Objective

By the end of this lesson, you will be able to apply formulas to calculate the volumes of composite solids made up of right prisms and cylinders.

Materials and Prep

- Paper
- Pencil
- Ruler
- Calculator (optional)

Prior knowledge of the formulas for calculating the volume of prisms and cylinders is required.

Activities

- **Activity 1: Building Composite Solids**
  Create a few composite solids using right prisms and cylinders using paper cutouts. Calculate the volume of each solid.
- **Activity 2: Real-World Applications**
  Research and find real-world examples of composite solids. Calculate the volume of these solids to understand their practical applications.
- **Activity 3: Problem-Solving Challenge**
  Solve a set of challenging problems involving composite solids. Try to visualize the solids and break them down into simpler shapes to calculate the volume.

Talking Points

- "*To find the volume of a composite solid, we need to break it down into simpler shapes like prisms and cylinders.*"
- "*Remember, the volume of a prism is given by V = Bh, where B is the base area and h is the height.*"
- "*For a cylinder, the volume formula is V = πr^2h, where r is the radius and h is the height.*"
- "*When dealing with composite solids, add up the volumes of individual shapes to get the total volume of the composite solid.*"
- "*Visualizing the composite solid and understanding how it can be broken down into simpler shapes will make volume calculations easier.*"