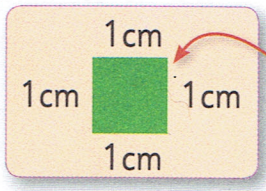
Chapter 32: Area

We call the measure of the surface of an object its **area**.
We may use different non-standard units to measure the following.

1.

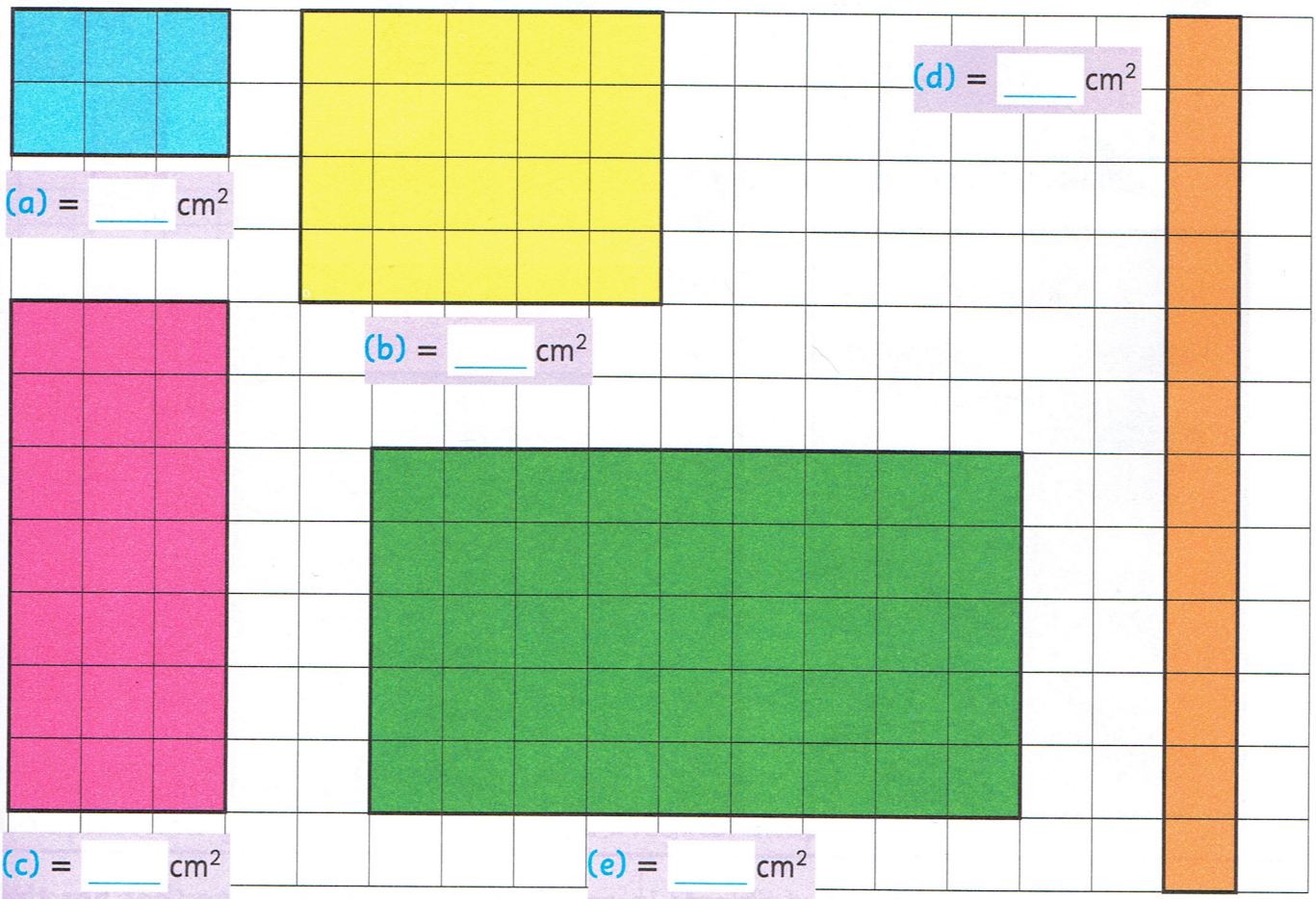
	surface area of	measured with	estimate	actual
(a)	this page	playing cards		
(b)	desktop	envelopes		
(c)	classroom door	maths books		

All of the above ways of measuring work, but it is much better to have the same standard unit.



Each side measures 1 cm.
This is called a square centimetre.
We write this as 1 sq. cm or 1 cm^2.

