Activities to initiate mathematical concept and understanding:

Children learn concepts faster, when it is taught through Activity based learning. There are innumerable fun activities in which the concepts are hidden and the children enjoy the activity more as a game, than as a teaching exercise. We have listed a few of these activities which help in stimulating logical thinking and also teach certain basic mathematical concepts for early learners.

Exploring and Understanding shapes:

This is the most common type of activity engaged with the children to make them understand about the various shapes. Let the child play with the various shapes that are cut out of different materials. First let the children explore the shapes by touching and feeling the materials, checking out the various sides that each shape has got.

Then after identifying the names of the shape, if the shapes are cut out in different colours, then the child would also love to know about the various names of the colours. And they would start pointing out the shapes saying" This is a red square". This is a green circle" and so on. The Styrofoam is a good material to use for this activity or thick cardboard shapes, which are painted in bright basic colours.

Circle time activities:

During the day, the children can also be involved in some physical activities, where they have some group games involving some circle activities. And in that activity have the shapes cut in big size and it is used as a prop in the classroom. Then the children can be given instructions like "Go and touch the red square", "Who is the boy holding the blue circle"

Another modification for the same activity would be to make the child generalise the concept of the shapes on daily living objects. So help the children to look out for the shapes of these objects like, clock, cell phone, playing toys etc. One can also place some real objects or picture of the objects in the classroom and help them identify the shapes around in the environment, like the shape of the TV, Fridge, Dining table, etc.

Count and sort:

Gather together a basket of small toys, like building blocks, cars and some animal figures. The children can be first instructed to sort the toys in various boxes labelled appropriately and ask them to count the objects under each group. If they are unable to do, then one can help them, or physically guide them with counting the sorted things. (i.e. count all the animals separately and the cars)

Numbers in the home environment:

Teach the child about the logic of house numbers, door numbers in an apartment. Talk with the child about how each house has a number and to teach them about landline phone numbers and surprisingly some children can be good in recalling the mobile numbers of their parents. Even if they are unable to say the number verbally, some children can point to the specific number when shown on a sheet of paper.

Concept of size:

The children should be asked to observe the various things around the house and the size of those things. Then they should be asked to name the things that are relatively bigger and the things that are very small in the same room. For example, the fridge is very big and the water bottles on the table are smaller and so on. Same comparison of sizes can also be shown between two note books like comparing big text books with the copy note books and so on. Even comparing the size of 2 people in his house will also teach him the concept of relativity of size.

Concept of time:

Try using a stopwatch, or a timer for any one of the activity that the child performs on a daily basis. This helps children to develop a sense of time and understand how much time does he take for performing a particular activity. Say for example, if he takes 5 minutes to drink milk, then he can be told about all the other 5 minute activities that he performs. These are based on specific activities only, the same kind of logic can be used to teach the children track of time in their daily activities. There are certain activities that are related to the morning schedule and certain activities that are performed in the evening. Some children try to understand the concept of time in association with their personal routine.

Concept of calendar:

The child should be first taught about the days in a week and what day it is? Then based on their daily activities, like attending school or father attending office, the concept of week days and weekend concepts can be taught to the children. Important birthdays of the family members, child's favourite festivals and other events can be marked on the calendar.

Use a calendar to talk about the date, the day of the week, and the weather. Calendars reinforce counting, sequences, and patterns. Talking about the birthdays and other festivals that come in that month and by talking about the weather conditions, one can teach the child to associate these things which are characteristic for that month. This way the child can track the month by using logical thinking and by associating the various events of the month. Same way certain small hints like switching on AC during summer, wearing winter clothes during cold months and so on.

Pass on things:

The children will be very happy when they are assigned any small task and they take it very seriously. The child can be asked to distribute some eatable like a biscuit among the family members and in that process the concept of one to one correspondence can be taught. When the child is distributing, the number concepts can also be introduced by saying "one for you, one for mummy and one for daddy" The same activity can be facilitated in the classroom also with the other children.

Building blocks: This is a very exciting activity for children, since they learn the concept of the size of the blocks and how to manipulate and use them according to their own creativity and imagination. The child should be given the opportunity to play with different varieties of blocks made with different materials and sizes Nesting boxes and cups for younger children help them understand the relationship between different sized objects.

Learning to sort through laundry work:

The regular household tasks can be made into an interesting learning exercise for the children with disabilities. The child can be involved in the sorting process of the clothes that has to be washed in the house. The child can be asked to make a pile of the shirts, pants and socks. Counting the clothes and identifying the colours of the clothes can also be taught.

Teach them to first sort based on men's clothes and women's clothes, then ask him which pile is bigger (this way they learn comparison by quantity and size) Then they can be asked to count the number of clothes in both the piles separately. Then mix up the various pairs of socks and ask the child to pair them respectively. Through this activity the daily chore can become a more learning activity for the child and feel happy that they have helped the mother in a small way..

Learning colours while dressing:

The child can be asked to pick up a shirt that he wants to wear and then the child can be taught about the colour.

What colour is your shirt? Yes, yellow. Then from there one can proceed further teaching them about other things that are yellow in the room. Or if there is nothing in the room, then using a book ask the child to point out things that are in yellow. The same thing can be followed for the colour of the curtains or for showing shapes and textures in the clothing.