

# General Science I

## MEASUREMENT: AREA

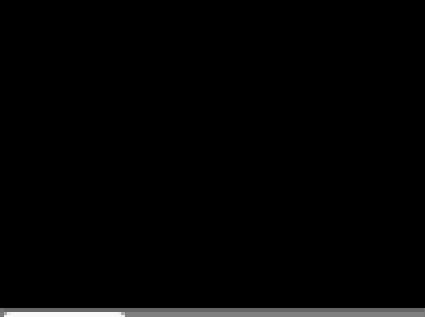
While the meter, centimeter, and kilometer serve as units of distance, the square centimeter (cm<sup>2</sup>), the *square meter* (m<sup>2</sup>), and the *square kilometer* (km<sup>2</sup>) are used for area measurements.

Here are your goals for this lesson:

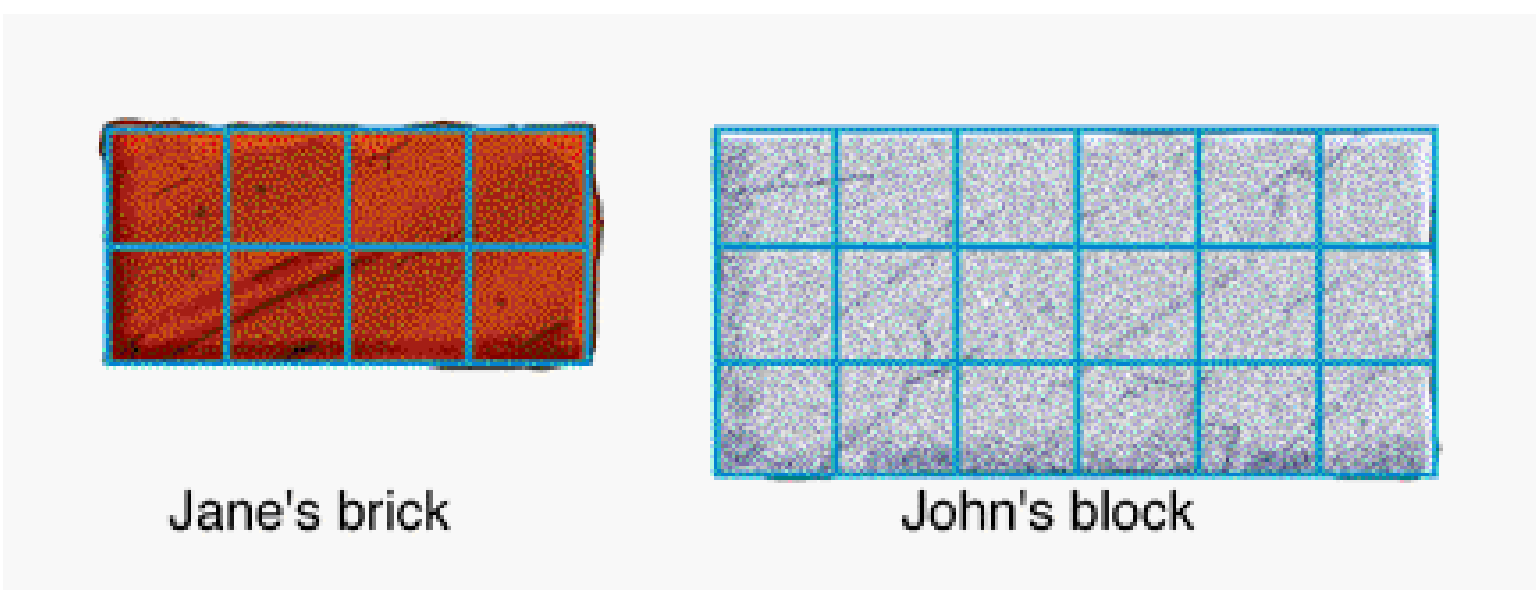
- Identify the standard unit of area
- Calculate area using correct standard metric units and the formula: area = length x width.

### VOCABULARY

▶ square kilometer	Unit of measure of an area equal to 1 km by 1 km.
▶ square meter	Unit of measure of an area equal to 1 m by 1 m.



The *square centimeter* is the standard unit of *area*. When you measure the area of an object, you are making a comparison between the surface being measured and the unit of measurement being used. To find the area of rectangles, you multiply the length of the base times the length of the height, or length × width.



**Calculating Areas.** The unit for measuring the surface of small areas is the square centimeter (cm<sup>2</sup>). Area can be computed by multiplying the number of units of length on one side (horizontal) by the number of units of length on the other side (vertical). One unit of length is called *length*, and the other unit of length is called *width*. Area = length times width. Using this formula, (**A = L · W**), find the area for the following shapes.



[Click here for area conversion chart.](#)

Question #1 TextMultipleChoice

Show Answer

Unit of measure of an area equal to 1 m by 1 m.

Question #2 TextMultipleChoice

Show Answer

Unit of measure of an area equal to 1 km by 1 km.

