## Ideas to use at home

Helping your child with **literacy** and **numeracy** in the **middle school:** Years 6–8



This brochure has been produced to assist parents and caregivers in helping their young adolescent in the middle school with literacy and numeracy. Your support and encouragement are vital to your child's education.



## What is literacy?

Literacy is the ability to read and use information and to write appropriately in a range of situations. It includes the ability to use modern technology with understanding. Literacy involves many skills in reading and writing as well as in speaking, listening, viewing, representing ideas, researching and critical thinking.

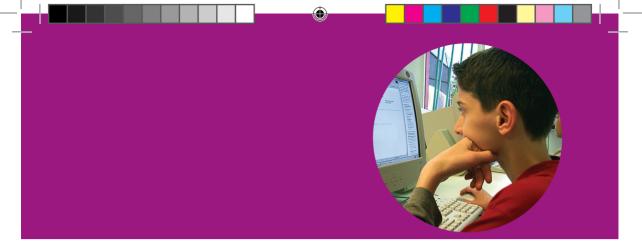
In primary school, your child learns many literacy skills which form a foundation for further development in high school. Year 6 prepares students for the demands of high school.

In high school many more teachers will be teaching your child in separate subject areas. Each high school subject has its own literacy requirements. For example, writing up an experiment in Science is quite different from writing about an event in History. Subject teachers will guide your child in how to use literacy in each subject.

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## What is numeracy?

Numeracy is the capacity to use mathematics in everyday situations at home, at work and for participation in community life. It involves applying mathematical knowledge when estimating, measuring and interpreting information presented as graphs, in texts and tables.

Each school subject may draw upon specific aspects of numeracy. Creating a graph in Geography, developing a timeline in History and measuring an ingredient accurately in Food Technology are examples of numeracy in subject areas.

Various aspects of numeracy support learning in all the subject areas. These aspects include:

- making calculations and working out simple number problems
- · estimating and measuring
- · reading and creating graphs and tables
- critically interpreting information presented as graphs.



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Many opportunities exist for you to support your child's literacy and numeracy development through everyday experiences. These opportunities will benefit your child's overall learning and progress at school.

# Here are some ideas to assist you in helping your child:

## Around the home

The home environment can provide many opportunities for developing numeracy and literacy:

## Numeracy ideas:

- How do you encourage numeracy learning in the home? You could encourage your child to help with:
  - home or garden renovations
  - making a vegetable patch
  - building a dog kennel or home for a pet
  - assembling *Do-it-yourself* items
  - paving or tiling or creating mosaics.
- Ask your child to estimate the amount of water used when washing a car and the cost. Are car-washing facilities cheaper?
- Discuss situations where it may be vital to be accurate with measurements or numbers, such as with medicine. Think about other situations when a high level of accuracy might not be needed, e.g. estimating how much wrapping paper is needed for a gift.
- Invite your child to help prepare a recipe or meal which will need reasonably accurate measuring. Ask your child to help you work out the quantities needed when changing a recipe from four people to six people.
- Newspaper articles often include graphs and tables. These provide opportunities to discuss how the presentation of the information in the graph or table influences the reader. Sports, the weather, economics, cars and music are all topics where information is presented in a variety of formats.
- Discuss your bills for electricity and water with your child. These often include graphs that need to be interpreted. Discuss what you could do around the home to reduce the amounts shown in the graphs.
- Talk about words such as *approximately*, *about*, *nearly*. You could discuss why these words are used at different times.

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#### Literacy ideas:

Families are strong role models. Let your child see you reading, researching, writing and viewing:

- newspapers, recipes, TV guides, junk mail, labels, instructions, signs, maps
- films, documentaries, computers, ATM screens
- comment on the readability of material sent to the home, such as: 'That instruction leaflet was so helpful.' 'This diagram shows me how to install the ...' 'I'll draw you a map so you can find the shop and ask for a catalogue.' 'This article about sportsperson/team claims that ... Would you like to read it and tell me what you make of it?'

