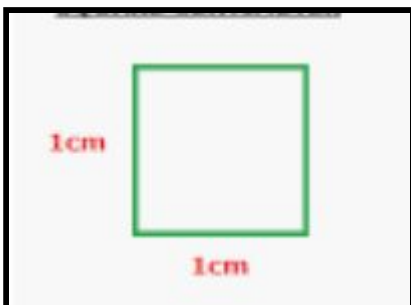


WALT - understand meaning of area and square meter, square centimeter etc
Success criteria I know area is two dimensional and i can calculate area by multiplying sides and get my answer in unit square

1. Guess the area of the table top



Guess the area of this square



Guess the area of a square with a side length of 1 kilometer.



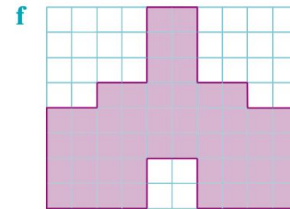
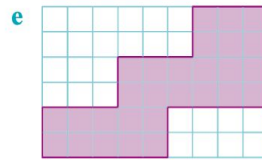
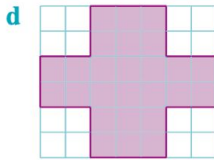
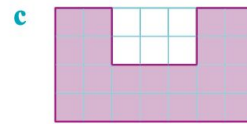
EXAMPLE 1

Find the area of the number 5 by counting squares.

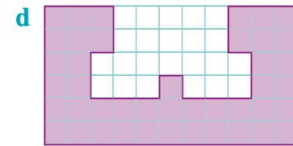
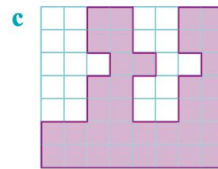
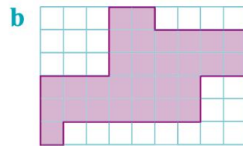
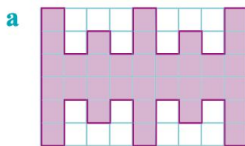


Area = 12 square units (units²)

1 By counting squares, find the area of each shape in square units.

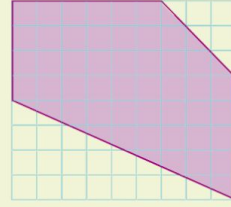


2 By counting squares, find the area of each shape in square units.



● EXAMPLE 2

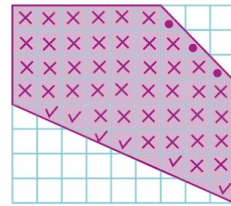
Estimate the area of the given shape by counting squares.



To estimate the area by counting squares:

- count whole squares as 1 square unit
- count squares with more than half shaded as 1 square unit
- count squares with exactly half shaded as $\frac{1}{2}$ square unit
- do not count squares with less than half shaded.

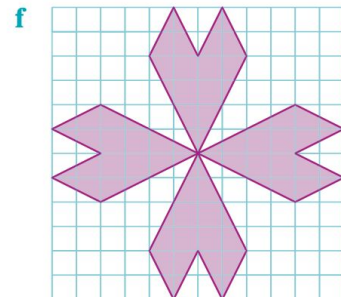
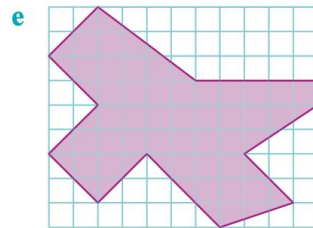
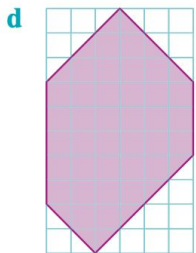
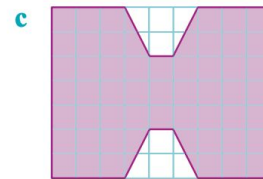
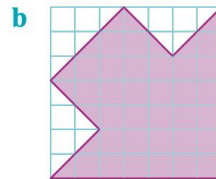
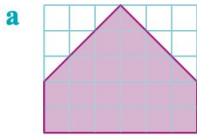
There are 42 complete squares.	42	(×)
There are 6 with more than half shaded.	+ 6	(✓)
There are 3 with exactly half shaded.	+ $1\frac{1}{2}$	(●)
	<hr style="width: 100%; border: 0.5px solid black;"/>	
	$49\frac{1}{2}$	



