

Using **calculators** can help your child's numeracy

Using the calculator to play with numbers

When young children play with their calculator they learn to recognise the numbers on the keys. They notice that when they press a number it will show on the screen.

Children enter numbers such as their age, telephone number, big numbers like one million and 'blast off' numbers (counting down from 10 to 0).

Using the calculator to explore number patterns

To count by 1s press

$$1 + = = =$$

To count by 2s press

$$2 + = = =$$

Please note that some older calculators may operate differently from this.

Try this with your child and see the numbers 'grow' on the screen. Ask your child to stop and predict which number comes next. Check to find out.

Ask your child to say the numbers as they show on the screen. Some children enjoy writing the numbers down a long strip of paper. They could look for a pattern.

Experiment with counting on from a larger number, e.g. start with 16 and count by 2s.

Now try counting backwards from 20 by 2s.

$$20 - 2 = = =$$

Using the calculator to count *how many things?*

Count the wheels on the cars by 4s.

Count the number of eyes in the family by 1s, by 2s.

Ask: *Did you get the same amount both times?*

Count to keep the score for games.



If you would like to know more...

- Contact your local school or talk with your child's teacher
- Look up the web and use some of the following key words to search: numeracy, number sense, mathematical games, number, chance and data

This brochure is on the internet at:
www.dest.gov.au/schools/publications/index.htm
 and
www.gu.edu.au/school/cls/clearinghouse/

Further copies of this brochure can be ordered from:
The Clearinghouse for National Literacy and Numeracy
 Research on telephone 07 3875 5703



EARLY YEARS

Numeracy:

families **working it out** together

the opportunities are everywhere

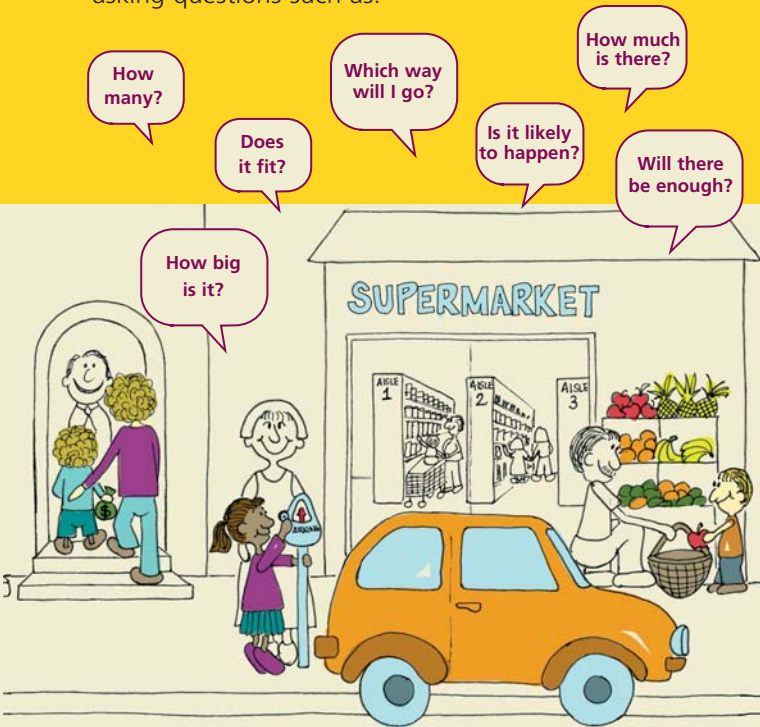


This brochure has been funded by the Australian Government as part of its commitment to improving numeracy outcomes for all students.

What do we mean by numeracy?

Children develop numeracy skills when they use mathematical ideas in their everyday situations.

They begin to make sense of these situations by asking questions such as:



Can families help?

YES !

You may feel that the maths children do at school is different from how you were taught, or that maths was not your best subject. You are however still able to help your child in many ways.

The information that follows will assist you in helping children learn and enjoy using their mathematical ideas in daily activities.

Families can help by:

Responding to children's ideas by...

- listening to, and talking with them about the number, shape and size of things in, for example, games, constructions, drawings, rhymes and stories
- asking questions like:



Pointing out...

- numbers in magazines, books, signs, prices, packaging and number-plates
- how these numbers help us to know how to find things, to know how much, to know how many and to know which one

Looking for opportunities where children can...

- sort, organise and count collections of things like: clothes, toys, books, shells, rocks, birthday candles
- choose from a variety of materials of different shapes and sizes to use for play and solving problems
- be involved in making plans and designing their own constructions like cubby houses, robots, sand castles

How can families and schools work together?

Talk with your child's teacher about numeracy at home and at school and raise any concerns with them.

Ask the teacher how you can support the class mathematics program at home.

Help your child to enjoy the mathematics they do at school by talking positively about work they bring home.

Support the teacher/school by attending parent meetings and volunteering your time or support.



Find out how mathematics teaching has changed since you were at school.

Find out how your child uses a calculator at school.

Help your child to plan how much money they will need for their lunch or outings at school. For example, have them write the amount on envelopes and orders. Ask them to check if they have enough money.



Fridge List

Encourage your child to ask questions like these to help them make sense of their everyday situations...

How much is there?

Will there be enough?

How big is it?

Which way will I go?

What might happen if...?

Is it likely to happen?

How do you know that?

How many?

Does it fit?

Why does...?



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Families can look for opportunities to point out and respond to children's numeracy ideas.

Here are some examples:

Travelling:

Play games in the car such as: *Let's count all the blue cars we see on our way to*

When your child asks: *How long will it take to get there?* you can respond with: *It will take about the same time as it takes to.....get to school, watch Playschool etc.*

Stopping at a service station ask: *How many ice-creams will we need to buy? Do we have enough money to pay for them? How much does the petrol cost here?*

Outdoors:

When going for a walk point out house numbers and ask your child: *What number do you think the next house will be? Will it be an odd or even number?*

When deciding what to wear, talk about the weather. Ask: *Is it likely to rain today?*

At home:

When playing computer games ask: *How did you know which way to go?*

When talking about TV programs ask: *What is the time? What time does the program start? Do we have enough time to read this book before it begins?*

When preparing a meal involve your child in deciding how much food to prepare for the whole family. You can ask: *Are there enough for us to have one each?*



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