Name:_____

Resources to be provided by the student: Calculator, a single sided A4 page of notes, ruler, pens, pencils

Total: /18
Weighting: 1%

Time: 20min

1. [4 marks]
   Choose an appropriate unit of measurement to describe the volume of the following items.
   a)   Refrigerator

   m^3

   b)   Moving box

   m^3
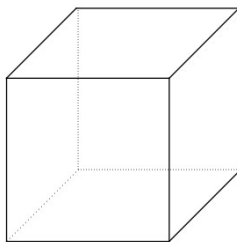
   c)   Takeaway food container

   cm^3

   d)   Car

   m^3

2. [4 marks]
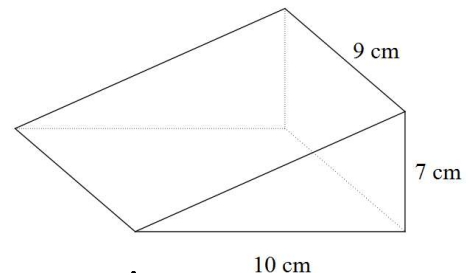   Calculate the volume of the following 3D objects

   a) A cube with edges of length 5cm   b)

   $V = L^3$
   $= 5^3$ ✓
   $= 125cm^3$ ✓

   2 marks

   9 cm
   7 cm
   10 cm

   $V = \frac{1}{2}bhL$
   $= \frac{1}{2} \times 10 \times 7 \times 9$ ✓
   $= 315cm^3$ ✓

3. [4 marks]
   Determine the capacity of the objects in Question 2 in millilitres and litres.

   Cube = 125mL ✓
   = 0.125 L ✓

   Triangular Prism = 315mL ✓
   = 0.315L ✓

1

4. [6 marks]

A fish tank has rectangular sides made of glass. It is 120 cm long and 70 cm wide. The water is 42 cm deep.

a) Sketch a diagram depicting this information.

42cm

120cm

70cm

1 mark
neat diagram
1 mark
correctly labelled
dimensions
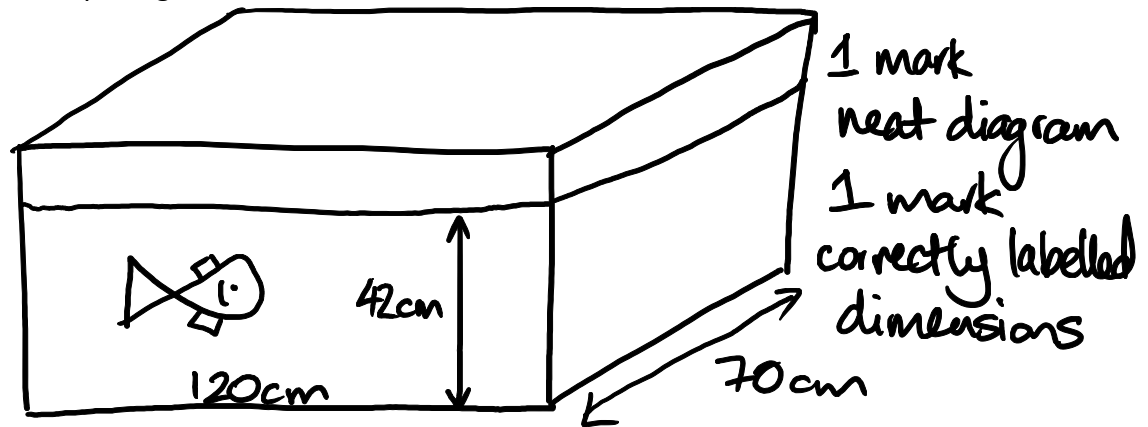
b) How many cubic centimeters of water does the fish tank contain?

$$V = L \times W \times H$$
$$= 120 \times 70 \times 42 \checkmark$$
$$= 352800 \, cm^3 \checkmark$$

c) If each litre of water occupies 1000 cm³, how many litres does the tank contain?

$$Capacity = 352800 \div 1000 \checkmark$$
$$= 352.8 \, L \checkmark$$