

Children's learning and playing go hand in hand. Even before going to school and after starting school, children learn a lot while playing. However, after a certain age, though learning continues, playing gradually decreases. In school too, activity-based learning is more prevalent up to the primary and upper primary classes but is totally missing in higher classes.

We all know that learning becomes easy when the environment is stress-free and there is no academic pressure. If we use the play-way method in teaching, children acquire mathematics and language skills efficiently.

Some mathematics games

I would like to share some common maths games that children of the primary and upper primary in my class play. In primary classes, children play these games orally first, and later, in written form to do better in addition-subtraction and multiplication-division.

Calculation game

In this game, three to four children play in a group. They have three dice – two with numbers and one with symbols (+, -, ×, ÷). Each child starts by rolling the three dice together when it is his/her turn, operates according to the symbol, tells the group and writes the answer in his/her notebook. It is marked (✓) if the operation is correct. But if it is wrong then it is marked (×), corrected with the help of the group and then written in the notebook.

Children need to remember one rule here which is that when they have to do addition and multiplication, they can write any number first, but when they get the symbol of subtraction and division (-, ÷), the bigger number should be written first. Sometimes, children are not able to do division, so they leave it for discussion with the teacher. At the end of the game, they see for themselves how many times they rolled the dice in a day, which operations they did and how many operations they completed correctly. In this activity, children learn with the help of each other.

Shopkeeper game

In this shopkeeper game, children not only buy and sell goods, but they also make bills. All the children, irrespective of their interests, enjoy the shopkeeper game and it has a lot of learning opportunities. There are children, whose parents do some business (run a grocery shop, sell vegetables etc.); they are used to helping their parents in their work and they teach others about how to list items, how to calculate etc.

Children prepare for this game themselves. They bring their toys and other items from home and sell them. They decide the price for these items and make bills for the goods sold. The older children calculate profit and loss occurred in the transactions. With this, children also learn the calculation of half, three fourth, one fourth etc.

This game is played in different ways at all levels from classes I to VIII. Once in class VIII, children also enjoyed arranging 'clothes sale' or discount on clothing. They had the photographs of clothes and put stickers on them displaying the original price and the discounted price of 10 percent and 15 percent. This activity enabled them to correct a lot of mistakes in solving problems based on profit and loss, discount and percentage.

Measurement game

Children play some special games in the upper primary classes to learn 'measurement'. They draw long lines on the ground, measure them with a scale and note down their readings. They also play long jump by turns and measure the length of their jump in metres and centimetres. They gradually try to increase the length of their jump.

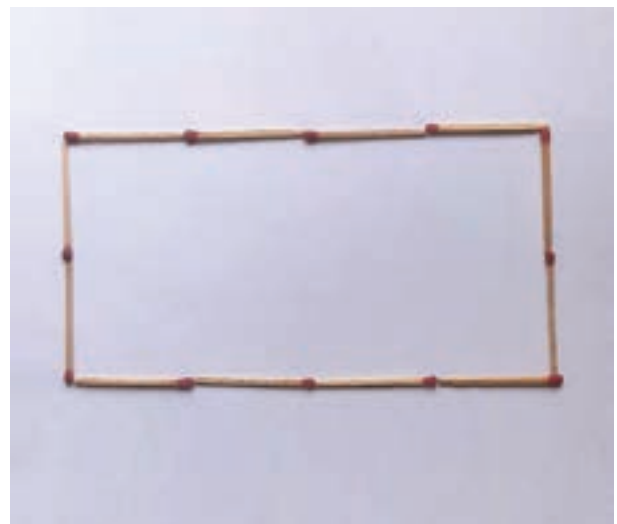
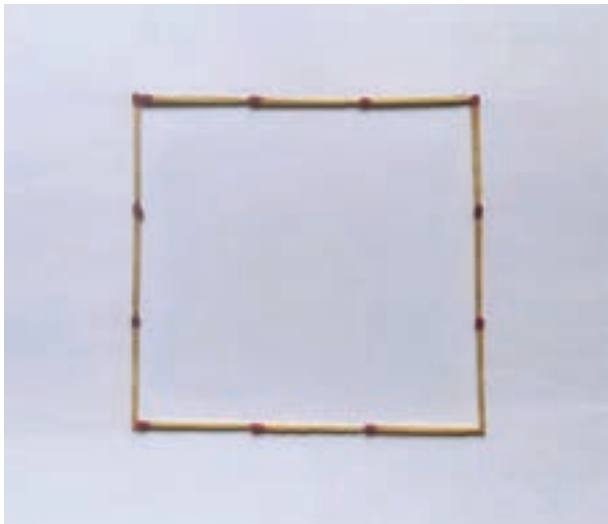
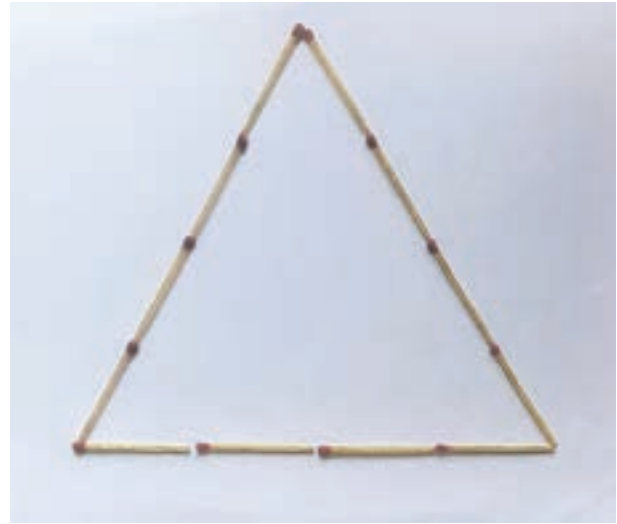
Young children love the long jump. Usually, they mark the distance and see who jumped the longest. But when they are learning how to measure, they draw the number line on the ground and write the measurement in centimetres as 0,10,20,30 on it. They mark a line from where they start their jump (0 or zero cm) and write the total distance covered in centimetres. They also write 'one metre' at 100

