TWO DIMENSIONAL SHAPES

8.6.2018

Subject

Mathematics

Prepared By

[Instructor Name]

Grade Level

1

Overview

This lesson plan covers teaching content for;

1. Identification of 2 dimensional squares, rectangles, circles, triangles

Objectives

1. Pupils should be taught to:
2. Recognize and name common 2-D and 3-D shapes, including:
3. 2-D shapes [for example, rectangles (including squares), circles and triangles]
4. 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].
5. Students will be able to name shapes according to the number of edges and vertices.
6. discriminate geometric shapes from one another based on the number of sides and corners.

Teacher Guide

Day 1/Lesson 1- 10 Mins

1. Display a triangle to the class, either by drawing it on the whiteboard or using an interactive whiteboard. Ask your students to call out the name of the shape.
2. Discuss the shape attributes as a class. Great discussion questions include: How many sides does a triangle have? Are they straight or curved? How many corners does a triangle have?
3. Point to each corner on the triangle. Explain to the class that a vertex is the place where two sides meet in a corner. Tell the class that a triangle has three vertices, the plural word for vertex.
4. Count the sides of the triangle together. Explain that each side is a line that connects two vertices, also known as an edge.
5. Announce to the class that today they will learn how to use the attributes of a shape to describe it, instead of always just using its name.

Teacher Guided Practice

Day 2 Lesson 2- 10 mins

1. Draw and label a rectangle and pentagon on the board.
2. Explain that shapes are made up of a set of sides or curved segments. Straight sides are the edges of each shape.
3. Draw a circle on the whiteboard. Ask the class how many edges a circle has.
4. After some discussion, tell the class that a circle doesn't have any edges or vertices, since there aren't any straight lines or corners on a circle.
5. Point to the rectangle and demonstrate how to count the edges and vertices. Explain to students how the number of edges and the number of vertices is the same.
6. Point to the pentagon and count the number of edges and vertices.

Materials Required

- Pattern Blocks (1 of each per student: t trapezoid, hexagon)
- Drawing paper
- 2-Dimensional Shapes worksheet (one per student)
- geometric tiles (teacher-made from teacher-selected materials or school-purchased)
- teacher-made chart showing labeled geometric shapes
- teacher-cut two-dimensional geometric shapes

Additional Resources

- http://aspoonfuloflearning.blogspot.co shapes-shapes-freebie.html
- https://childhood101.com/hands-on-ac about-2d-3d-shapes/
- https://pinterest.com/pin/1739516043
- https://mensaforkids.org/teach/lesson-shapes/
- http://thefirstgradeparade.org/2d-3d-s
- http://hand2mind.com/pdf/hos/hos-cc online/e78864_HOS_CCE_Grade%204/
- http://education.abc.net.au/home#!/m and-3d-shapes

Objectives

Introduction/Instruction

1. The class will be asked to identify what shapes they see in the classroom. As each shape is mentioned, the teacher will put it on the board, so the class has a visual aid.
2. We will be studying two - dimensional shapes first and concentrating on the square and rectangle for the day.
3. The shapes will be on the board and the class will be asked to identify each some similarities and differences between the shapes.
4. Describe objects in the environment using names of shapes and using relative position terms.
5. Correctly name shapes regardless of position and size. Model shapes in the world through building and drawing shapes.
6. Use shapes to form other shapes (e.g., three triangles can make a trapezoid).
7. Analyze and compare two- and three-dimensional shapes.

Teacher Guide

Day 3 Lesson 2 – 15 Mins

1. Hold up the laminated picture of a triangle. Ask the students, "What is the name of this plane shape?" Listen for answers
2. Tell the students that this is a picture of a triangle. A triangle has 3 sides (run finger over the sides as you count them out loud).
3. Then, tell the students that a triangle also has 3 vertices. Ask the students, "What are the vertices on this triangle?" Listen for answers.
4. Tell the students that the term "vertices" means corners. Ask the students, "How many vertices/corners does a triangle have?" Listen for answers.
5. Tell the students that we want to try to use the term "sides" when we are talking about the number of sides on a plane shape, and we also want to use the term "vertices" when talking about the number of corners on a shape.
6. Hold up the laminated picture of a rectangle. Ask the students, "What is the name of this plane shape?" Listen for answers.
7. Tell the students that this shape is a rectangle. Then, proceed to ask the students, "How many sides does this shape have?" Listen for answers
8. Allow a student to come up and count the sides out loud with the rest of the class.
9. Then, ask the students, "How many vertices does a rectangle have?" Listen for answers.

Teacher Guided Practice

Day 4 Lesson 4: 20 Mins

1. Ask the children to identify what shapes they see inside the classroom. Tally their responses.
2. Follow-up the activity by asking the children to identify a shape within a shape, for example, small windows in a door are squares within a rectangle. Tally their responses.
3. Show students a chart with the drawings of geometric shapes to introduce new terms: rhombus, trapezoid, etc.
   Small-Group Activity:
4. Distribute pre-cut two-dimensional geometric shapes, at least ten shapes per group.
5. Ask children to categorize the shapes.
6. Let children think about what categories are they going to use. Encourage discussion.
7. Elicit children's views on how they categorized the geometric shapes. Have children glue their categories of shapes onto chart paper so the other children can see their work.

Objectives	Teacher Guide	Teacher Guided Practice
8. Use informal language to describe similarities and differences (i.e., number of sides, corners) and other attributes.		

Assessment Activity	Assessment Activity	Assessment Activity
	1. Pass out a sheet of drawing paper to each student. Instruct your students to draw and label a pentagon on the paper.	1.
	2. Remind students that they should count and label the edges and vertices on the paper as well.	

Summary		
	1.	