

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



### Using the calculator to find out about numbers

When children play with their calculator they enjoy finding out what happens when they press different keys. Talk about what they did to change the numbers on the screen.

### Using the calculator to explore number patterns

Use the calculator to count up to large numbers. To count by 5s press

5 + = = =

To count by 10s press


1 0 + = = =

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.

Some children like to say the numbers as they show on the screen and enjoy writing them down on a long strip of paper. Ask: *Is there a pattern you can see?*

Try starting from a number like 7 and count by 2s, 5s, 10s etc.

Try counting backwards from 1 000 by 10s using the  key.

### Using the calculator to play games

#### Back to Zero

Take turns to change one of the digits in a number like 526 to 0 in one move. For example, to change the 2 to 0 in 526 subtract 20 resulting in 506. Keep going until the screen shows 0.

#### You can help your child with multiplication tables

Ask: *How many times did you have to add 7 to get to 42? How many 6s do you think there would be in 42?*

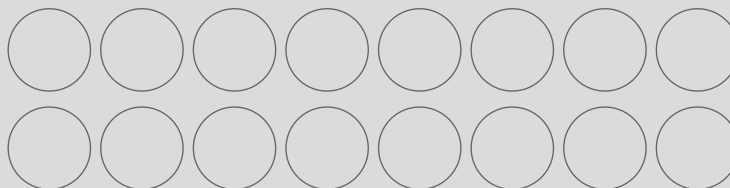
Use your calculator to check if you were right.

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](http://www.dest.gov.au/schools/publications/index.htm)  
and  
[www.gu.edu.au/school/cls/clearinghouse/](http://www.gu.edu.au/school/cls/clearinghouse/)

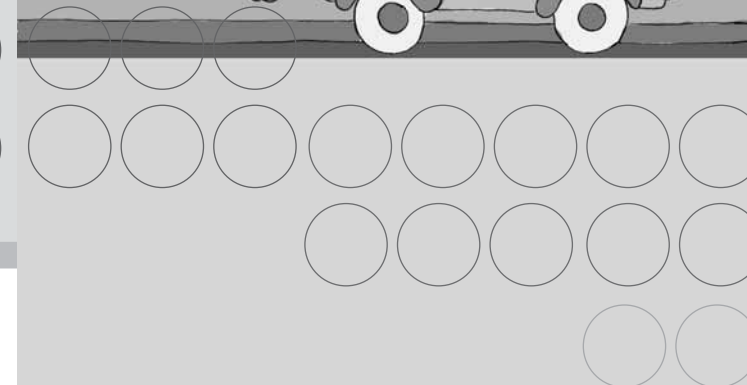
Further copies of this brochure can be ordered from:  
**The Clearinghouse for National Literacy and Numeracy**  
Research on telephone 07 3875 5703



MIDDLE PRIMARY 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 prices, directions for making things and the shape of materials they are using
- asking questions like:



### Pointing out...

- how the right measurement is important when using a recipe or when following instructions to make or build something

### Looking for opportunities where children can...

- choose from a variety of materials of different shapes and sizes for games and for making things to play with
- sort and organise things like: collections of swap cards, coins, games, CDs, videos
- be involved in making plans and designing their own cubbies, furniture and vehicles for use in their games

## 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.

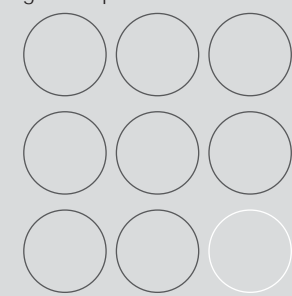
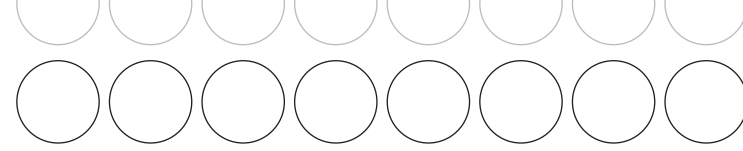
**Help** your child to enjoy the mathematics they do at school by talking positively about work they bring home.

**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 amounts on envelopes and orders. Ask them to check they have the exact amount or how much change to expect.





## Fridge List

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

Here are some examples:

### Travelling:

When taking a long car trip, involve children in using a map and ask them to find the best way to get there. When they ask *How long will it take?* show them how to use road signs and the map to find out.

When stopping to buy petrol ask children: *Is the petrol cheaper here? More expensive? What is the difference?*

### Sport:

Look at scores during a game and ask: *Who might win?* and *Why?* At the end of a game talk about how much your team won or lost by.

Talk about times and records for major sporting events. Ask: *How fast did they swim? Is it faster than last time?*

When going for a swim ask: *How deep is the water? How can you tell? Is it safe to swim or dive here?*

### At home:

When talking about TV programs you could ask: *How long is the program? Do we have time to watch it before we go out? What time does it start? Should we record it?*

Talk to your child about the strategies they use in board, card and computer games.

### Shopping:

When shopping with children ask questions like:

*Have you enough money to buy that?*

*Will you get any change? How much?*

*How much more will you need to*

*buy another one? What can you buy for \$2.00?*



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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 did you work it out?
- Does it fit?
- How many?



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