

Maths Meeting in: Reception

Maths Meetings are a vital part of the Mathematics Mastery programme. Their purpose is to consolidate key areas of mathematics and develop fluency in recall of key knowledge. To be most effective, it is recommended that Maths Meetings occur daily for 10-15 minutes. A Maths Meeting should cover several curricular areas, broken down into short segments; each segment should take approximately 2-3 minutes.

Maths Meetings should:

- Give pupils repeated practice of basic skills and concepts (fluency, consolidation, mastery of what has been taught)
- Provide opportunities to develop number sense, for example, exploring conservation of number, cardinality, subitising, using known facts, near doubles, commutativity, inverse etc.
- Be an exciting whole-class ritual around the Meeting Board or IWB
- Establish a routine for mathematical thinking in the day, building classroom culture, and making connections with mathematics in everyday life.

Maths Meetings expectations:

- Everyone in the class must be ready to respond
- Everyone in the class must look at and listen to the teacher, or pupil if Maths Meeting is pupil led.
- Teacher only accepts appropriate responses, including technical vocabulary and full sentences when appropriate.

Teachers should plan their own Maths Meetings depending on the needs of pupils, focusing on key knowledge to consolidate. Teachers should prioritise key learning areas for their class and also incorporate current learning in the Maths Meetings where necessary. Assessments will also inform the content of the Maths Meetings.

Items in **bold** are suggestions for transitions within the Mathematics Mastery lesson.



Important concepts for Reception Maths Meetings

The topics below <u>must</u> be included each term for both fluency and because some key learning will not be revisited until a later term and requires ongoing consolidation. Teachers should also consult the more detailed guidelines in this document for suggested activities and other areas to include.

Term	Detail
Autumn	Number (ELG): Counting on and back within ten along a number line (vertical and horizontal) Conservation of number and cardinality activities, for example, 6 is still '6' in any arrangement and the number will stay the same unless more are added or some are taken away Number bonds up to 5 (including subtraction facts) One more and one fewer within 3, 6 and then within 10 Numerical patterns (ELG): Verbally count beyond 20, recognising the pattern of the counting system. Explore and represent patterns within numbers up to 10. Start to identify odd and even within 10 Shape and Pattern: Recognise, create and describe two-criteria patterns of colour or size Matching shapes that are the same Measures: Introduce comparative long, longer, longest, short, shorter, shortest, tall, taller, tallest, big, bigger, biggest and small, smaller, smallest Time: Sequencing daily timetable Days of the week Months of the year Money: Introduce coins 1p, 2p, 5p and 10p
Spring	Number (ELG): Counting on and back within 20 Subitising (recognise quantities without counting) within five One greater or one less than a given number within 10 Representing addition and subtraction within 10 on a ten frame Identifying the number of groups, how many in each group and how many altogether (within 10) Automatically recall number bonds to 5 and some number bonds to 10 Numerical patterns (ELG): 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 evens and odds within numbers up to 10 Shape and Pattern: Naming 3-D and 2-D shapes and matching shapes that are the same. Time: Days of the week; today, tomorrow and yesterday Months of the year Introduce the clock and talk about familiar times of the day such as the time to start school, for lunch, for the end of the school day etc. Measures: Ordering lengths Introduce comparative vocabulary related to weight, capacity and volume Money: Introduce 20p coin



Summer

Number (ELG):

- Double and half numbers (within 10)
- · Counting using the abstraction principle and subitising
- Represent addition and subtraction within 10 using a bead string
- · Counting in twos, fives and tens
- Comparing two numbers using vocabulary greater and less
- Recall number bonds to 5 (and some to 10)

Numerical patterns (ELG):

- Verbally count beyond 20, recognising pattern of number system
- Explore and represent double facts within numbers up to 10
- Explore evens and odds within numbers up to 10
- · Explore how quantities can be distributed equally

Shape and Pattern:

- Describing the properties of 3-D and 2-D shapes using the vocabulary face, edge, side, vertices
 Measures:
- Comparing two or more lengths, weights and capacities

Time:

• Introduce the clock and o'clock times



Additional concepts and activities for Reception Maths Meetings

Detail

Autumn

Number & Numerical patterns:

