

LESSON PLAN: VISUALIZING AND DESCRIBING SOLID FIGURES

Objectives

By the end of the lesson, students will be able to

- Understand the definition of solid figures
- Identify and differentiate between various solid figures including cubes, rectangular prisms, spheres, cylinders, cones, and pyramids.
- Apply knowledge of solid figures to real-world objects.

Materials

- Computer with Internet access for Learning Passport
- Physical models of solid figures (optional for hands-on activities)

Addressed Standards

CCSS.Math.Content.6.G.A.4: "Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems."

Lesson Structure

Opening

- Display the interactive lesson prominently on a screen or projector.
- Begin with a captivating question or fact about solid figures to grab students' attention.

Introduction to Solid Figures

- Briefly introduce the concept of solid figures, emphasizing their three-dimensional nature.
- Use slides 1-4 to discuss the parts of solid figures, such as faces, edges, and vertices, making sure to provide clear definitions and visual examples.

Introduce Specific Solid Figures

- Present each solid figure (cube, rectangular prism, sphere, cylinder, cone, pyramid) using slides 5-10.

- Highlight key characteristics of each figure, such as their shape, number of faces, edges, and vertices.
- Guide students through the counting activity with an example of a cube.
- Ask students to actively participate by counting the number of faces, edges, and vertices of each solid figure presented, based on prompts displayed on the screen.
- Note: Ensure to provide immediate feedback and clarification to foster a supportive learning environment.

Guided Practice & Interactive Activities

- Drag and Drop Activity: Students will match real-world objects to their corresponding solid figures (e.g., basketball to sphere, book to a rectangular prism).
- Pick One/Pick Many Activities: Various scenarios where students choose the correct solid figure(s) that match the described object (e.g., ice cream cone, world globe).

Real-World Application

- Discussion on how solid figures are used in everyday objects.
- Group activity: Students find items in the classroom that correspond to each solid figure discussed.

Assessment

- Complete the interactive Drag Drop, Pick One/Pick Many Activities together with students, allowing them to provide answers and discuss about each question

Closing

- Have students share their learning with the whole class.
- Summarize the key points learned during the lesson.

Homework

1. Assign students to find 10 daily objects that contain any of the six solid figures.
2. Instruct them to be prepared to discuss it in the next class.