

# Lesson Plan

Year 7

## Geometric Folding Shapes Set

Year 7: Exploring Composite Shapes & 3D Problem Solving

### Curriculum Links:

+ **AC9M7SP03:** Solve problems involving the area and perimeter of composite shapes.

### Lesson Objectives:

- + Decompose complex 3D solids into simpler shapes.
- + Apply formulas for **surface area and volume**.

### Lesson Activities:

- + **Break it Down:** Students break complex shapes into **rectangular prisms or pyramids** and solve for surface area.
- + **3D Blueprints:** Given a set of nets, students predict what composite shape will be created.
- + **Engineering Challenge:** Design a **building or structure** using multiple 3D nets.

### Assessment:

- + Accurately calculate surface area and volume of composite shapes.
- + Construct a working 3D model using nets.

### Differentiation:

- + **Support:** Work with basic composite shapes (e.g two cubes together).
- + **Extension:** Explore **real-world applications** in architecture and packaging.



### 3D solids with their corresponding 2D nets