- One-to-one correspondence within 10 (ELG)
- Saying cardinal number names in order within 20
- Consolidating numbers within 5 (ELG)
- Patterns of numbers within 5 (ELG)
- Subitising within 5 (ELG)
- Counting on and back within 10, but not always at the same starting point, along a number track (vertical and horizontal)
- Ordering numbers within 10 on a number line (vertical and horizontal)
- Conservation of numbers within 10 (ELG)
- Components of numbers within 10 (ELG)
- Counting on and back within 20
- Number bonds up to 5 (including subtraction facts) (ELG)
- Ordinal numbers 1st to 10th
- One more or one less than a given number within 10
- Counting on and back within 10, but not always at the same starting point, along a number track (vertical and horizontal)
- Estimate a number of objects and check by counting
- Comparing quantities up to 10 in different contexts (ELG)
- Conservation of number 1–15
 - Number song or counting do not always start at 1
 - o Ten Green Bottles, Five Little monkeys, Five little speckled Frogs
 - Number of the day encourage pupils to spot the given number in their classroom environment
 - Show different patterns of pegs and pegboards or Unifix cubes
 - Daily ordering of numbers on the number line

Sets:

- Sorting objects that are the same
- Comparing objects that differ in some way
- Forming sets of objects with two similar attributes, e.g. size and colour, colour and shape

Data Handling:

- Use manipulatives to represent data.
 - Straws could be used to represent the number of days at school or the number of Maths Meetings in the week so far (these should be shown on a place value board to show they are 'ones').

Shape and pattern:

- Matching shapes that are the same
- Recognise, create and describe two-criteria patterns of colour, shape or size
- Rhythm patterns, e.g. clapping, tapping
- Two-criteria patterns of shape, size or colour
- Naming 2-D shapes: rectangle, square, circle and triangle



• Positions and directions – use vocabulary such as: next to, behind, under, in front of, top, back, bottom, forwards

Capacity, volume, length and weight:

- Discuss size, weight, capacity and length using everyday language: full, empty, long, short, heavy, light, big, and small
- Comparison of equivalent and inequivalent weights, lengths and volumes
- Use vocabulary such as: longest, shortest, heaviest, lightest, more, less
 - Use objects and pupils from the classroom for comparisons, e.g. books, tables, chairs and pencils for heavy and light; pencils, colours and rulers for long and short
 - o Use the pupils' drink containers to compare heaviest, lightest; more, less

Time:

- Events associated with time
- Vocabulary: night, day, today, tomorrow, yesterday, days of the week
- Discuss everyday events using vocabulary: after, soon, before, always, late, early, later
 - Discussion of events that happened or will happen using specific vocabulary e.g. PE will happen on Wednesday, art was yesterday
 - o Time song: 'Ticker, ticker, ticker, tick. What time is it? Aha! Ticker, ticker, ticker, tock. What time is it? Aha! Stop!'
 - o Recognise familiar times of the day on the clock
 - Relating events that happen every day to daytime or night time

Money:

- Coin recognition: 1p, 2p and 5p
- Coin recognition 1p to 10p
- Discuss uses of money
 - o Show each coin to the class until they are familiar with each one
 - Allow pupils to experiment and play with real money when possible, e.g. role play in the shop
 - Use Dienes blocks alongside each coin to show their value, for example, a 20p coin is the same as two ten sticks; a 50p coin is the same as five ten sticks, etc.



Detail

Spring

Calendar Maths:

- Days of the week
 - 'Days of the Week' song (Adams family tune) http://www.youtube.com/watch?v=HtQcnZ2JWsY
 - o Today is..., Yesterday was..., Tomorrow will be...
- Months of the year
 - 'Months of the Year' song (found on YouTube)
 http://www.youtube.com/watch?v=5enDRrWyXaw
 - o This month is...
- Date
- Seasons of the year
 - o 'Seasons of the Year' song (several versions are available on YouTube)
 - o This season is...
- Weather
 - o *'What's the Weather?'* song (several versions are available on YouTube)

Number & Numerical patterns:

- Verbally counting beyond 20 (ELG)
- One more or one less than a given number within 10
- One-to-one correspondence within 10
- Composition of each number up to 10 (ELG)
- Number bonds to 10 (ELG)
- Double facts within 10 (ELG)
- Even and odd numbers within 10 (ELG)
- Recognising one quantity as greater than, less than or the same as another (ELG)
- Patterns of numbers within 10 (ELG)
- Double facts within 10 (ELG)
- · Representing numbers on a ten frame
 - Number song or counting do not always start at 1
 - Ten Green Bottles, Five Little monkeys, Five little speckled Frogs
 - Number of the day encourage pupils to spot the given number in their classroom environment
 - Show different patterns of pegs and pegboards or Unifix cubes
 - o Daily ordering of numbers on the number line

Sets:

- Sorting objects that are the same
- Comparing objects that differ in some way
- Forming sets of objects with two (or more) similar attributes, e.g. size and colour, colour and shape
 - Using objects or toys from around the classroom and grouping them on the basis of similar attributes
 - Using the pupils themselves based on hair or eye colour, etc.
 - Sorting song 'Red and yellow, pink and blue, sorting <u>(counters, Lego, buttons)</u>, me and you. Sort the colours, sort the size, sort the shapes, just



use your eyes.'

