, under a cloth, in a tent, in a cave, etc.: “Seven went in the tent and 2 came out. I wonder how many are still in there?” • Play card games such as snap or matching pairs with cards where some have numerals and some have dot arrangements. • Ask children to explain how they have sorted or arranged objects.
Vocabulary • Numbers to 10 • Order • Total (how many)	Vocabulary • Numeral • Represent • Subitise • Numbers to 20 • Composition • Numicon

