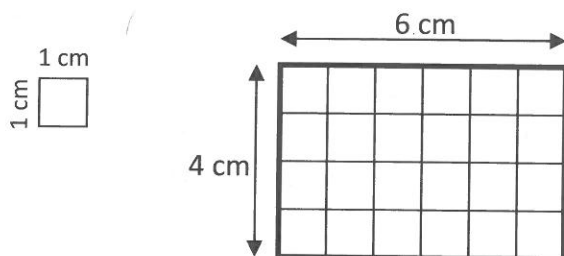


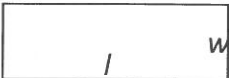
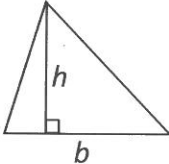
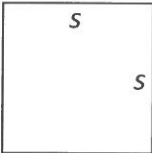
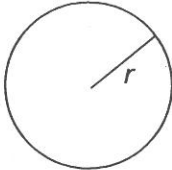
Area

Area is the measurement of the amount space covered by a 2-dimensional (2D) object. Area is measured in units squared (units²). For example, the rectangle below has been filled with blocks that are one cm on each side. Each little block is referred to as a 'square centimeter'. (A square with centimeter-long sides).



Since there are 24 of these boxes contained in the rectangle, we say that the rectangle has an **area of 24 square centimeters**.

The short-cut to arrive at this number is to use the formula for the area of a rectangle, namely: $A = lw$. (Keep and mind that the actual labels used for the sides might be different – some formulas use *base* (b) and *height* (h) instead of length and width – the concept is the same.) By multiplying the length by the width, you can quickly and accurately calculate the area of a rectangle. Some important area formulas are:

Figure Name	Diagram	Formula	Figure Name	Diagram	Formula
rectangle		$A = lw$	triangle		$A = \frac{1}{2}bh$
square		$A = lw$ OR $A = s^2$	circle		$A = \pi r^2$

These formulas will be provided on your Unit Test and the Final Exam – there is no need to make room for them on your resource page.

Area is commonly used to calculate things like amount of paint needed to cover a wall, or how much carpet is needed to cover a floor.