

## Literacy and maths tips to help your child

Published by the Department of Education and Early Childhood Development Melbourne

Published Febuary 2011
© State of Victoria 2011
The copyright in this document is owned by the State of Victoria. $\mathbf{N E A L S}$ No part may be reproduced by any process except in accordance with the provisions of the Copyright Act 1968, NEALS (see below) or with permission.

An educational institution situated in Australia which is not conducted for profit, or a body responsible for administering such an institution, may copy and communicate the materials, other than third-party materials, for the educational purposes of the institution.

Authorised by the
Department of Education and Early
Childhood Development, 2 Treasury Place, East Melbourne, Victoria 3002.


Research shows that families have the first and most significant influence on their children's learning, development, health, safety and wellbeing. Your family can play a key role in helping your child succeed at school.

As a teacher and principal for over 19 years I understand the importance of schools and families working together. I believe that building strong links between families and schools is really important in terms of building positive outcomes for students.

You can make a difference by supporting what and how your child learns at school and at home.

We know that literacy and maths skills are crucial building blocks in our children's lives. This booklet provides 201 literacy and maths tips including practical activities for you to do with your child at home and questions you can ask your child to help them learn.

Doing these practical activities will help your child develop excellent reading and writing skills, to speak well and be a good listener. You can also help them develop their maths skills, like calculating and using numbers in everyday activities at home.

Working together, families and schools can provide the greatest opportunity for children to have the best possible start in life.


Minister for Education

## CONTENTS

How do I use this booklet?

## Page

Helping your child to read, write, speak \& listen
Before School - Year 2
2

Doing maths together at home
Before School - Year 218
Exploring maths with your child Year 3 - Year 6 ..... 26Where can I get help?35

## HOW do I use this booklet?

This booklet provides handy hints and ways you can help your child develop literacy and maths skills. It provides practical activities for you to do with your child at home and questions you can ask your child to help them learn.

The booklet is divided into age groups Before School - Year 2 and Year 3 - Year 6. Go to the sections appropriate to your child's level and look at the tips and handy hints. You don't have to do all the activities but doing some everyday will improve your child's learning.

This booklet has been developed to support the Victorian Essential Learning Standards (VELS) which outline what is important for all Victorian students to learn and develop during their time at school. The activities in this booklet reflect these standards and support lessons taught in your child's school everyday. For information on the VELS go to:
(9) http://vels.vcaa.vic.edu.au/parents/vels.html

Electronic versions of this brochure are available in English and 23 different languages from the Families as Partners in Learning website:
(9) www.education.vic.gov.au/about/directions/familiesaspartners/schools/connecting.htm If English is not your first language, you can involve your child in these activities in your first language and in English if you feel confident.

## HELPING YOUR CHILD TO READ, WRITE, SPEAK AND LISTEN

In the early years of primary school, students learn to read through rhymes, storytelling and following along with their favourite book. Learning to write begins with scribble and drawings. The activities below will help your child develop these skills.

1. Share rhymes and songs and encourage your child to join in.
2. Save safe cardboard and household items for your child to build with. Ask your child to describe what they are building.
3. Have a dress-up box for your child to use for imaginative play.
4. Listen to your child and respond to their ideas with questions and ask for more information.
5. Write down your child's stories as they tell you and encourage him or her to read it back to you.
6. Point out and talk about letters and words all around you. For example, on cereal boxes, car number plates, signs.
7. Cook simple things together. Read out the recipe, talk through what you are doing.
8. Join a toy library and choose toys together.
9. Look at junk mail and talk about the things for sale.
10. Provide materials and create a writing/drawing table or area.
11. Talk about family photos and histories.

## STORY-telling

Story-telling is a great way to extend your child's language and listening skills, as well as expanding their imagination. Either you can tell the story, or encourage your child to tell the story.

Story-telling might be about:
12. A favourite character from a book or television program.
13. Another family member.
14. Your child's favourite toy.