2. Count the number of cm^2 in each of these shapes to find its **surface area**.

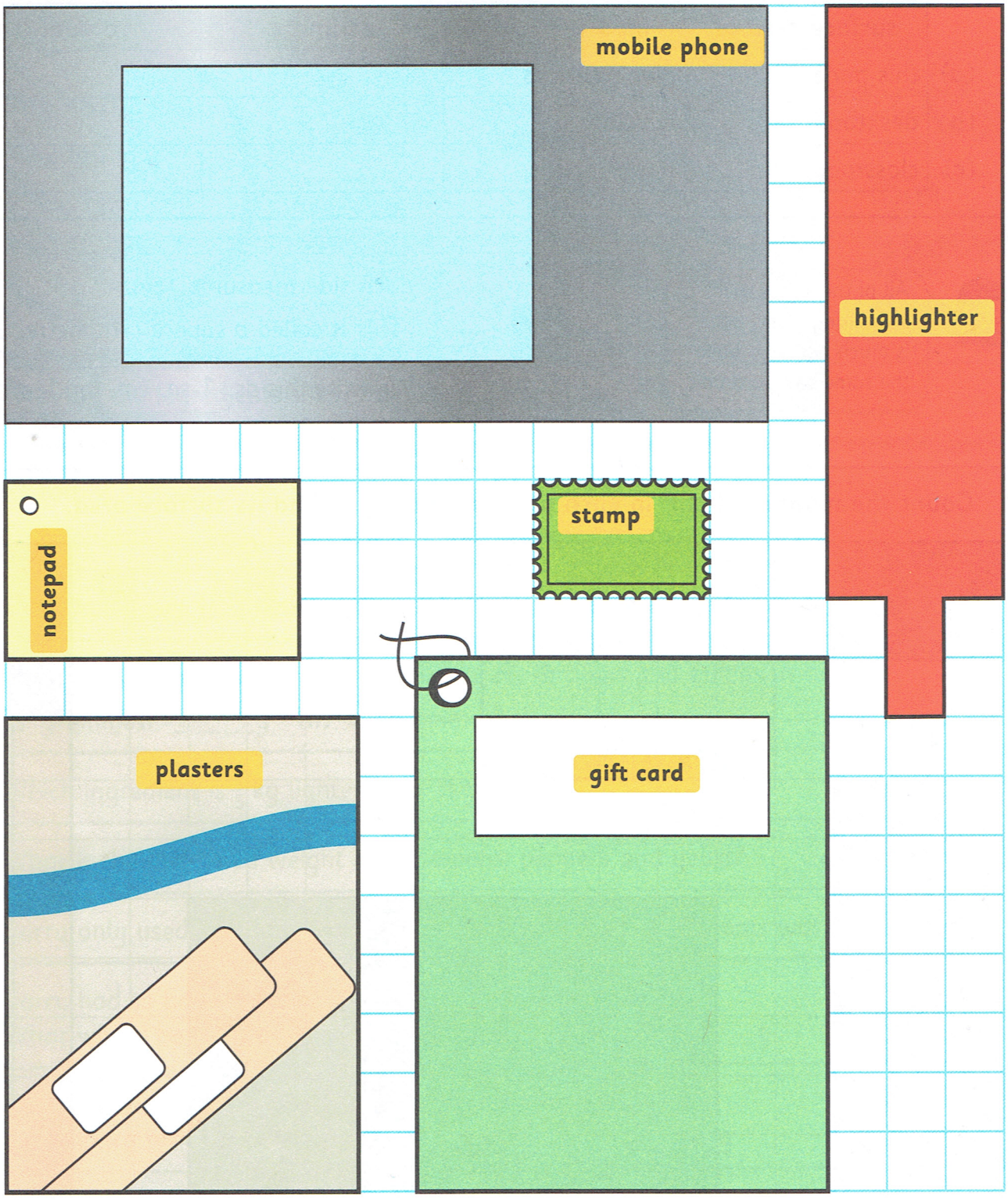


3. How many cm^2 would a rectangle 6cm long and 4cm wide cover? ____ cm^2

Area – Using a cm² grid

Each of the shapes on this square centimetre grid is an everyday object.
Count the square centimetres (cm²) covered by each shape to find its area.

1.



