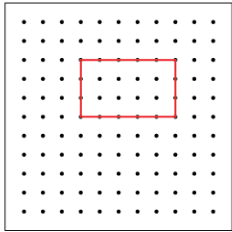


# Activity 3 Assessment

## Measuring the Area of Rectangles

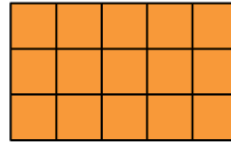
### Measuring Area of Rectangles

Recognizes that area is measured using square units.



"I made a rectangle on a geoboard and used 15 square tiles to cover it."

Determines and records area by counting squares, using square metres and/or square centimetres.



"On the grid, each square represents 1 square centimetre. There are 15 squares, so the area of the rectangle is 15 cm<sup>2</sup>."

Uses the row and column structure of an array to determine the area of a rectangle.



"I traced the shape on a grid and let each square represent 1 m<sup>2</sup>. The rectangle forms an array with 4 rows of 6 squares:  $4 \times 6 = 24$ ; the area of the mural is 24 m<sup>2</sup>."

### Observations/Documentation

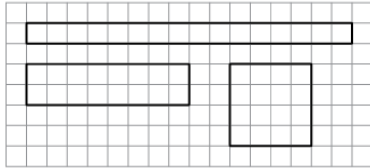
## Activity 3 Assessment

### Measuring the Area of Rectangles

#### Measuring Area of Rectangles (cont'd)

Constructs different rectangles for a given area (square centimetres or square metres).

Area of rectangle =  $16 \text{ cm}^2$



"I constructed 3 different rectangles:

- A square with side length 4 cm:  $4 \text{ cm} \times 4 \text{ cm} = 16 \text{ cm}^2$ .
- A 2-cm by 8-cm rectangle:  $2 \text{ cm} \times 8 \text{ cm} = 16 \text{ cm}^2$
- A 1-cm by 16-cm rectangle:  $1 \text{ cm} \times 16 \text{ cm} = 16 \text{ cm}^2$ "

Chooses the more reasonable unit (square centimetres or square metres) to measure an area.



Area of laptop screen

"I would measure the area using square centimetres. I could trace the screen onto 1-cm grid paper, then multiply the number of rows by the number of columns to determine the area."

Flexibly determines the area of rectangles, solves problems, and identifies the more reasonable square unit.

The floor has length 9 m and width 8 m. A square tile has area  $1 \text{ m}^2$ . How many tiles are needed to tile the floor?

"I modelled the floor on a grid. The floor has 8 rows of 9 squares:  $8 \times 9 = 72$ ; area =  $72 \text{ m}^2$ ; so, 72 tiles are needed to cover the floor."

#### Observations/Documentation