Here are some tips to start your storytelling:
15. Make it exciting, with different voices, puppets, props or a finger play.
16. Start with what interests your child.
17. Create a character and setting.

## READING together

Reading is an important way to make the link from spoken words to written words.

Reading to your child is a valuable thing to do. Here are some tips:
18. Encourage your child to select the books, magazines, catalogues, multimedia stories or DVDs.
19. Discuss the pictures in a book and encourage your child to talk about the pictures.
20. Share wordless picture books to develop imagination, ideas and vocabulary by naming things in the pictures.
21. Re-read your child's favourite books and stories.
22. Look for rhyme, rhythm or repetition in books.
23. Support your child to make their own books with pictures and then 'read' the story to you.


Reading with your child will begin when your child becomes familiar with the story and can take over some of the reading.

When your child reads to you, allow time for working out words and ask questions to see if he or she understands what they have read.

If your child is trying to read a long or tricky word, give your child time and ask questions like these:
24. Look at the picture, what can you see that might start with that letter?

25 . Look at the picture, what word makes sense?
26. What letter does it start with? What sound does the letter make?

What letter does it end with?

It's also important for you to show your child how you read every day for different purposes, for example: recipes, greeting cards, calendars, shopping lists, food labels, instructions, maps, newspapers, emails, signs, and websites.

## READING together...



Book talk is an important part of reading. Chat about the book before, during and after reading and really encourage your child to talk about their ideas and ask questions about the book.

Here are some questions you can ask at different times before, during and after reading the book:
27. What would you like to read about?
28. Would you like to choose a book you know?
29. Look at the cover - what do you think this book is about?
30. What is happening in the pictures?
31. How could we work out these tricky words?
32. What do you think is going to happen next?
33. What was your favourite part of the book?
34. Who was your favourite character in the story? Why did you like that character?
35. If you could change the ending of this book, what would it be?

## READING ideas

36. View and try quizzes together by clicking the Quiz link on the Connect-Primary website for primary students.
37. Write down what your child is telling you about an experience and then read it back together.
38. Visit your local library or school library to select and read books together.
39. Find out facts about the world by clicking the Find out link on the Connect-Primary website.
40. Draw or paint pictures about the scenes or characters. Click on the Draw link on the Connect-Primary website.
41. Explore words using a dictionary.
42. Talk about what authors and illustrators do.
43. Point out important things about a book - for example, the front cover, the spine, the contents page, or the title.

## READING and writing go hand in hand

Learning to write begins with scribble and drawings. This is an important first step and should be encouraged. Support your child to read their writing aloud. Create somewhere to store and display their writing.

Use your child's experiences to create links between talking, writing and reading. Here are some steps to follow:
44. Ask your child to talk about an experience or something that interests them.
45. Ask your child what part of the conversation they would like you to write.
46. As your child is talking write down their ideas. Use the child's language.
47. Ask your child to read back the writing.
48. Your child may want to draw a picture or create something to match the writing.

## OPPORTUNITIES to write everyday at home

Like reading, writing becomes an everyday activity at home. Let your child see you writing.

Try some of these writing ideas at home:
49. Write a shopping list or add items to the list and tick off the items as you buy or unpack them.
50. Keep a board to write and read family messages.
51. Give your child a pad of sticky notes to write reminders for themselves.
52. Plan and write your weekly menu together.
53. Write captions for photographs in your family photo albums.
54. Write labels for your child's art works and creations.
55. Make words using magnetic letters and stick them on the fridge.
56. Make and write greeting cards, birthday cards, and thank you notes.
57. Keep a family calendar on display and write down family events. Talk about upcoming events with your child, for example, where, when, and who will be there.


## DOING MATHS TOGETHER AT HOME

Children need lots of experiences in making, counting, drawing and talking about numbers. Make connections for your child by explaining how numbers and counting are a part of everyday life. The activities below will help your child develop these skills.

You may feel that the maths your child is doing at school is different from how you were taught, but you will still be able to support your child in many ways.

