North Sydney Demonstration School

K-2 Mathematics Parent Information Evening

Some Ideas For Helping Your Child at Home

***Counting**
***Addition & Subtraction**
***Multiplication & Division**

Activities to do at home : Emergent

Students at the emergent stage know some number words but cannot count visible items. They either do not know the correct sequence of number words or cannot coordinate the words with items. ***At this stage counting is the most important skill to master.***
Counting is learnt through repetition, so take lots of opportunities to rote count (just saying the numbers) and counting objects. Count with your child, and help them count up to 20, or demonstrate it to them so that they hear the patterns of the numbers. Children can begin to explore the number of fingers on their hands and show numbers to 5 on them, perhaps more.

***Practise counting to 10**

Tens Frame: take turns to roll a die displaying dot patterns, count the dots and place the corresponding number of counters/beads/lego pieces onto the ten frame. (attached)

Practise counting up to 10 e.g number rhymes "One, Two, Buckle My Shoe"", "Once I caught a fish alive" etc.
Practise counting down from 10 e.g a rocket blasting off. "Ten Fat Sausages" "Ten Green Bottles" song.

Watch Sesame Street, Team Umizoomi and Splash ABC.

Count groups of objects e.g how many knives, forks, spoons on the table, buttons on shirts, counting the number of stairs you're walking, counting how long it takes to do things e.g. to walk to the door, get undressed for a bath, have a drink.

Look at the calendar to see the number today is. What number was it yesterday? What will it be tomorrow?

Look at the numbers on letter boxes.

Practise showing numbers on fingers e.g "Show me 5 fingers (hi five!), show me 2 fingers," etc.

Play 'Snap', roll dice and dominoes – these help the children count in a fun way and see similarities.

Matching words 1:1 with objects e.g. sultanas, plates etc

Making sets of objects and numbers with playdough (to 10) – read the numbers, count the sets. Write numerals in sand. Count groups of shapes drawn in the sand.

Activities to do at home: Perceptual

Students at the perceptual stage can count perceived items but not those in concealed collections. Perceptual counting includes seeing, hearing, or feeling items. At this stage counting on fingers is an important strategy.

***Practise counting to 20 and back to 0**

Rabbits Ears: Ask your child to put their hands above their head. Then ask them to show various numbers by raising the correct number of fingers. This is best done in random order, first in the range one to five and then six to ten. For example, "Show me the number four,… two,…five,…three." The aim is for the students to raise their fingers simultaneously rather than sequentially. Students may verify their count by bringing their hands down and counting their fingers.

Ten Frames: Colour in the tens frame with 2 different colours or fill with 2 different coloured lego/counters etc. Discuss the number combinations they see on the ten frame.

Finger Counting: Show your child 5, 3, 7, 8, etc fingers on your hands and see if they can tell you how many there are. As they get more proficient at this they may recognize patterns instantly. *Build up to five fingers on one hand first, then some more e.g 7 will be one whole hand and 2 more. This helps the children see patterns more quickly and will support them in using the tens frames.*

Everyday counting: Three big plates on the table and three small plates. How many plates altogether? (Count from one)
Look at the numbers on houses/cars/at the shops/people/food/cars

Calendar Numbers: Look at the calendar to see the number today is. What number was it yesterday? What will it be tomorrow?

Counting songs and rhymes: Practise counting down from 10 e.g a rocket blasting off. "Ten Fat Sausages" song.

Addition and subtraction using items: You have 7 grapes and I have 3. How many altogether?
We have 9 grapes. How many will be left when we have eaten 2?

Grouping: Place buttons/lego/counters in to groups of 2/5/10. Count in 2s/5s/10s to count them.

Activities to do at home: Figurative

Students at the figurative stage can count concealed items but counts from one rather than counting on. Has a 'figurative' notion of numbers and does not need to count perceived items, but counts from one to find the total when adding.

