

Mosman Public School



*A practical approach to
supporting your child with
Mathematics outside of the
classroom*

Years 3-6

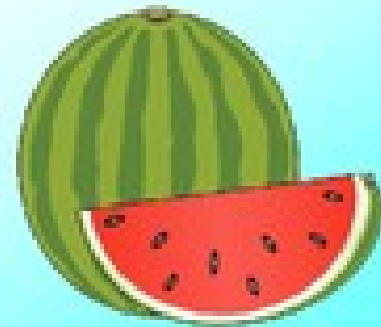
What will we focus on in this session?

- How to support mathematics understanding through 'every day' maths
- Making connections with times tables
- Activities and games to try at home

'Every day' mathematics

MATH.

The only place people can
buy **64** watermelons
and no one asks
why...



As parents you engage in many real life mathematical experiences with your children every day.

What mathematics can you see?



'Helping your child to experience the world'

A good way to think about maths is in terms of 'helping your child to experience the world'.

- Why did you choose that?
- How did you decide to do that?
- What do you think might happen next?
- Why do we think that happened?
- How can we tell why that happened?
- What patterns can we see here?
- What else might have happened then, if we made a different decision?
- Is this answer reasonable?
- Ask your child to find a solution rather than providing one yourself. Ask your child about his or her own thinking about a situation or issue.

“But, I wasn’t good at Maths”

As a parent, you don’t have to know the answers to the questions you and your child are asking, but you can have fun thinking about possible answers. The questions are meant to be the start of a conversation, to help you discuss ideas and ask even more questions.

Some facts to consider:

- When we focus too much on facts and procedures, students are more likely to develop misconceptions and inefficient methods. This quite often leads to maths anxiety, disengagement and poorer performance in mathematics.
- Most adults were shown one way to add and subtract, multiply and divide. 30% of Australian adults are unable to use the procedure that was drilled into them and often don’t realise when procedure mistakes are made that result in the wrong answer.
- Mental computation and estimation account for approximately 80% of the calculations we do in real life.

Simple maths opportunities



What number can you see?

How much would the 7 digit be worth?

What is the total if we add the numbers up?

What is the total if we multiply the numbers?

Who can find the largest number?



**A trip to
Taronga Zoo**

How many animals are in each enclosure?

I wonder how many animals there are altogether in the zoo?

How many minutes until the seal show?



A trip to Taronga Zoo

Navigate around the site using a map...

Plan a route within an amount of time available.

Times table connections

Number facts

$$8 \times 3 = 24$$

$$3 \times 8 = 24$$

Story

I need 24 sausages for the BBQ. There are 8 sausages in a pack so I'll need 3 packs.

Related facts

$$24 \div 3 = 8$$

$$24 \div 8 = 3$$

Extended facts

If I know that $8 \times 3 = 24$ then I also know:

$$80 \times 3 = 240$$

$$80 \times 30 = 2400 \quad \text{etc}$$

Link this to fractions,

Eg, $\frac{1}{3}$ of 24 = 8

Simplify $\frac{8}{24}$ to $\frac{1}{3}$ because 8 goes into 24 three times.

Your turn 😊

Years 3 & 4

$$21 = 7 \times 3$$

Years 5 & 6

$$11 \times 12 = 132$$

Number facts

Story

Related facts

Extended facts

What number fact is central to answering this question?

There were 23 958 people at a football match.

One-third of the people at the match supported the away team.

Which of these is closest to the number of people at the match who supported the away team?

700



800



7000



8000



Number fact

$$3 \times 8 = 24$$

Related facts

$$24 \div 3 = 8$$

Extended facts

$$\begin{aligned} 24000 \div 3 &= 8000 \\ 3 \times 8000 &= 24000 \end{aligned}$$

How do I help my child if they forget a number fact?

**“I have forgotten
 8×7 ”**

I know $7 \times 2 = 14$
Double 14 is 28
Double 28 is 56

$10 \times 7 = 70$
Take two 7s (14)
from 70
That's 56

I know that
 $5 \times 8 = 40$
 $2 \times 8 = 16$
 $40 + 16 = 56$

Activities and games to try at home

What you can do with dice and a pack of cards...