## Playing shop

Collect food and grocery items and label them with prices written on sticky notes or prices cut out of shopping catalogues.
58. Talk about how we pay for items using notes and coins.
59. Make paper money or use play money to buy and sell goods from the shop.
60. Order the food items by height (tallest to the

61. Introduce kitchen scales to the shop to weigh some foods such as a box of tea bags or a bag of rice and order items by weight.

## PLAYING games

62. Play I Spy or other games to identify shapes, numbers and patterns.
63. Dice are a great addition to any toy collection. Roll the dice and say, make or write the numbers identified. Roll the dice and add the numbers together to find the total.
64. Play number games online with your child.

Try this website:

http://www.abc.net.au/countusin/

## MAKING patterns

Recognising and making patterns are important maths skills for exploring numbers, shapes and symmetry.
65. Identify and explain visual patterns on clothing, wrapping paper, crockery, cards and furniture.
66. Use coloured pegs, blocks, beads or cutlery to begin a pattern for your child to continue. For example, red, blue, white, red, blue, white.
67. Encourage your child to draw, create and describe their own patterns. Use them for borders or greeting cards or on material.

## MEASURING things

68. Use a wall measuring chart to measure the height of people in your family.
69. Cut a piece of string for your child, any length will do. Use the string to measure the objects in your house to find out what is longer or shorter than your 'string measuring tape'. Ask your child to identify anything that is the same length.
70. Explore other ways of measuring using a cup, jug, teaspoon, icy pole sticks, foot prints or hand lengths.
71. Build a tower of blocks that is taller than a favourite toy. Ask your child to count the total blocks to measure the height of the tower.

72. With your child find numbers around you, for example house numbers, calendars.
73. Look at and say the numbers on car number plates, signs, calendars, newspapers, shopping catalogues, speed signs, house numbers.
74. Use different numbers as the starting point for practising counting, for example start counting from 6 or 10. Ask your child to count forwards and backwards. Ask what number comes before or what number comes after.
75. Identify the numbers on a calculator. Use an online talking calculator at

http://pbskids.org/cyberchase/games/calculator/calculator.swf

## TURNING maths into a story

By presenting mathematics as a story children can make links to their everyday life. Begin by reading books to your child that include numbers and counting.

Turn everyday events or objects into a maths story:
76. Count the fruit in the fruit bowl.
77. Cut fruit into six pieces.
78. Count the pieces of toast you cooked at breakfast.
79. Add the total of cutlery at the table.
80. Count the number of people travelling in the car or the bus.

Encourage your child to draw and talk about the number of things in the pictures they have drawn. Write down your child's ideas as a story. Here are some examples:
81. There are five pieces of fruit in our bowl. Three are apples and two are bananas.
82. My lunchbox has four things inside. One sandwich, one orange and two slices of cheese.

## MOVING with maths

These ideas use movement of the body, hearing sounds, using eyes and feeling with hands to experience counting.
83. How many throws can we do without dropping the ball?
84. How many jumps does it take to get to...?
85. How many times can you tap the balloon before it touches the ground?
86. How long does it take you to skip to...?


## USING playing cards

87. Play matching number games with playing cards.
88. Put cards in order from largest to smallest by counting the shapes (hearts, spades) or using the numbers on the cards.

## ASKING questions to investigate

Ask your child questions to encourage them to investigate maths:
89. What shapes can you see?
90. How could we measure the...?
91. How will we find half?
92. What is the best way to share...?


## HAVE you tried these counting ideas at home?

93. Count the food items as they are placed in the trolley or unpacked at home.
94. Count each toss of the ball as you play a game.
95. Count the steps to the letterbox, front door, clothes line.
96. Collect and count objects such as toys, shells, and flowers from the garden.
97. Count days on a calendar. Count days down to a special event.
98. Read books that involve counting.

## SPOTLIGHT on counting

Counting is one of the first experiences
of maths for young children.
Learning the counting words often begins with a favourite song or rhyme and the repetition of the number names.