2. Write the names of the above objects in order, starting with the one that has the smallest area.

(i) _____ (ii) _____ (iii) _____

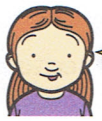
(iv) _____ (v) _____ (vi) _____

Area – Irregular shapes

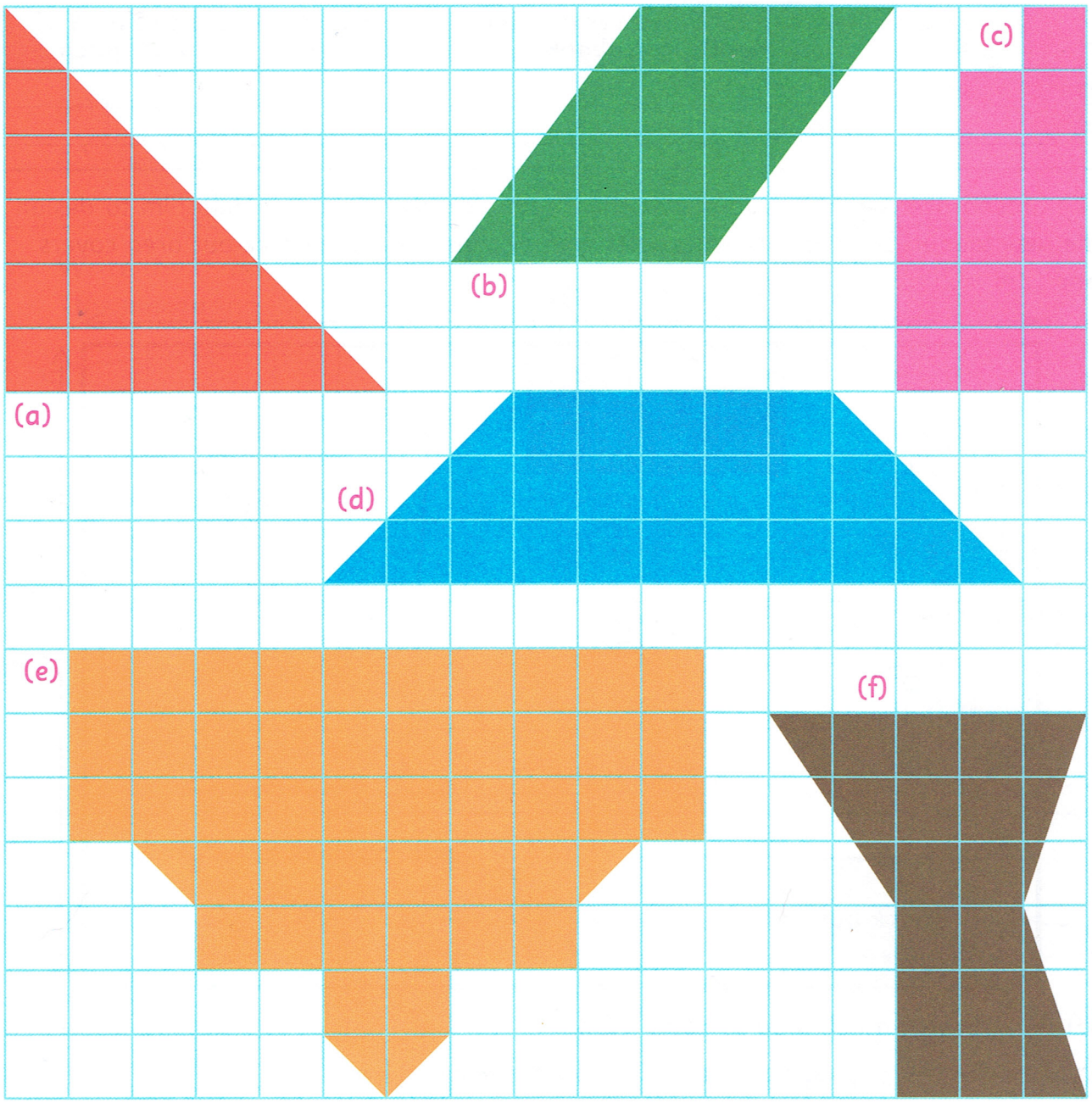
It is easy to count the full cm² in regular shapes.
Here are some tips for **irregular** shapes and **triangles**.

Count all $\frac{1}{2}$cm², remembering that two $\frac{1}{2}$cm² = 1cm².

Count as full cm² any squares that are more than $\frac{1}{2}$cm².



Ignore any square that is less than $\frac{1}{2}$ cm².



Complete this grid, based on the above irregular shapes.

Shape (a): estimate _____cm² actual _____cm²	Shape (b): estimate _____cm² actual _____cm²
Shape (c): estimate _____cm² actual _____cm²	Shape (d): estimate _____cm² actual _____cm²
Shape (e): estimate _____cm² actual _____cm²	Shape (f): estimate _____cm² actual _____cm²