

# TEACHING MANUAL

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**Name of the School : MERUVAMBAYI M U P SCHOOL**

**Subject : MATHEMATICS**

**Unit : LET'S DRAW**

**Class : 3**

## Learning Objectives

- Recognizes, classifies and constructs geometric shapes as part of various needs in daily life .
- Enjoying the beauty of geometry seen in constructions etc .
- Create beautiful patterns by adding color to geometric shapes .
- In everyday life, we observe our surroundings and discover various patterns, enjoy their beauty, and make our own patterns.

## Concepts/Perceptions

- Shapes such as square, circle and triangle can be seen in the structures around us .
- Different shapes can be made using shapes like square, circle, triangle .
- A variety of patterns can be found by observing the house and surroundings .
- Finding the logic of patterns and drawing continuity.
- Classification according to features of shape.

## Learning materials

A4 paper, Color, Matchstick, cCoth for vegetable printing, Vegetables, etc..

| PROCESS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ASSESSMENT |
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| <ul style="list-style-type: none"> <li>• Teacher give A4 paper for all children.</li> <li>• An opportunity to colour your favourite pictures and make it beautifully.</li> <li>• The pictures are displayed in class.</li> <li>• Teacher ask to children which geometric shapes they see in the picture they have drawn.</li> <li>• Discussing mathematical shapes in pictures.</li> <li>• Introduces geometrical shapes in house, mountain and flower, etc....</li> </ul> <p><b>In to the lesson</b></p> <ul style="list-style-type: none"> <li>• The teacher shows the picture in the TB to the children.</li> <li>• Children get a chance to talk about the picture.</li> <li>• Finding familiar shapes. A chance to name them.</li> <li>• Opportunity to enumerate familiar shapes.</li> <li>• Square is asked to colour blue, circle is green and triangle is red. colour it.</li> </ul> <p><b>Greeting card preparation</b></p> <ul style="list-style-type: none"> <li>• A plant stem is drawn on A4 paper and given to the children.</li> <li>• Instead of flowers, coloured paper can be cut out in circles.</li> <li>• Green coloured paper can be cut into triangles instead of leaves.</li> <li>• Let the children make the greeting card using the products provided by the teacher.</li> <li>• Help the teacher to make it more beautiful.</li> <li>• Class level presentation.</li> <li>• Greeting cards made by children can be placed in the portfolio</li> </ul> |            |

### **Let's meet the round**

- Ask the children what objects they see in the circle.
- The teacher writes one by one on the black board.
- The teacher displays some of the objects in class [ ICT ].
- The general principle is that circles can be drawn using objects such as coins and bangles.
- Children are then given the opportunity to draw a picture of their choice using only the circle. asking for colour it.

### **What's in the boat?**

- The teacher presents a step-by-step process of making a boat.
- Color papers are given to the children and the children make a boat.
- The teacher should ensure that the folds are done accurately.
- Then shapes are cut through the folds with scissors (necessary help should be given by the teacher).
- The picture on page 10 of the textbook is made using cut papers.
- All images can be generated by assigning this function at the group level.
- You are asked to count how many triangles and how many squares are there in each picture.
- Then the teacher gives the activity to make shapes at group level.

### **Continued action**

- Make Squares with 24 Matchstick .
- Record the number of squares made and the number of rods used.
- Make as many triangles as possible using 24 matchsticks.

- Count and record how many triangles are made and how many matchsticks are used.
- The shapes made can be pasted on A4 paper and kept in the portfolio.

### **let's play**

- Shapes such as square, circle and triangle are drawn in the class in such a way that the children can stand up.
- Then the teacher sings a song.

**"Are you running?  
Are we running?  
We will run and stay  
In the round and in the square"**

- In this way, the teacher engages the children in the activity of further identifying shapes by singing songs.
- After the children have correctly understood the shapes circle, triangle and square, turn to page 12 of the textbook.

### **Pictures on the tile**

- Asks if the tile is bought in the children's house or yard.
- Opportunity for independent response.
- Teacher asks if children seen such a yard.
- It can be shown using ICT for those who cannot see.
- The teacher gives the students ,A4 paper with dots marked as given on page 12 of the textbook.
- As seen above, asked to match the dots and colour them.

### **Indicators-**

- The order and continuity of the changes

have been followed.

- The logic among the matins is understood.
- The pattern is attractive.
- Opportunity to improve in groups.
- Showing Teacher's Version ( ICT ).
- A chance to perfect your own pattern.
- Once again the print is given to the children and asked to draw and colour the pictures and keep them in the portfolio.

Then get into groups and do the activities on page 13. The teacher gives necessary instructions and help.

### **Shapes around us**

- Observe the picture on page 14 of the textbook.
- What shapes do you see in the picture?
- Gives an opportunity to record.
- After that, the teacher walks around the school premises with the children.
- They are asked to note down which objects are found in the shape of a square, triangle or circle around the school premises.

Similarly, follow-up activity should be given to find and record the objects in the children's house in the form of square, triangle and circle.

### **Wooden figures**

- Children should be divided into groups and given a fixed number of wooden blocks and balls.
- Each group should arrange these at the maximum height in the designated area of the class.

Then the textbook completes the table on page 15.

- The name "sphere" should be brought to the attention of the child.
- Children should be given an opportunity to name spherical objects. The help of ICT can be used if required.

### **Vegetable print**

- An opportunity to see vegetable printing is prepared in class.
- ICT can be used and vegetable printed cloth can be brought to class.
- How it is made can be shown to the children through ICT in the form of a video.
- Then vegetable printing is done in class.
- Children can be asked to bring the necessary vegetables.
- The teacher can cut the vegetables in the correct shape and give them to the children.
- Can be printed on fabric with paint and beautify it. Can be displayed in class.
- It should be ensured that geometric patterns are formed during printing.
- A follow-up activity of vegetable printing can be given with the help of parents.

Worksheets can be provided for fixing the parts.  
All children's products can be put into the portfolio. Continuous assessment can be used.