#### Activities:

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- Talk and read with your child in your home language if you speak a language other than English. First language maintenance is important.
- Continue to read to and with your child especially with more challenging books or journals.
- Are there various items in the house that your child may be interested in reading: film, comics, fashion or sports magazines? Purchase a subscription to a favourite magazine may be an idea for a present or borrow magazines from the local library.
- Assist your child in effectively using and navigating printed and electronic reference materials (dictionary, thesaurus and encyclopaedia). Discuss how to use an index, a contents page and how synonyms and subtle interpretations of a word can be found in a thesaurus when you need just the right word.
- Encourage your child to read widely newspapers, magazines, the Internet, menus, packets, brochures. (Subject matter may still need to be monitored.)
- Reading quality contemporary and classic poetry can be very satisfying. The concepts explored by poets enable readers to think beyond themselves.
- Ask your child to show you his or her plan for getting an assignment done, the ideas and the timing involved.
- Could your child rehearse oral presentations in front of family members and ask for feedback?
- Assist your child to write for the purpose of a given task, e.g. write a report or a procedure. Using an organiser (such as a mind map) is often very helpful as a starting point. You may want a recipe recorded (a procedure). Some children need explicit instructions for cleaning their room – ask them to write down what needs to be done and the order in which it needs to be done.

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## At the shops or the movies

### Numeracy ideas:

- The term 'mental computation' is used to describe how some mathematics is taught in schools. It involves working out answers to arithmetic questions in your head in quick and accurate ways. This is a useful skill when shopping. Encourage your child to:
  - work out the total cost of some items without a calculator before reaching the checkout
  - work out the final cost of discounted items to help decide on value for money when making purchases
  - think about what, for example, '50% off the second item' and 'Buy one get one free' really mean when you look at the total cost for the two items.
- Encourage your child to ask questions about advertising, e.g. if a sale sign says 'Up to 70% off', does this mean that everything is 70% off or does it mean that many items may only be 30% off, with a few items 70% off? This type of information links to the shop owner's purpose.
- If your child wants to buy a new, expensive item, consider doing some comparative shopping. Also discuss the initial cost, cost of repairs, replacement of any parts and ongoing costs.
- Ask your child to use available scales to weigh fruit and vegetables and estimate the cost of the item. Have a go yourself with your child there.
- Compare the nutritional content, particularly saturated fat, of pre-packaged food items. This information is often listed as decimals or percentages on packaging.
- Talk about numerical information used in advertising food products and why the company has chosen to show this information in a particular way.



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## Visit www.nlnw.nsw.edu.au

## Literacy ideas to build communication and analysis of teenage issues:

- Discuss why a filmmaker, writer or author may have created a film, article or play in a particular way. What was the purpose? Who is the intended audience? What ideas and points of view are presented?
- Talk about how cartoonists suggest something without having to draw it in a realistic or literal way.
- Discuss television advertisements, documentaries or films? You could talk about the message behind the surface and what the creators are really trying to say or sell.
- Ask your child to justify their own interpretation of a film, article or text by referring to the film or article and their own knowledge and experience.





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## Visit www.nlnw.nsw.edu.au

## When travelling

Time spent in a vehicle can be entertaining and also educational.

#### **Numeracy ideas:**

- Do you ask your child to use maps or directories to help when planning a trip or while travelling? Not only could your child think about directions but also distances, speed and the time it would take. This will also involve your child in using scales on maps.
- Along the way, you may have the opportunity to have your child help you use road sign indicators to check the accuracy of your odometer.
- Bus, train and ferry trips provide opportunities to read and discuss timetables.
- You could discuss fuel consumption, cost and savings.

#### Literacy ideas:

- Listen to news broadcasts or a chat program on the radio with your child and discuss the issues raised.
- Discuss advertising on billboards and their effect. What was the purpose? What ideas and points of view are presented?

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## Sports and hobbies

Many of your child's interests will include measuring skills and calculations.