Data Handling:

- Use manipulatives to represent data.
 - Straws could be used to represent the number of days at school or the number of Maths Meetings in the week so far (these should be shown on a place value board to show they are 'ones').

Shape and pattern:

- Positions and directions use vocabulary: first, next, last, before, after, morning, afternoon, evening, night, over, under, above, below, top, bottom, side, on, in, next to, behind, under, in front of, top, backwards, forwards, across, between, up, down, left, right, towards, away from
- Naming and describing 2-D shapes: rectangle, square, circle and triangle
- Increasingly more difficult rhythm patterns, e.g. clapping, drumming
- Three-criteria patterns of shape, size or colour

Capacity, volume, length and weight:

- Ordering lengths
- Introduce vocabulary: tall, thin, wide, narrow and bigger
- Comparing two or more lengths, weights and capacities
 - Use objects and pupils from the classroom for comparisons, e.g. books, tables, chairs and pencils for heavy and light; pencils, colours and rulers for long and short
 - Use pupils' drink containers to compare heaviest, lightest; more, less

Time:

- Introduce vocabulary: tall, thin, wide, narrow and bigger
 - Discussion of events that happened or will happen using specific vocabulary e.g. PE will happen on Wednesday, art was yesterday
 - Time song: 'Ticker, ticker, ticker, tick. What time is it? Aha! Ticker, ticker, ticker, tock. What time is it? Aha! Stop!'
 - Recognise familiar times of the day on the clock
 - o Relating events that happen every day to day time or night time

Money:

- Coin recognition 1 p to 50 p
 - o Show each coin to the class until they are familiar with each one
 - Allow pupils to experiment and play with real money when possible, e.g. role play in the shop
 - Use Dienes blocks alongside each coin to show their value, for example, a 20p coin is the same as two ten sticks; a 50p coin is the same as five ten sticks, etc.



Detail

Summer

Number & Numerical patterns:

- Skip counting in fives and tens
- Verbally count beyond 20 (ELG)
- Subtraction counting songs
- Comparing two numbers within 10 using vocabulary greater than, less than or the same as (ELG)
- One more or one less than a given number
- Number bonds to 10 (ELG)
- Even and odd numbers within 10 (ELG)
- Distribute quantities equally within 10 (ELG)
- Double facts within 10 (ELG)
- Explore and represent patterns within numbers up to 10 (ELG)
- Identify and recognise a pair of objects is equal to a set or group of two objects
 - Number song or counting do not always start at 1
 - Ten Green Bottles, Five Little monkeys, Five little speckled Frogs
 - Number of the day encourage pupils to spot the given number in their classroom environment
 - Show different patterns of pegs and pegboards or Unifix cubes
 - Daily ordering of numbers on the number line

Sets:

• Form sets of objects using a Venn diagram (with hoops or a pictorial representation) where the objects that have the same attributes are placed in the overlapping section.

Data Handling:

- Use manipulatives to represent data.
 - Straws could be used to represent the number of days at school or the number of Maths Meetings in the week so far (these should be shown on a place value board to show they are 'ones').

Shape and pattern:

 Describing the properties of 3-D shapes using vocabulary such as edge, face, vertex and vertices

Capacity, volume, length and weight:

- Ordering lengths
- Introduce vocabulary: tall, thin, wide, narrow and bigger
- Comparing two or more lengths, weights and capacities
 - Use objects and pupils from the classroom for comparisons, e.g. books, tables, chairs and pencils for heavy and light; pencils, colours and rulers for long and short
 - Use pupils' drink containers to compare heaviest, lightest; more, less

Time:

- Introduction to the clock discuss the numbers around the clock, the hands of the clock and o'clock times
- Talking about day time and night time
 - Discussion of events that happened or will happen using specific vocabulary e.g. PE will happen on Wednesday, art was yesterday



- o Time song: 'Ticker, ticker, ticker, tick. What time is it? Aha! Ticker, ticker, ticker, tock. What time is it? Aha! Stop!'
- o Recognise familiar times of the day on the clock
- Relating events that happen every day to day time or night time

Money:

- Coin recognition £1 and how it is the same as 100 pennies
- Addition and subtraction problems within 20
 - o Show each coin to the class until they are familiar with each one
 - Allow pupils to experiment and play with real money when possible, e.g. role play in the shop
 - Use Dienes blocks alongside each coin to show their value, for example, a 20p coin is the same as two ten sticks; a 50p coin is the same as five ten sticks, etc.