How Can I Help My Child At Home?

Your encouragement is important to your child's numeracy learning. There are many opportunities for children to consolidate their learning at home. By practicing their maths at school and at home, children are more likely to retain maths concepts. Here are some ideas:

Count objects when doing everyday tasks with your child, such as fishing, scoring at the basketball/football or counting how many plates knives and forks etc to set for dinner.

Read stories and **ask questions.** Many books contain numerical concepts and use maths language such as first, second etc. Ask questions like which child had more cookies? who had the least? The language in story books is very important in young children's understanding of maths.

Take your children **Grocery shopping,** ask them to collect a certain amount of each item (E.g. 9 apples). They can also give the shop assistant the correct amount of money and check the change they are given.

Cooking with children teaches them how to measure accurately, it also introduces them to fractions and large numbers when turning on the oven and weighing ingredients.

Talk about **time** (start time of favourite TV show for young child or work out how long a program runs for with older child); write sport days/times and birthdays on a Calendar.

Breigh Pearson, Hayley Barker & Erin Smith 2013

HUNDRED AND TWENTY DAYS

Each morning students learn reinforce number concepts by counting up to 120 days. Every day we add a pop stick to our ones container and watch as they increase! Once there are ten popsticks (ones), we bundle them up and put them into our tens container.

We discuss ideas such as:

- How many more pop sticks do we need to make a ten?
- What would happen if we double the number of popsticks? or
- How many tens and ones do we have today?

120 days of school helps us to practise our mental maths, partitioning and helps reinforce our place value knowledge!

MATH WIZARD

Math wizard helps your child practise the different mental math strategies we have been learning in class and increase their speed in which they solve sums. Students have 4 minutes to complete a sheet of 40 sums. They are then marked and compared against previous Math wizard sheets they have completed to see how much they have improved.
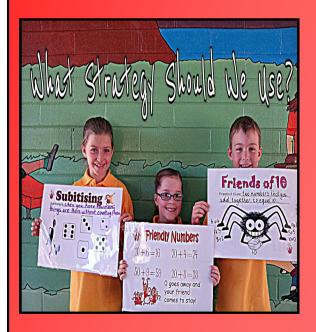
MATHLETICS

Mathletics is a great program on the internet that engages students in Mathematical learning and concretes concepts learnt in the classroom.

Your child's username is: _____

Your child's password is: _____

Millars Well PS

Mental Mathematics Strategies

Helping My Child At Home

Over-reliance on finger counting can slow a child's mathematical learning in later years. Therefore, we aim to promote a range of strategies for children to learn that will strengthen their mathematical understandings and improve their speed and accuracy.

Subitising
Counting can be an inefficient strategy if children can see at a glance how many objects are in a collection or part of a collection. Using a dotted dice is a great way to help your child to become more confident when subitising collections. Roll a dice and see if your child can subitise the numbers on each face. To make it harder roll two dice. Your child should be able to use their knowledge of subitising, doubles, near doubles and friends of ten to work out the sum. Flash your fingers quickly or use dominoes, tallies and ten frames in the same way.

Partitioning
Students can break up numbers to make it easier to add or subtract. For example: 6 is made up of (2+4) Therefore 8+6 becomes easier if they can think of it as (8+2+4).
14+16+7= can be represented as (10+4) + (10+6) + 7.

Friends of Ten
To be able to work out larger sums mentally, it is essential your child knows their 'Friends of Ten'. 'Friends of Ten' are the paired combinations of 10. There is a great song on you tube called 'What makes Ten?' that you can sing with your child. Once your child has mastered their Friends of Ten, they can move onto learning their friends of 20 (E.g. 17+3) and friends of 100 (E.g. 20+80).

Place Value
We are encouraging students to think flexibly when using numbers and place value.
Counting large numbers by ones:
- is a basic strategy;
- is often inefficient;
- can be inaccurate as children forget where they are up to; and
- is difficult to represent visually.

Ask your child to count large collections of pasta, pop sticks, lollies etc.

Encourage them to make collections of ten with any remaining ones left over. They may need guidance to group the objects into bundles of tens.

Encourage your child to count the number of tens and the number of ones. The table below is an example of 165.

16	5
Tens	Ones

You may also like to practice skip counting the groups of tens and then add the remaining ones.

Ask questions like:
- How many tens are there?
- How many ones are left over?
- How many are there altogether?
- How many digits in this number? (63 =2 digits)
- What number is in the tens place? 321= 2
- How many tens is in the number 165? 16 tens

1	6	5
Hundreds	Tens	Ones

Friendly numbers (Place Value Knowledge)
Students need to be able to add numbers on from ten.
For example: 10+1=, 10+2=, 10+3= etc.
Extension: Students who have mastered their friendly numbers can apply the same principles of friendly numbers with higher multiples of tens and be able to count on ten from any number.

For example: 20+6=, 40+9= or 54+10=, 23+10= etc.

Doubles
Learning their doubles to 10 will assist students with many calculations. Automatic recall of doubles facts will allow students to:
- Automatically recite doubles facts (Eg. 6+6, 60+60. 600+600)
- Automatically recite 'near doubles facts' (Eg. 6+7 = 6+6+1or 7+7-1)
- It also helps with the concepts of fractions and even numbers.
- Helps with calculations such as 12+12 = 10+10+2+2

Near doubles
Students can use their knowledge of doubles to then add or take a number to make a near double. For example: 2+3= is nearly a double of 2+2= or 3+3=.

Halves
Once your child has mastered their doubles halving numbers should be a lot easier for them to solve. To half a number the number needs to be even and be shared into two parts.