Lesson 55 MEASURES

Area by counting square units

WHAT THIS LESSON TEACHES

Area is the amount of flat space inside a shape. We find it by counting the equal square units that cover the shape, with no gaps and no overlaps. On centimetre-squared paper each little square is one square centimetre (cm²).

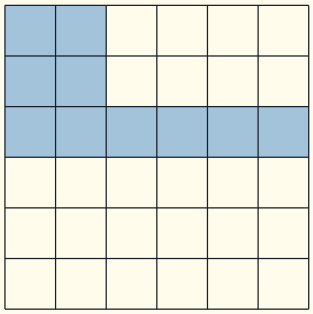
→ A shape that covers 8 whole squares has an area of 8 cm².

→ Two half-squares under a sloped edge join to count as one whole square.

MODEL THIS ON THE BOARD

COUNTING SQUARES IN AN L-SHAPE

1. Count the full squares in the tall part of the L: **6** squares.
2. Count the full squares in the foot of the L: **4** squares.
3. Add the two parts: 6 + 4 = **10**. Area = **10** cm².



DISCUSSION STARTER

REFLECT Do you prefer counting every square or multiplying rows by columns? When does each help?

ANSWER KEY

a) 6 cm²

b) 11 cm²

Q1: 12 cm²

a) Always — Each little square is one cm², so 8 covered squares is always 8 cm².

b) Always — Same number of equal square units always means the same area, even if the shapes look different.

c) Never — Any shape, including L-shapes and triangles, can be covered and counted in squares.

d) Always — Two matching halves always join to make one whole square unit.

EXTENSION SHEET · STRETCH ANSWERS

S1: 88 cm²

S2: 48 cm²

S3: 45 cm²

S4: 35 cm²

S5: 108 cm²