### Numeracy ideas:

- While watching sports events, discuss scoring aspects of the game. For example, cricket lends itself to discussing run rates, averages, angles, position and graphs.
- Your child may be interested in being a timekeeper for swimming or athletics events. You could show your child how to use a stop watch for lap times or speed to compare times.
- Is your child interested in construction of models such as cars, trains and aeroplanes? Take the opportunity to discuss the scale or size of the model compared to real-life size.
- Sewing, scrapbooking, cross-stitch, tapestry and quilting all include aspects of measuring and patterning.
- Your child could measure the temperature in various parts of your home. You could ask which would be the coolest place to store some chocolates you want to buy and set aside for a special occasion. If you want to germinate some herb seeds (like parsley or chives), where would be the most suitable place? If your child does this with three different types of seeds, he or she could measure the growth of the seeds each day and the temperature to determine the growth speed and effect of temperature. Your child could put the results into a table or chart to clearly see the results.

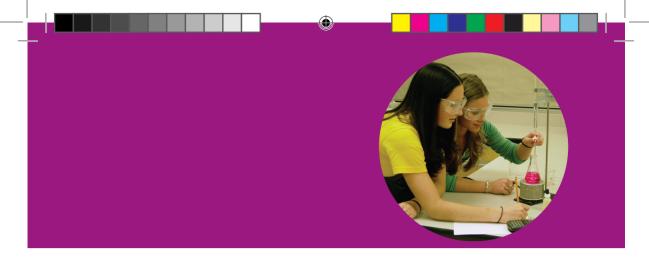
## Literacy ideas:

- Does your child enjoy sport? He or she could research more about particular players, events or rules. Consider taking your child to the local library to select non-fiction materials or show your child how to research using different search engines on a computer.
- Develop listening by explaining the procedure of an activity, e.g. read aloud a recipe; explain how to write a letter of thanks; explain how to assemble something; explain the rules of a game.
- Encourage your child to plan a writing exercise on a hobby, draft it, review it, proofread and edit it before being satisfied that is the best quality.

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## Developing your child's thinking skills

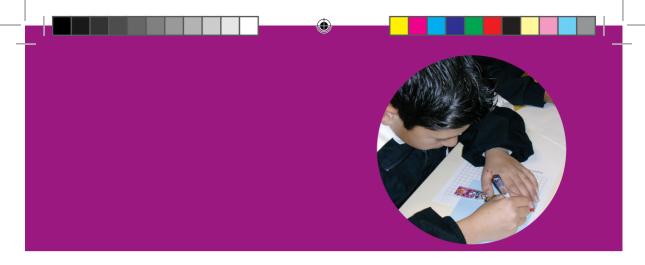
Consider fostering critical thinking in your home:

- Use questions and language that need deeper thought. Words such as *compare, analyse, predict, give examples* may promote conversations.
- Help your child to use precise wording rather than generalisations.
- Encourage looking at a situation, event or issue from another's point of view.
- Ask your child to find a solution rather than providing one yourself. Ask your child about their own thinking about a situation or issue.
- Choose wording that encourages thinking: *Help me understand why you chose to* ... or *What do we need to take with us when we go to (the movies, the picnic)*?

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## For further information:

- approach your child's teachers for assistance in supporting your child at home.
- visit your school's web site.
- about Aboriginal education, visit: http://www.dest.gov.au/sectors/ indigenous\_education/default.htm
- visit the Board of Studies web site: http://www.boardofstudies.nsw.edu.au
- visit your school system site or the NSW Department of Education and Training site: https://www.det.nsw.edu.au
- · about sports and hobbies visit your local library.
- use a search engine to find various web sites for further research.



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#### Contacts:

- Federation of Parents and Citizens' Associations of NSW
   Phone 1300 885 982
   Fax (02) 9080 2364
   mail@pandc.org.au
- Council of Catholic School Parents
  Phone (02) 9390 5339
  Fax (02) 9390 5299
  danielle.cronin@ccsp.catholic.edu.au
- NSW Parents' Council
  Phone (02) 9955 8276
  Fax (02) 9954 4429
  office@parentscouncil.nsw.edu.au

Individual brochures on literacy and numeracy are available online in six languages (Arabic, Chinese, Korean, Spanish, Turkish and Vietnamese) at www.nlnw.nsw.edu.au









## An Australian Government Initiative





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