



# Exploring Geometric Shapes with Wooden and Cork Figures

## AAC Tool

### Material needed:

- Sheets of cork (available at craft stores)
- Scissors or a craft knife (adult supervision required)
- Ruler and compass
- Non-toxic paint, markers, or crayons for decorating
- Glue (optional, for creating 3D shapes)
- Templates for different shapes (can be made from cardboard or printed)

**Key competence:** Numeracy (Geometry)

### GENERAL OBJECTIVES

This tool comprises a set of geometric shapes and 3D geometric bodies made from wooden or cork materials. The set includes basic shapes like circles, squares, triangles, ovals, rectangles, and rhombuses, as well as 3D bodies such as cubes, spheres, pyramids, cylinders, and cones. Cork is used as a safer and more sustainable alternative to wood, ensuring that the materials are non-toxic and child friendly.



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The main objectives are:

- **Enhance Spatial Awareness:** Children learn to recognize and differentiate between various geometric shapes and 3D bodies.
- **Develop Fine Motor Skills:** Manipulating the shapes helps improve hand-eye coordination and dexterity.
- **Foster Creativity:** Decorating and arranging the shapes encourages artistic expression and imaginative play.
- **Promote Sustainability Awareness:** Using cork as a material introduces children to eco-friendly practices.

## HOW TO USE IT

### 1. Introduction to Shapes (10 minutes)

#### **Presentation:**

Begin by presenting each geometric shape and 3D body to the children. Show them a circle, square, triangle, oval, rectangle, and rhombus, along with a cube, sphere, pyramid, cylinder, and cone.

Hold each shape up and ask the children to name it, guiding them as needed.

Discuss the properties of each shape, such as the number of sides, corners, edges, and faces. For example, explain that a circle has one continuous curve and no corners, while a square has four equal sides and four corners.



### **Hands-On Exploration:**

Pass around the shapes so the children can handle them and get a tactile sense of their characteristics.

Encourage them to trace the edges with their fingers and count the sides or faces.

### **2. Shape Sorting (15 minutes)**

#### **Sorting Exercise:**

Spread all the shapes out on a table or the floor, ensuring there's enough space for children to work.

Ask the children to sort the shapes into groups based on their type (e.g., all circles together, all triangles together).

Let the children work together, promoting cooperation and discussion as they decide where each shape belongs.

#### **Group Discussion:**

Once the shapes are sorted, gather the children and discuss the sorted groups.

#### **Ask questions like:**

"Why did you put these shapes together?"

"What do all the squares have in common?"

"How can you tell a triangle from a rectangle?"



Highlight the key characteristics of each shape group as you discuss their answers.

### 3. Shape Properties (10 minutes)

#### Detailed Examination:

Take each group of shapes and examine them more closely.

Discuss specific properties, such as:

- Circles: One continuous curve, no corners.
- Squares: Four equal sides, four right-angle corners.
- Triangles: Three sides, three corners (explain different types of triangles like equilateral, isosceles, and scalene if appropriate).
- Ovals: Elliptical shape, no corners.
- Rectangles: Four sides, opposite sides equal, four right-angle corners.
- Rhombuses: Four equal sides, opposite angles equal.

#### Interactive Questions:

Engage the children with interactive questions:

"Can you find another object in the room that is shaped like a circle?"

"What makes a square different from a rectangle?"



## HOW TO CREATE IT

### 1. Prepare Materials:

Gather sheets of cork, a ruler, compass, scissors or a craft knife, and templates for the shapes you want to create. Ensure that the cutting tools are handled by an adult or under adult supervision.

### 2. Draw Shapes:

Use the ruler and compass to draw the desired shapes on the cork sheets. For flat geometric shapes, draw simple outlines of circles, squares, triangles, ovals, rectangles, and rhombuses. For 3D bodies, draw nets (flat layouts) that can be folded into cubes, pyramids, and cones.

### 3. Cut Shapes:

Carefully cut out the drawn shapes from the cork sheets. For 3D shapes, cut out the nets and fold them into their respective forms, using glue to secure the edges if necessary.

### 4. Decorate Shapes:

Provide children with non-toxic paint, markers, or crayons to decorate the flat shapes. They can add patterns, colours, and designs to personalise their geometric figures.



## 5. Assemble 3D Bodies:

For 3D shapes like cubes, pyramids, and cones, fold the cut-out nets along the edges and glue them together to form the shapes. Allow the glue to dry completely before handling.

### Activity Ideas:

**Sorting and Categorising:** Ask children to sort the shapes by type, size, or colour.

**Building Structures:** Encourage children to use the shapes to build towers, houses, or other structures.

**Shape Hunt:** Organise a game where children find objects around the room that match the geometric shapes.

**Creative Decoration:** Let children decorate flat shapes with patterns, faces, or other designs to create unique art pieces.

By using cork geometric figures, children can safely explore geometric concepts while developing their motor skills and creativity. The use of sustainable materials like cork also promotes environmental awareness from a young age.

