

Math

Math is not just about numbers; it covers many other concepts, such as measuring, comparing, spatial awareness, and awareness of sizes and patterns. It helps to develop mental processes that enhance life skills, such as logical and critical thinking, accuracy, making predictions, problem-solving, and decision-making.

Mathematical Readiness

To deem a child ready for school in terms of math, they should be able to do some or all of the following:

- Count to 100. Count in 1s, 5s, and 10s.
- Understand one-to-one correspondence.
- Know number symbols 1 to 9.
- Solve addition and subtraction problems up to 20.
- Distinguish between more, less, and equal, and many and few up to 20.
- Identify patterns in the environment.
- Copy, extend, and create their own patterns using shape, number, and color.
- Understand the spatial concepts of in front of, behind; on top of, on, under, below; in, out; up, down; and be able to verbalize the position of two or more objects in relation to each other.
- Recognize and name the following 2D shapes: circle, square, triangle, rectangle, diamond, oval, and star.
- Use words like day and night, light and dark, morning, afternoon, and tonight to describe the time of day.
- Show an awareness of days of the week, seasons, and weather.
- Know their own age and birthday date.
- Collect and sort object according to one attribute.

How to Play?

- Print and cut the 3D shapes. Divide the class into pairs and give a set of shapes and cards to each pair. If time allows, ask students to fold and paste the labels to build the shapes. For shorter time frames, you might need to build the shapes in advance. Attach a paper clip to each one.

- Take a few minutes to review the name of the 3D shapes. Give students time to look at the shapes, touch them, follow the edges and faces with their fingers; etc.
- Explain to students that they will place cards facing down and then take turns to pick up one card.
- Student A will give instructions to Student B by choosing two 3D shapes and using the position that appears in the chosen card, e. g., *The cylinder is under the cube.*
- If Student B follows the instructions correctly, they can take their turn. If not, explain that Student A can do something to help their classmate.
- Give time to students to repeat and practice with all the cards. Allow them to repeat the positions with different 3D shapes.

Teacher Tips

Playing with 3D shapes and positions can be a great opportunity to develop their language through game.

Give students more 3D shapes and review their names. Then let students build something with the shapes. They can make a house, a castle, etc. Give students some freedom to create. Then, set some time for students to present what they built by using the shapes vocabulary and positions, e. g., *I made a castle, I put the cone on the cube. This is the tower.*