



Title of the activity: Classification of geometric figures

AGE RANGE

5/6

Activity for...

Group of children with educational robotics

Author

**DURATION /
TIMING:**

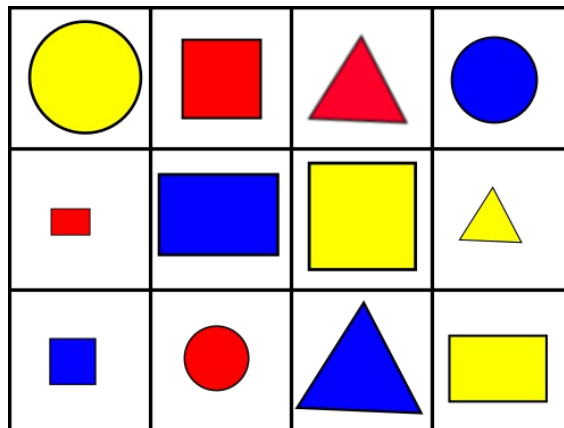
2 hours

**REQUIRED
MATERIALS:**

- Geometric shapes of different sizes and colours in wood or other material
- Coloured sheets to draw and cut out geometric shapes
- Scissors and glue
- Tables / cards for pasting the shapes during the activity


(reference figure)	(figures similar in shape)
	(similar figures by colour)
	(figures similar in size)

- Display board with the geometric figures drawn on.

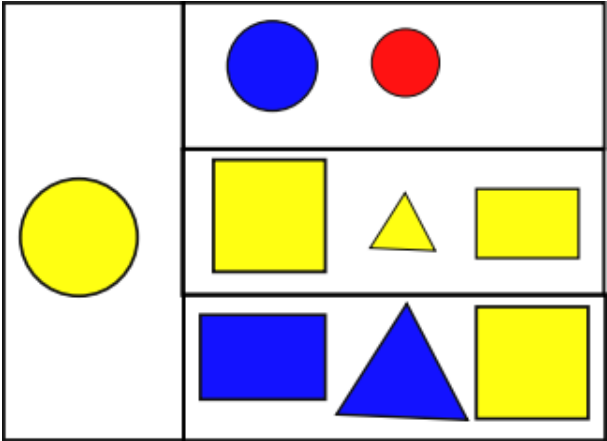


- Programmable educational robot (Clementoni Doc, SuperDoc, MindDesigner)



	
<p>PREPARATION OF THE ENVIRONMENT:</p>	<p>The teacher introduces the geometric shapes, enhances children's familiarity with the characteristics of each shape, stimulates reflection on the general characteristics of objects: shape, colour, size. Children are invited to identify all the characteristics of the presented forms. For example: Triangle - large - yellow; Circle - medium - purple; Square - small - red; etc.</p> <p>The child is given scissors and coloured sheets from which to cut out a series of geometric figures (the same ones shown in the game board) that he/she will use as cards to complete the table.</p> <p>This first activity can be carried out on the desk, in the classroom.</p> <p>If the children has never used the Clementoni robot, the teacher introduces its use, leaving the child time to familiarize with its commands.</p>
<p>DETAILED DESCRIPTION: How the activity is implemented?</p>	<p>The children are seated on the ground in front of the game board and have the Clementoni robot at their disposal. The teacher explains that they must group together the figures that have a common feature (shape, color, size). A child of the group chooses a figure which will be the reference one. Starting from the box with the chosen figure, the children will program the robots to complete a path that reaches the figures sharing the same characteristic: each time they reach one, they will take the same figure cut out in the preparation phase and attach it in the summary sheet.</p> <p>For example: the first child chooses the large yellow circle. The group will have to program the robot to reach:</p> <ul style="list-style-type: none"> - all circles; - all yellow figures; - all large figures.



	<p>Example of summary sheet:</p> 
<p>ROLES of the CHILDREN</p>	<ul style="list-style-type: none"> - Prepare the figures of the game (fine dexterity) - Identify the characteristics of the figures of the game - Choose the figure to start with - Classify the figures - Knowing how to orientate themselves in the table - Program the robot - Respect the shifts and choices of others - Find a common strategy - Fill in the summary sheet
<p>ROLE of the TEACHER:</p>	<ul style="list-style-type: none"> -Introduce the elements of the classification of the characteristics of the figures - Facilitate activities
<p>EXTRA RESOURCES</p>	
<p>Other remarks / Hints for the implementation</p>	
<p>References, if any</p>	