***Practise counting to 30 and back to 0**

Friends of 10: Use a tens frame. Place one colour of counters/lego/beads etc on the frame (1-9)and fill the blank spacers with another colour. Now say the two numbers which go together to make 10 e.g 2 and 8 makes 10.

Finger Counting: Use fingers to learn the groupings to 5. e.g 2 and _?, 4 and _?, 3 and _? And groupings to 10: "How many more do we need to make ten? We have 6; we have 8; we have 2, etc"

Calendar ordering: Cut up an old calendar month so that you have the numbers to 31. Help your child to reassemble the numbers into the right order (you could start with smaller sections first e.g 1 – 10, 1 – 20, etc) Count the numbers and point to each number in order. Count backwards while pointing to the numbers. Cover up some numbers and see if the child can tell you what they are. E.g. cover 15. The child might count from one to find out, or just know. Uncover the number to see if they were right.

Addition and subtraction: Use fingers to solve addition and subtraction problems to 10, then use your fingers behind your back. Check if you're right by looking at your fingers afterwards.

Equal Groups: Nana gave us 20 lollies. How many does each person get if we share between 2?
Give your child small amounts of lego/counters. Can put these into equal groups? How many groups do you have? How many in each group? How many altogether?

Arrays: Provide lego blocks or counters and a piece of paper or card. Ask your child to 'Make 3 rows of 4'. Then rotate the paper to make '4 rows of 3'. Discuss the rows, number of counters in each row and total number for the array pattern.

Activities to do at home: Counting On

Students at the Counting On stage can use advanced count-by-one strategies. They count on and back rather than counting from one, to solve addition and subtraction tasks. They can keep track of what they are adding on either by using their fingers or in their head.

***Practise counting to 100 and back to 0**

Skip Counting: Count with or for your child in 10s to 100, 2s to 20 or more, 5s to 50 or more. Then back again. Write the numbers down so the child can use them as a guide.
Keep skip counting in 2's, 5's 10's etc to work out three 2's, use fingers to track – 2, 4, 6. Or use pictures cut out and group into twos etc.

Board Games: Board games e.g snakes and ladders

Counting in 10's and ones: Bundle lolly sticks with pipe cleaners into 10s to see how many there are. Count the 'tens' in tens and the ones left over in ones. Start with numbers up to 40 or so. Start calling the bundles of ten 'a ten'. "Let's get 30 sticks. How many bundles of 10 will that be? How many tens have we got here? How many is that altogether?"

Play a game with 2 dice and the lolly sticks. Roll the dice and work out how many has been thrown. Collect that number of sticks. The rule is that every time you have ten they must be bundled up. Keep playing and see who gets the most.

Rolling Groups: Provide your child with one numeral die showing the numbers 1, 2, 3, 4, 5 and 6 and another die showing dot patterns for 2, 5 and 10. You will also need a supply of counters. Your child rolls the two dice and constructs groups of counters as indicated by the roll of the dice. The numeral die indicates the number of groups and the dot die indicates the number in each group. Encourage rhythmic or skip counting to find the total number of items.
Variation: Replace the dice with a pack of numeral cards and a pack of dot cards. You choose two cards as instructions for your child. Your child then construct the groups and uses rhythmic or skip counting to find the total.

Build a tower: Provide with ten lego blocks as well as an additional pile of blocks, such as twenty, for each pair of students. Prepare "direction cards" showing either addition or subtraction tasks, for example: + 3. Have the students take turns to draw a "direction card" and follow the instruction by adding or subtracting the correct number of blocks to their tower. The winner is the first to make a tower of twenty blocks.

Mathematics Websites to use at home

- Count Me In Too:
  http://www.curriculumsupport.education.nsw.gov.au/countmein/index.htm

- Counting On:
  https://detwww.det.nsw.edu.au/curr_support/maths/counting_on/html/home_1.html

- Rainforest Maths
  http://www.rainforestmaths.com.au

- Count Us In
  http://www.abc.net.au/countusin/default.htm

- Copacabana Public School
  http://www.copacabana-p.schools.nsw.edu.au/Get_Smart_Pages/Get_Smart