Listen for the counting sequence in these songs and rhymes:

## Five Little Ducks

Ten in the Bed
1, 2, 3, 4, 5, Once I Caught a Fish Alive
Ten Green Bottles
Five Little Monkeys
1, 2, Buckle My Shoe
As children move on to counting a collection of objects they begin to link each object with one number name. In the beginning, encourage your child to touch each object as they say the matching number's name.

Children will begin by counting all objects in a group, for example, fingers and toes, the buttons on their clothes, steps to the house or their toys.

When beginning to count a group of objects, children may arrange the objects in an order to help them. Later they will be able to start counting at any object to find the total.

Some children will need to repeat the count of the objects if the arrangement has been changed, such as the blocks were in a row and now they are in a group. This can be a good way to explore the idea that the last number counted says how many there are in the group.

## HELPING YOUR CHILD TO READ, WRITE AND VIEW

In the middle to upper years of primary school students use reading and writing to learn and explore other learning areas, and to seek out information for themselves
 as active learners, The activities below will help your child develop these skills.

## Creating reading and writing opportunities at home

As readers and writers, children explore their world everyday beyond school and home. It's important at home that you:
99. Show a genuine interest in your child's reading and writing and viewing of all different types of texts.
100. Let them see you read and write and tell them why you are reading and writing.
101. Talk to your child about their understanding and encourage their reading and writing efforts.
102. Share family histories and stories through talking and encourage your child to talk to older family members.
103. Discuss television shows or films that you have watched together.
104. Encourage your child to develop their own library of books.
105. Talk about world events and encourage your child to look at the different sides of the story to form their own opinions.

## SUPPORTING your child's reading and writing at home

Create a routine for learning and provide materials to motivate writing such as:
106. Notebooks to write their ideas and feelings.
107. Computers and/or netbooks.
108. Markers, pencils, highlighters and pens.
109. Dictionaries and thesauruses as references. These can be books or found online.
110. Online resources such as online maps, encyclopaedias, weather sites.


## ASKING your child questions

111. By asking questions you can support your child to:

- Share their enjoyment of reading and writing.
- Develop a better understanding about the characters or topics.
- Develop a sense of empathy for others.
- Develop their values, attitudes and beliefs about the world.
- Broaden their experience and knowledge of the world.
- Foster their imagination.
- Consider the important points in what they are reading.


## These are the types of questions your child might be asked at school. You can include some of these questions when you talk about reading at home too.

The following questions require your child to get clues from the text to answer:
112. How do you think the character was feeling?
113. How would you change the ending?
114. How would you describe the changes in the character/setting?

These questions require your child to refer back to the text:
115. What were the characters' names?
116. What was the setting?
117. What did each character do?
118. What happened at the beginning, middle and end of the text?

The following questions require your child to think about the main messages:
119. What do you think is the main message in the story or text?
120. Can you relate it to another event or issue?
121. Do you agree with the views of the author?
122. What is your opinion about the message in the story?
123. How could other people see it differently?

## WORKING out difficult words

It is important to give your child time and strategies to read or write any long or unfamiliar words.

Before telling your child the word when he or she is reading, try these prompts:
124. Look for clues for the word's meaning in the sentence.
125. Look at the word closely. Does it look like another word you know?
126. Can you break the word down into smaller parts?
127. Do the words before and after this word help?
128. Before spelling a word for your child when he or she is writing, try asking:

- Does it look right?
- Does it sound right?


## SHARE ideas about texts

Talk to your child about how you select books for your own reading. After your child has read a text, encourage him or her to share insights, feelings and understandings of the text.

Here are some ideas that may suit your child's interests:
129. Read about the author or illustrator at their website.
130. Find and read another story by the same author.
131. Follow the instructions from the text to create something, for example, recipes, making models, or origami (Japanese paper folding).
(3) See the link at http://www.origami.com/index.html for examples and instructions.
132. Read several articles together on the same issue to get more than one opinion. Discuss the different views expressed.
133. View a movie based on a book and make comparisons.
134. Draw or paint pictures about the scenes or characters from a story. Draw these online by clicking the Draw link on the Connect-Primary website.
135. Make music to match the text by clicking the Explore or Make Music links on the Connect-Primary website.