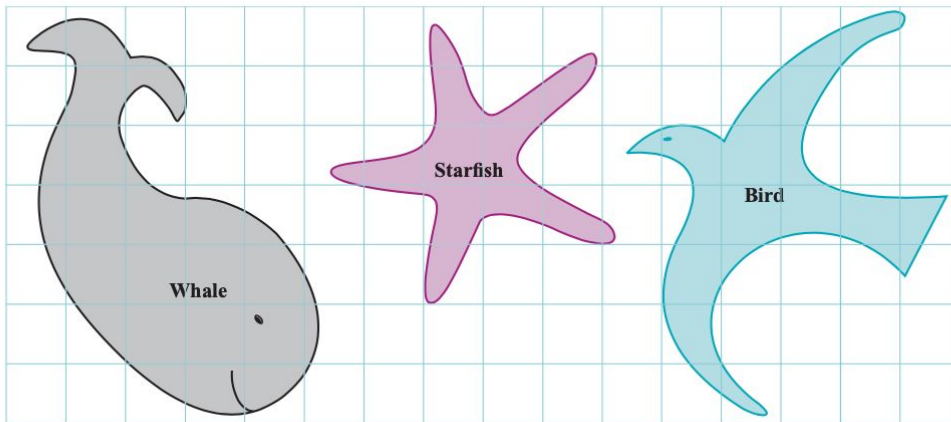
∴ Area $\approx 42 + 6 + 1\frac{1}{2} = 49\frac{1}{2}$ square units.

\approx means approximately equal to. !.....

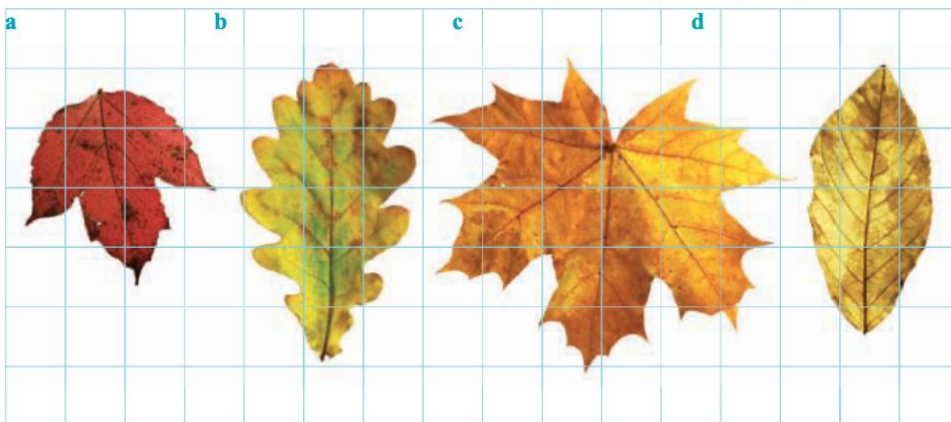
3 By counting squares, estimate the area of each shape.



- 4 By counting squares on the grid paper, find an approximation for the area of each shape.



- 5 Approximate the areas of the leaves drawn on the 1 cm grid paper below by counting the squares.



- 6 a Explain the meaning of a square metre. Illustrate with a diagram.
b Explain the meaning of a square kilometre.

Investigation 1 Areas in life

- 1 Use newspaper or cardboard to make a square metre.
 - a Use this square metre to estimate the areas of the walls in your classroom.
 - b If 1 L of paint covers about 10 m^2 , how many litres of paint are needed to paint your classroom's walls?
 - c How many litres of paint are needed to paint the ceiling with two coats of paint?