cm on the number line and if someone jumps up to 115 cm, then they easily understand that is one metre and 15 cm long.

Shapes and perimeter

In this game, children bring three or four equal lengths of threads (12 or 18 cm) from home to understand the concept of perimeter. They sit in groups in the class and make different shapes (square, triangle, and rectangle) in their notebooks. Then they discuss the figure that looks bigger. But

they observe that the outside measurement is the same for all the figures because they have made different shapes with the threads of the same length. They also make similar figures with sticks using three sticks for each side of a square, four sticks for each side of a triangle and four and two sticks for the sides of a rectangle. When they see that each figure is made up of 12 sticks, then they understand that the outside measurement is the same for all.



Oral calculations

For oral practice, the class is divided into two groups. Group A asks group B to give the answers by doing oral calculations. Children (of classes VII and VIII) frame the questions themselves, like:

1. What is half of 700?
2. What is the total of two notes Rs 500 and four notes of Rs 100?
3. If 70 is added to 280, how much will you get?

Children take the help of elder siblings, write down questions and ask in the class. Some children who have been learning like this for two to three years, start making word problems:

1. If a pen costs Rs 12, then what will be the cost of 12 such pens?
2. I went to the market with my mother. Potatoes were available for Rs 20/kg. If my mother bought one and a half kilos of potatoes, how much money did she spend?

In this way, children try to formulate questions and solve them orally. This helps them to think and calculate. But in this activity, the whole group is not active, only the children who speak more often ask questions and give the answers quickly. Children who are quiet do not get a chance.

Some language games

Reading fun

When children cannot find a book they want to read or want to play during their library time, they have the option to play games around reading. One of them reads from a book but omits some words and the others have to supply these.

In another game, each group is given a letter or a word, and they have to make new words using those. The group, which makes the maximum number of words, wins.

Writing letters

Children write letters to their friends. They write multiple things in different ways, which is an expression of their emotions. They write about the food they like or make or want to eat. In the same way, they sometimes write about all the good or bad things that happen in their homes. Or how they plan to celebrate a festival.

Similarly, they create games of their own for oral expression. They give a topic to each other and speak about it for two minutes.

Conclusion

Even outside the school, we see how children, both girls and boys, love to cycle. It gives them confidence and they learn various things, like how to fix the chain, check the brakes and air pressure, how the cycle moves in water or sand. When they learn to swim, they overcome their fear and enjoy the activity which also teaches them about speed, body movements and lung strength.

I have talked about these games because if we carefully look at the games played inside and outside the classroom, we find that there is joy in learning but no pressure on the child. Children enjoy learning if the games are built around their willingness, their rules, and comparisons that are only with their own selves.



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