Visit Connect-Primary at: www.education.vic.gov.au/primary


## ENCOURAGE your child to read or write with a specific purpose in mind

Some ideas include:
136. Read a book or film review by clicking the Review link on the Connect-Primary website and then you and your child can add your own review.
137. Listen to and view texts on the internet, MP3 or other digital audio player. Click on the Listen link on the Connect-Primary website to watch and listen to stories.
138. Read, collect, experiment with and write recipes to create a cookbook.
139. Find out facts about the world by clicking the Find link on the Connect-Primary website.
140. Use instant messaging to communicate with family and friends together.
141. Keep a diary where your child can record events, feelings etc.
142. Make and write greeting cards.
143. Write a shopping list for a recipe you and your child wish to make.
144. Capture video of your own review using a web camera, or the movie function of a digital camera or mobile phone. View other videos made by children by clicking the Watch link on the Connect-Primary website.
145. Play appropriate computer games that require reading.
146. Download podcasts to listen and discuss.
147. Join a blog to read and to make contributions together.

## FAMILY projects

Take the opportunity to involve the whole family in reading and writing.
Some family projects could include:
148. Emailing friends or family members.
149. Using social networking sites to communicate with family and transport timetables and information signs at public sights.

## EXPLORING MATHS WITH YOUR CHILD

You may feel that the maths your child is doing at school is different from how you were taught, but you will still be able to support your child in many ways.

There are lots of activities you can do at home, using everyday items to help explore maths with your child.

## SPORTS scores

159. How does your favourite sport tally the score? What maths is presented on the tally?
160. How do other sports tally the score, for example, tennis, golf, cricket, netball, football?
161. What maths do you use to find the total of the scores?
162. Are there other ways to record the score?
163. How long do your favourite sport games go for in minutes and seconds? Are they divided into halves, quarters or something else?
164. What are the shapes of different playing fields and courts? Talk about edges and angles.
165. How can you estimate the perimeter and area of a playing field?

## WEATHER maps

166. Visit the website
(3) http://www.bom.gov.au/weather/vic/ or look at the weather maps in the newspaper.
167. What is the difference between the minimum and maximum temperature for each day?
168. Find a seven-day forecast then record the actual temperature for each day and compare. Was the forecast accurate? What were the similarities and differences?
169. Use the information on the weather website to explore differences in weather from your area to others. How much rain do you get compared to others? Are there differences in temperature?


## RECIPES

170. Collect and read recipes and discuss the use of fractions, millimetres and grams. Encourage your child to make accurate measurements using measuring cups and spoons.
171. Discuss how you would double a recipe. Encourage your child to record the new measurements for the recipe.
172. Identify the temperature and cooking time on the recipe.
173. Estimate the cost to buy all the ingredients to make the recipe.
174. Make a list of the abbreviations used in the recipe and then write them in full, for example, L for litre, mL for millilitre, tsp for teaspoon, tbs for tablespoon.

## CATALOGUES

175. How would you spend $\$ 40$ from a catalogue? How many products can you buy for $\$ 40$ ?
176. Select five products from the catalogue then calculate what the cost be if there was a $50 \%$ sale. Does it make a difference if you add up the items, and then deduct $50 \%$, or if each item is reduced by $50 \%$ then totalled?
177. What is the best value sale item in the catalogue? Can you explain your reasoning?
178. What are the cheapest and most expensive items in your catalogue?
179. Compare the cost of a product across different stores using different catalogues. What did you find?


## TRAVEL timetables

180. Can you identify your starting point on the timetable?
181. What is the earliest and latest time to travel on this route? What is the difference?
182. How long does it take to travel the entire route?
183. How many stops are there on this route?
184. What is the difference in the time travelled when not making all stops?
185. What is the cost? Is it good value compared to other travel options?

