EYFS Math's Quickstart Meeting

January 2022

Learning through Play

- Play is essential in teaching and consolidating in maths.
- Many of the objectives within the EYFS curriculum can only be developed during free play.
- Play enables children to be independent and remain curious
- By setting up and supporting activities in the environment, like the ones you see here today, children are not only learning about one specific maths objective, they are also learning so much more in other areas of learning; the possibilities are endless!

What can the environment teach in maths and how do teachers facilitate learning?

Mathematical Language

- Lots of mathematical language, for example, more, less, big, small, wide, thin and positional language needs to be modelled by adults for children to learn and it is so much more effective if it's during authentic play experiences.
- This can be replicated at home when doing every day activities.

Problem solving, Reasoning and Pattern

- Loose parts are not only amazing for helping children to develop creativity, problem-solving and reasoning skills, but are also perfect for developing and embedding pattern creating
- Pattern creating in play links to the development of pattern with numbers and supports children in their development of future maths calculations and has equal weight in the maths ELG
- Construction is another area whether children can learn these undervalued skills

Weight and Measures

- We model measuring for example, outside during building and construction: large scales outside, small balance scales inside for children to explore.
- Self-service play dough stations and cooking activities help children to develop important maths skills while having fun!
- Any cooking you do with your child at home will be really helpful.

Money

- The best way to learn about money is to use it in a purposeful way. We use role play shops, impromptu role play situations. Children can use these independently.
- Any shopping children can help with at home will help embed the learning.

Time

- We encourage children to use time every day for example measuring how long running races or a car racing through guttering takes: estimate then check; will a sand timer work?
- Modelling using stop clocks during races or games.
- Asking children for the time.
- When discussing the daily routine, we talk about the times that things will happen.
- Always have as many clocks and watches at home as you can and modelling using the time.

Other ideas to help at home

- Play board games
- Engage in imaginative play with your child
- Look for and create patterns
- Sort objects according to colour, shape, size
- Describe the shape of objects using language such as straight, spiky, round etc.
- Sing number rhymes and nursery rhymes
- Check out our ‘Weekly Round Up’ on Tapestry to keep up-to-date with what we are learning and how you can help at home.

Working towards the ELG

Mathematics

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.

Numerical Patterns

Children at the expected level of development will:

- 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

White Rose Maths

Adult led sessions in Reception will be based on the White Rose Maths scheme, in line with the whole school. We deliver a daily maths input with a continued focus on practical learning activities. This daily session is embedded in the continuous provision that the children can engage with.

Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Autumn	Getting to Know You			Just Like Me!			It's Me 1 2 3!			Light and Dark			Consolidation	
Spring	Alive in 5!			Growing 6, 7, 8			Building 9 and 10			Consolidation				
Summer	To 20 and Beyond			First Then Now			Find My Pattern			On The Move				

Spring term

Spring

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Phase	Alive in 5!			Growing 6, 7, 8			Building 9 & 10		
Number	Introducing zero Comparing numbers to 5 Composition of 4 & 5			6, 7 & 8 Combining 2 amounts Making pairs			Counting to 9 & 10 Comparing numbers to 10 Bonds to 10		
Measure, Shape and Spatial Thinking	Compare Mass (2) Compare Capacity (2)			Length & Height Time			3d-shapes Spatial Awareness Patterns		

Week by week

Reception – Spring Phase 4 – Alive in 5!

Comparing Numbers to 5

Guidance

Children continue to understand that when comparing numbers, one quantity can be more than, the same as or fewer than another quantity.

Use a range of representations to support this understanding and encourage the children to compare quantities using a variety of objects and representations. Support the children to make comparisons in different contexts as they play.

Other Resources

A Squash and a Squeeze – Julia Donaldson

Room on the Broom – Julia Donaldson

One Elephant Came Out to Play

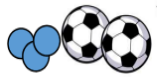
5 Little Monkeys Swinging in a Tree

Prompts for Learning

Show the children 3 fingers – ask them how many fingers?
Can they hold up 3?
Can they hold up more than 3 fingers?
Is there more than one way to do this?
Can they hold up fewer than 3 fingers?
How many do they have?

Working with a small group, provide each child with a plate and give them each a handful of snack such as grapes or crackers. Does everyone have the same? Is it fair? Encourage them to notice that some children have more snack and some have less and to share out the snack fairly. Can they check that everyone now has the same?

Provide opportunities to compare smaller quantities of large items with larger quantities of small items to help children make the distinction between size and quantity.
E.g. 2 large balls take up more space than 3 small balls but there are more small balls.



Comparing Numbers to 5

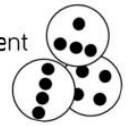
Sand

Make towers of pebbles.
Who can make the tallest tower?
How many pebbles are in each tower?
Does your tower have more or less pebbles than your friend's tower?
Can you each make a tower using the same number of pebbles?

Enhancements to areas of learning

Carpet

Provide a set of dot plates with different arrangements of 0-5 dots.
Can you find a plate with 4 dots?
With more/fewer than 4 dots?
Can you put the plates in order?
One of the plates is missing.
Can you work out which one?



Maths Area

Children use the number shapes, linking cubes and numeral cards to match and compare quantities.
Provide a set of dominoes to explore. Ask the children to compare the number of spots on each side of the domino. Are there the same, more or fewer dots?

Small World

Provide children with the numbers 1 – 5 on cards and various small, similar items such as people, toy cars, plastic animals, etc.
Ask them to show you fewer, the same or more than the number they choose.