

Spatial Sense



SHAPE UP

Purpose

- To calculate area and perimeter.
- To reinforce area and perimeter relationships.

Division – Primary, Junior

Equipment

- Paper (construction or cardstock; square-shaped)
- Clipboard, pencils, and paper (1 set per group)

Set-up

- Divide students into groups of two.
- Give each student a small stack of paper, a clipboard, and a pencil.

Activity

- Provide each group with an area challenge (e.g., “How many different ways can you create a shape with an area of 8 units/papers?”).
- Students create each shape on the ground using the appropriate number of units.
- Students jump around the shape to calculate the perimeter.
- Students record the information (e.g., draw diagram, label perimeter and area).
- Students repeat until they run out of ideas.
- Repeat activity with a new area challenge number.

Modifications

- Use different square materials (e.g., tiles, mats) and different movements for calculating the perimeter (e.g., squats, lunges, planks, inchworms).
- **Junior:** Ask students to create only rectangles and use a multiple statement to describe the area (e.g., Length x Width = Area).

Questions for Student Understanding

- How do you find the perimeter of a shape?
- How do you find the area of a shape?
- What is the relationship between a shape’s area and perimeter?
- Do shapes with the same area always have the same perimeter?