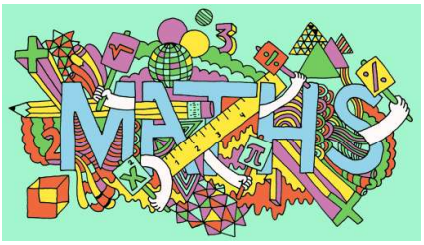
Reception Maths

Parent/Carer Session 19.10.17



How to help your child become a keen mathematician:

- say counting rhymes and songs
- count objects
- make number lines and number tracks and use them in games (see over)
- play board games like snakes and ladders and skittle games
- make repeating patterns with toys e.g. parking vehicles car, bus, car, bus...
- play 'I spy' games with numbers and shapes
- make and talk about shapes with playdough, finding out and describing how the shape can be lengthened, shortened, widened, etc.
- fill spoons, bags, etc. and talk about them being full, empty, half full
- let your child handle money, sort and name coins, make amounts and give change.
- Most importantly, talk to your child about maths. Ask 'why?', 'what?' and 'how?' questions to encourage mathematical thinking.

A few books to support development of thinking about measure in mathematics

- Pardon? said the Giraffe Colin West
- Jim and the Beanstalk Raymond Briggs
- Where's my Teddy Jez Alborough
- Who Sank the Boat? Pamela Allen
- Titch series of books Pat Hutchins
- Mr. Archimedes' Bath Pamela Allen
- Five Minutes Peace Jill Murphy
- What's the Time Mr. Wolf? Colin Hawkins
- Bad Tempered Ladybird Eric Carle
- The Very Hungry Ladybird Eric Carle
- On Friday Something Funny Happened John Prater
- Mr. Wolf's Week Colin Hawkins

Your child will be bringing home a 0-20 number line in their book bag. Here are a few ideas for using it to facilitate your child's learning.

- Using toy or counter to jump from numeral to numeral and count the jumps.
- Displaying quantity as a staircase (see photo of apples below) to facilitate your child's understanding that number is linked to quantity and it increases as you move along the number line and decreases as you move backwards along the number line in ones.
- Talk with your child about how numbers change as you move along the number line. Which way do we go along the number line when the numbers get bigger, greater, more and which way to be less, smaller?
- Puppet stands on a number, e.g. 5 which way will he turn to go one more, one less. How do you know?
- Use a puppet to stand on the number line. They are going to deliver a letter to house number 5, how many jumps to get there from house number 2.... etc.
- Santa is standing on 2, Rudolf is on house number 7, what are the numbers in between?
- Puppet on 5, counting on and counting back a given number. ¤ Puppet is hiding (covering) a number on the number line. Which number is he hiding? How do you know?
- Jumping along and back in jumps of 2, 5 or 10.
- Make own number lines, make large scale ones outside.

Numicon ideas

1. Simple sorting of tiles by pattern.

2. Find a tile that has more/less holes.

3. Find a tile that is larger/smaller.

4. Order tiles by size.

5. Find the tile that is the same size as 2 smaller ones. How many ways can you find?

6. Choose a tile. Find the equivalent amount of counters.

7. Find a tile that is 1 more/1 less.

8. Children make own number line by matching tiles. Start using number names. Order a handful of tiles. 18. Give children an amount of counters so they can find the matching tile.

9. 2 tiles, which is more/less?

10. 2 tiles different sizes. Which additional tile will make them the same?

11. Give me the number 4, etc in tiles.

12. Can you make each individual number another way with the tiles (bonds)?

13. Put 10 pegs in. Ask child to remove 3. Find tile that matches the amount left. (subtraction).

14. Find a tile eg. 10. Find 2 smaller boards that fit on to it. Take one board away. How many left?

15. Throw dice and take tile until total exceeds 10. Match amount with a 10 tile and other required amount (Tens and Ones)

16. Children choose 2 tiles with total more than 10.

17. Number bonds: Make 10 using 2 tiles.

18. What shape can you make with 1 red and 1 orange?

19. Which shapes will make squares?

20. Make a square with tiles. Make the same square with different tiles. Make a bigger square.

21. What shape do you make when you put, for example, 2 and 4 together?

22. Use 2 tiles to make, for example, 10 and record number sentence.

Key Questions to build reasoning and check understanding

Questions help you check and support your child's understanding

How could you sort and group these numbers/ objects)?

Can you explain how you sorted them?

What is the same about...?

What is different about...?

Can you show me another way that you could do this?

What happens when we ....? *take away 4 from this group?, add 10 to each of these numbers?, share them into groups of 5?*

How many ways can you find to ... *make 7 ... sort these coins... sort these shapes?*

Have you found all the ways to do this?

How many different ways can you find to add 2 numbers that make 7 (7+0, 7+1, 5+2, 4+3, 3+4, 2+5, 1+6, 0+7)

Can you draw/ record what you are doing?

What do think comes next?

Why?

Prove that...

3+6 makes 9., you can share 8 biscuits between 2 bears equally

Can you prove that your answer is correct?

Why is that correct?

Can you show me how you know that?

What made you decide to do it that way?

What have you discovered?

How did you find that out?

Why do you think that?

What would happen if...?