

# Diagnostic TASK

## FOCUS

### Understand Units

- Key Understandings 1, 3, 7

### Direct Measure

- Key Understanding 3

### Indirect Measure

- Key Understanding 1

## What Is the Area?

Year 5–8

### Purpose

To investigate what children know about:

- using an array structure as a shortcut to counting squares
- using the area formula.

### Materials

Worksheets

A variety of objects that can be used as units, e.g. 1 cm and 2 cm cubes, tiles, marbles, pattern blocks, round counters.

A collection of measuring equipment that extends beyond that required to measure area, e.g. balance scales, measuring cylinders, string, measuring tape, ruler, pencil, scissors glue, plain paper, and square grid paper; also a jug of sand, rice or water.

### Producing the work samples

#### Individual interview

Interviews are appropriate for younger students or for students whom teachers consider may be at risk. Read and familiarise children with the tasks on the sheets. Students carry out the tasks and record how they worked it out. They may need assistance to record this information.

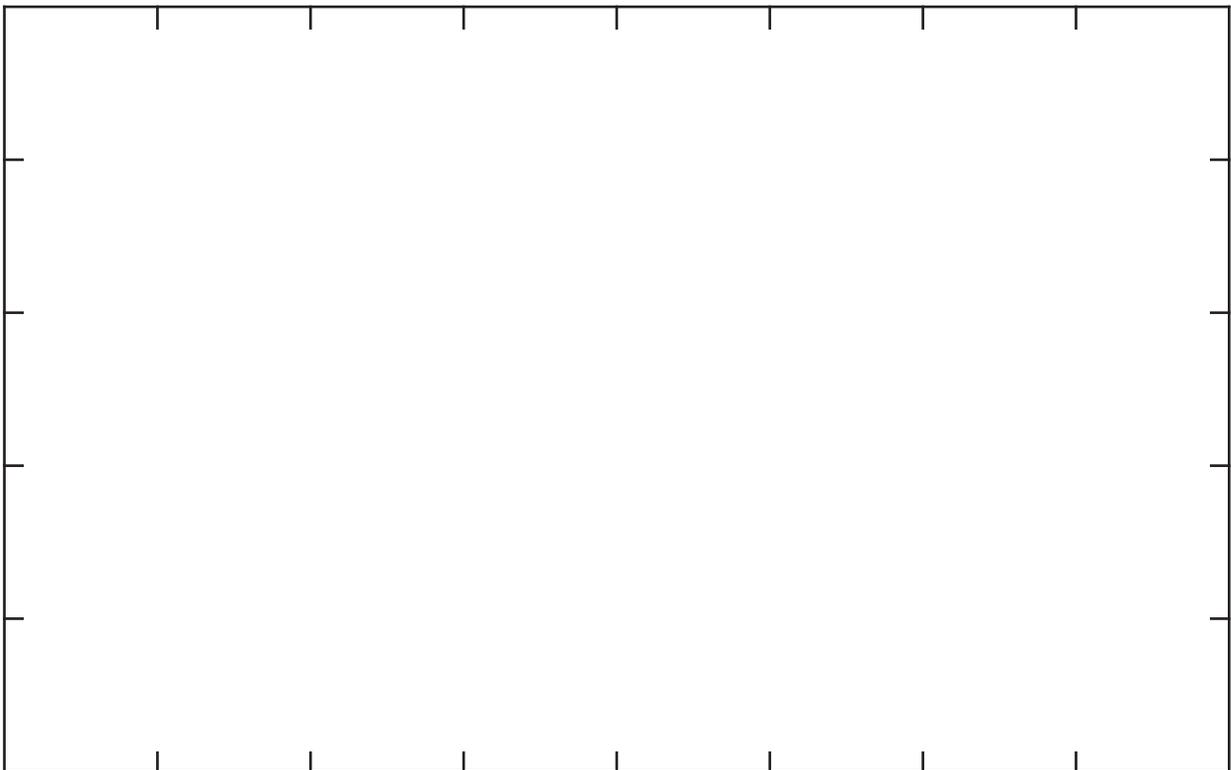
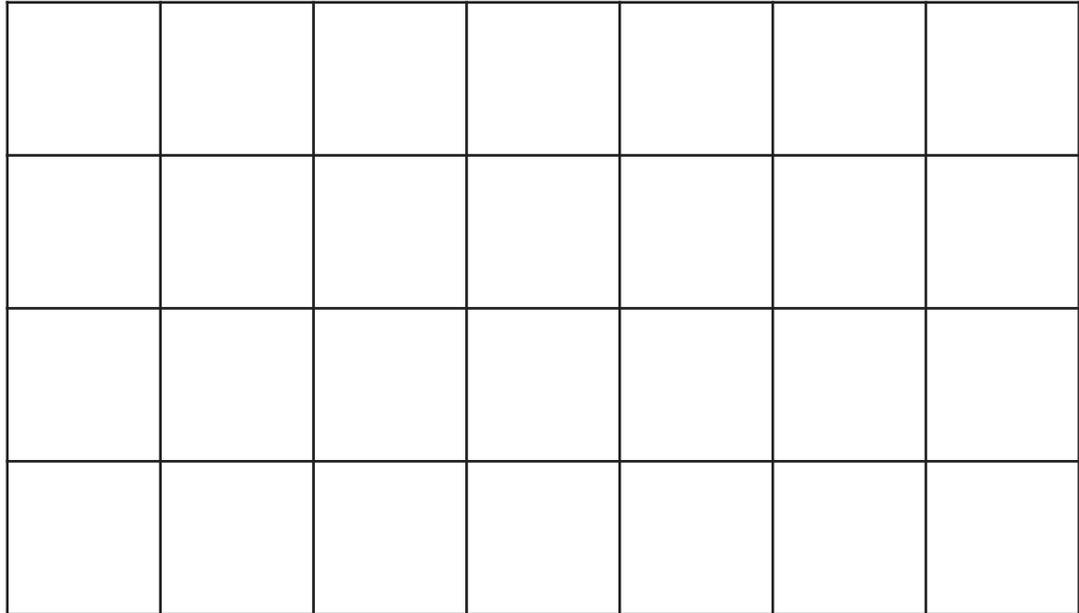
#### Small group or whole class

These tasks may be administered in small groups or with the whole class. Read and familiarise children with the task on the sheet. Students carry out the task and record how they worked it out. They may need assistance to record this information. Observe and record how the students worked it out and what they refer to as their unit of area.

# What Is the Area? 1

Name \_\_\_\_\_ Year \_\_\_\_\_ Date \_\_\_\_\_

What is the area of these shapes? Write how you worked each one out?



# What Is the Area? 2

Name \_\_\_\_\_ Year \_\_\_\_\_ Date \_\_\_\_\_

What is the area of these shapes? Write how you worked each one out?