## MONEY

Encouraging children to think about money, saving money and considering how they spend money are important skills for all children to develop.
186. Encourage your child to work out how much change you will get after buying something.
187. Investigate costs for family trips together. For example, a visit to a theme park may include transport costs, entry ticket costs and food costs.
188. Discuss saving money for presents or something your child may want to buy. Work out how long it will take to save this much if they get a small amount of money each week.
189. Negotiate increases in pocket money as percentages. For example, a 5\% increase would be how much money per week?
190. Encourage your child to save a percentage of their pocket money or birthday money, and work out how much this would be. For example, how much money would you have if you saved $40 \%$ each week?
191. Calculate together how much a mobile phone costs per month. How much is spent on messages and how much on phone calls?

## NEWSPAPERS

192. On the front page, estimate the percentage of picture and text. Does this vary over the first four pages?
193. Research the cost per word/line to put a classified advertisement in the newspaper. Calculate how much it would cost to put an advertisement in the classified section.
194. Find numbers in the newspaper, in digits and in words. Cut the numbers out and put them in order from smallest number to largest number.
195. Visit the section that advertises entertainment. Select an event or movie. Find out how much the tickets are. How much would it cost for your family to attend?
196. Try the number puzzles such as Sudoku, in the puzzle section of the newspaper or online.

## SPOTLIGHT on fractions

Fractions are a maths topic that is very relevant to everyday life. We use our knowledge of fractions to solve problems and make decisions all the time.
Support your child by using mathematical language to talk about fractions. Here are some maths language terms that your child will be using at school:

Fraction - any part of a whole, a group or a number.

$$
\rightarrow 1
$$

Numerator - showing the number of parts of the whole.

Denominator - the number of parts the whole is divided into.

Proper fraction - numerator is less than the denominator.

Improper fraction - numerator is greater than or equal to the denominator.

Equivalent fraction - fractions that have the same value or amount.
Mixed numbers - a whole number and a fraction. $\frac{-1}{3}$
As children learn about fractions, they gain new mathematical skills:
Children begin by learning that there are many numbers between whole numbers. A number line is an effective model to start with.


2

In the beginning, children are able to recognise and make models of familiar fractions, for example $\frac{1}{2}$ (half) or $\frac{1}{4}$ (quarter). Everyday examples include sharing an apple or cutting a piece of toast.
When children begin to add, subtract and multiply fractions they use models
to help.

- Decimals - a numeral system based on 10 , for example, 0.75 or .75
- Ratio - compares the value of two amounts, for example, $\frac{3}{4}=3: 4$
- Percentage - is a number out of 100 , for example, $\frac{3}{4}=75 \%$

Talk positively about how you use fractions in everyday life. Making models of fractions for your child will support their understanding of fractions. Try some of these ideas making use of everyday objects:
197. Can you cut up the apple to make six equal pieces?
198. What fraction of the glass is filled with water?
199. How do the hands on the clock face show the time quarter past?
200. Can you show me halves and quarters as you cut the orange?
201. If you fold a towel three times equally, what fraction does it show?


## WHERE can I get help?

## Your Child's Teacher

Your child's teacher can provide advice about how you can help develop your child's literacy and maths skills. Some topics you could discuss with the teacher include:

- Your child's level of achievement on literacy and maths tasks.
- The goals your child is working towards in literacy and maths, and how you can support your child to achieve these.
- Strategies you can use to assist your child in areas that he or she finds difficult.


## Online Resources

The Victorian Government's Connect-Primary website makes it easy to connect to great learning tools from your home computer, local library computer, or maybe your school. It includes games you can play with your child to build their literacy and maths skills.

The sites in Connect-Primary have been checked by teachers to make sure they are suitable for use by children.

BE GETIING INVOLVED
IN FOUR CHICD's
LEARNING, YOU WILL
MAKE A B16 DIFFERENCE
TO TIER FUTORE. A
LIIILE BTT TODAF WILL HeLP THEM TO SHINE.


