

Mathematics

The game called 'dominoes' can be played in Class II also. Class II can have more children according to the numerals they have learnt.

These games have been tried out on children and have been welcomed by teachers and students alike. With such activities the children would have learnt all the addition facts.

Another problem area faced by the teachers is while teaching subtraction.

Using fingers and figures is a long drawn process, tedious and at the end of it all, the children have learnt subtraction, but "intuitive" learning has not been achieved.

The method of teaching subtraction using the addition table has been welcomed by the teachers.

Children also understand what subtraction is all about.

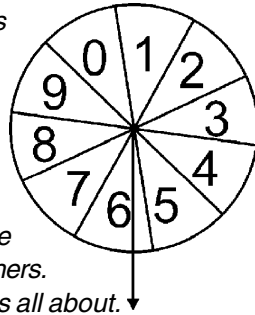
Take care to do subtraction with borrowing mentally! Once the concept of subtraction has been introduced in the book using pictures and other illustrations, the child can be taught the process of subtraction - here again '**using fingers should be strictly avoided**'. The addition table forms the basis for subtraction too. Before actually doing subtraction, the children can be drilled to do fill ups in addition facts. $2 + ? = 5$ (2 plus what is 5?), $9 + ? = 17$ (9 plus what is 17?). And then subtraction can be introduced. e.g. $5 - 2$. The children can be asked $2 + ? = 5$. The children say $2 + 3 = 5$. So the answer is 3.

Teachers can bring objects with pre-determined weights, like an orange, a coconut, a water melon, etc. The child giving the closest answer gets a prize.

Maths should be related to day-to-day life in every way permissible. Use examples from immediate surroundings. Take the children from familiar ideas to new ideas.

Suggested activities:

1) Lotto : This can be used for subtraction, multiplication & division.



2) Dominoes : can be used for multiplication & division too.

3) A game for learning place value. A circular disc is made as shown with numbers from 0 to 9 with a pointer which moves.

In class 2 the teacher rotates the pointer thrice and calls out the number at which pointer comes to rest.

For example if the pointer comes to rest at 4, children can fill up the hundreds, tens or ones place with 4. The next time she rotates it, the number may be 6.

The children will have to fill up one of the remaining places.

The third and the last time, she rotates it, the number may be 8. The children now fill up the place left out and read out the number.

They could have got any of the following numbers

4 6 8 , 4 8 6

6 4 8 , 6 8 4

8 4 6 , 8 6 4

The children who have got the largest number. 864 win the game.

Dominoes can be played with subtraction facts also.

The child's capacity to do mental work should be exploited by the teachers to the maximum. This helps the child to work faster in the higher classes.

Practice surely makes perfect. At the primary level, expecting the children to understand the concept behind multiplication and division is being very idealistic. Maths is a subject which reveals itself more and more as one works at it. The concepts behind operations are bound to dawn suddenly at a later stage. So the teachers should give enough problems for practice.

Estimating is a very important aspect of Maths. This should be done in a class appropriate manner.

Children may be using numbers like 97 and 10576 but they may not realise they are roughly 100 and 10,000.

Somehow rounded numbers have a life and meaning of their own. They seem to make more sense to the children.

Name:.....
Weight:.....kg.

Estimating roughly the length, weight and volume of given objects is equally important. The child should know that a pencil /book weighs in grams while a school bag with books weighs in kilograms.

Activity: The teacher can bring a measuring tape to the class. Using this she can measure the length of the black board and write on the board. "Length of the black board = cms". She can also measure the length of the doorway, its height, the length and width of the window frame and record them on the black board. While doing this she can compare different lengths using 'visual impression' and the actual measurements. Heights of two students can be measured and their heights compared. Activity is very important to teach these ideas.

Activity: This concept is understood better by involving the children themselves. Bring a weighing machine to the class. Make cards which can be tied with a string around the neck of each child. The card may look like this.

The children can stand in a line and their weights taken and recorded in their name cards. After this, the teacher can ask each child, "What is your weight" or "How much do you weigh?" and the child should answer "My weight is kg." or "I weigh kg". Then the teacher can ask, (1) Whose bag is the heaviest in the class? (2) Whose bag is the lightest in the class? etc.

Activity: The teacher can bring measuring jars of 1 litre and 2 litres capacity. She can ask the students to measure out, say, 3 litres of water in a bucket or 1 litre in a bucket etc. She can ask the students to find the no. of litres of milk or cooking oil their parents buy at home.