

## Volumes by Counting Cubes

The volume of a shape is simply the "amount of space" it takes up.

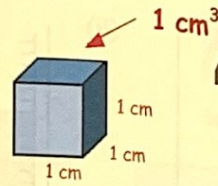
One unit of volume we use is the "cubic centimetre".

The small cube shown measures 1 cm by 1 cm by 1 cm,

It has a volume of 1 cubic centimetre.

or for short :-

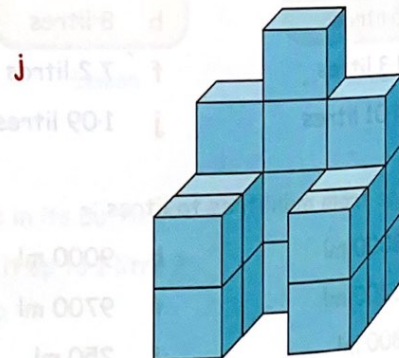
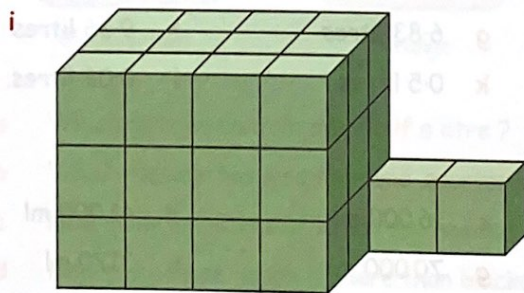
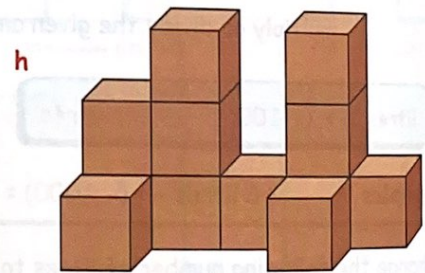
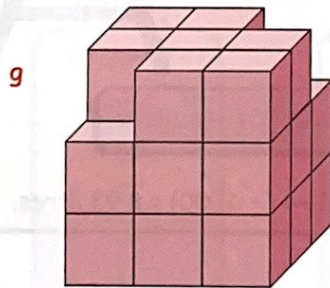
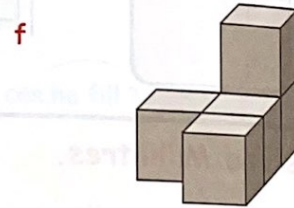
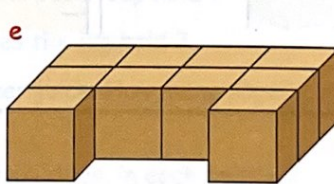
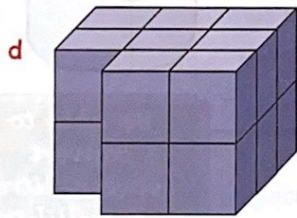
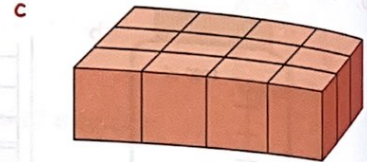
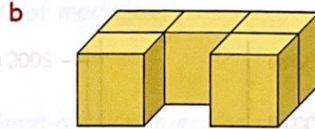
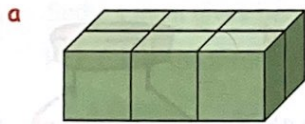
$1 \text{ cm}^3$



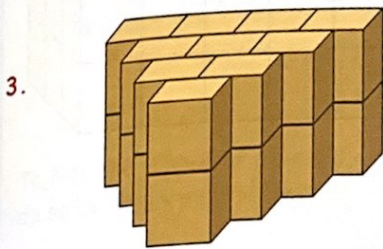
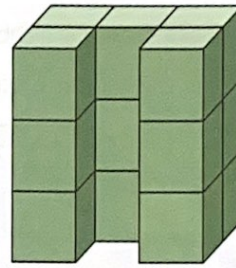
Be able to find the volume of a shape by counting cubes

### Exercise 3

1. State the volume of each of the following shapes, (in  $\text{cm}^3$ ) :-

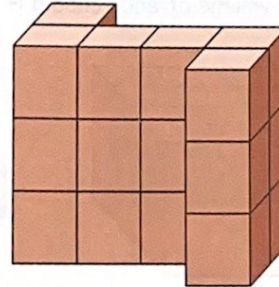


2. a How many cubes are on the top layer of this shape ?  
 b How many layers does it have ?  
 c What is its total **volume** ?



- a How many cubes are on the top layer of this shape ?  
 b How many layers does it have ?  
 c What is its total **volume** ?

4. What is its total **volume** of this shape ?



5. By working out the volume of the top layer first, calculate the total **volume** (in  $\text{cm}^3$ ) of each of the following shapes :-