Question #3 TextMultipleChoice

Show Answer

Jane's brick is square units.

Question #4 TextMultipleChoice

Show Answer

John's block is square units.

Question #5 TextMultipleChoice

Show Answer

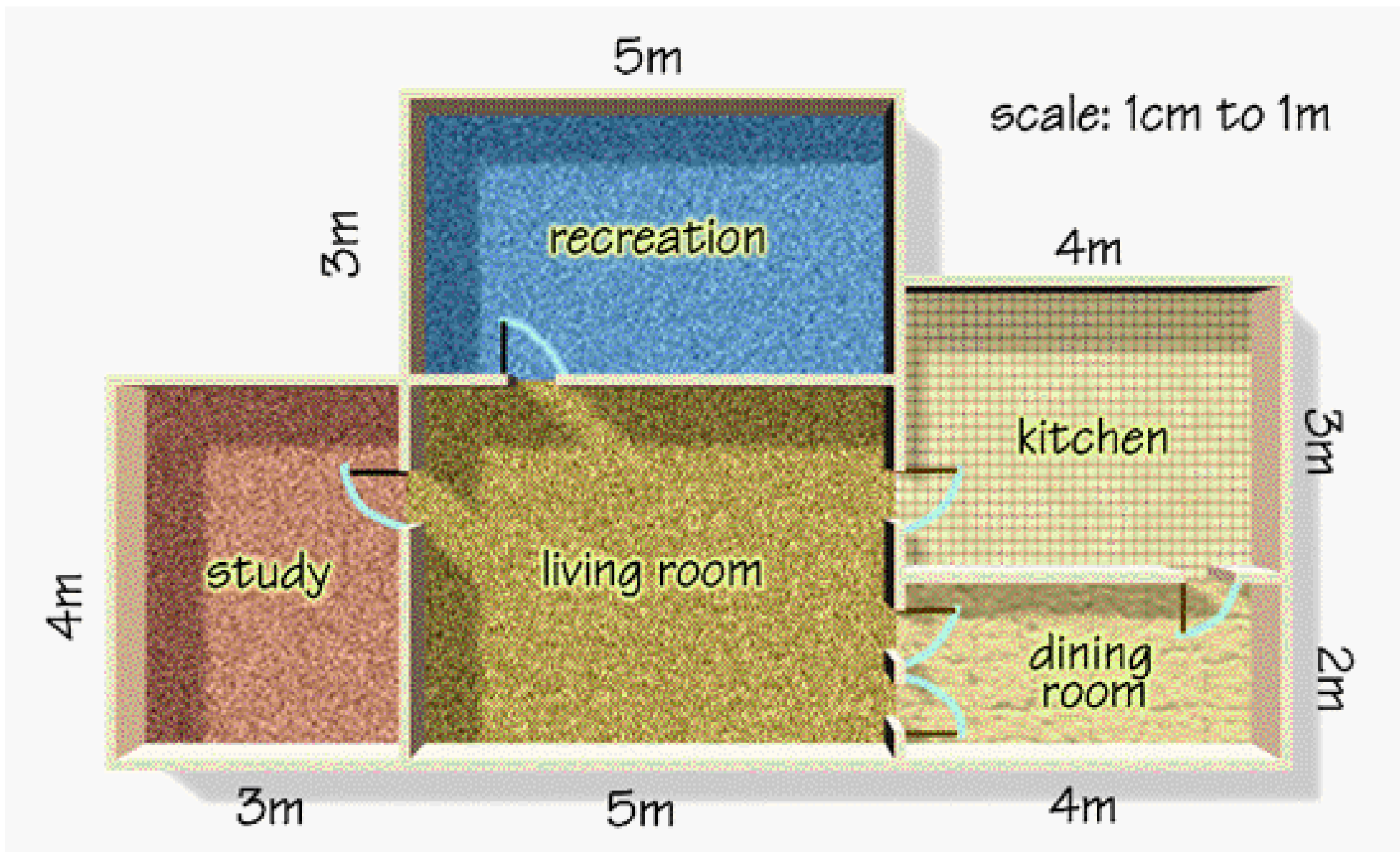
Area 1 is cm<sup>2</sup>

Question #6 TextMultipleChoice

Show Answer

Area 2 is cm<sup>2</sup>

Sometimes you may want to know the area of a room in your house.



A square meter (m<sup>2</sup>) is used for measuring the area of larger surfaces. Figure the areas for the following rooms in this house plan.

Question #7 FillInBlank

Show Answer

Determine the area based on the house plan.



Kitchen area:  m<sup>2</sup>

Question #8 FillInBlank

Show Answer

Determine the area based on the house plan.



Living room area:  m<sup>2</sup>

Question #9 FillInBlank

Show Answer

Determine the area based on the house plan.



Recreation room area:  m<sup>2</sup>

Question #10 FillInBlank

Show Answer

Determine the area based on the house plan.



Study area:  m<sup>2</sup>