Name KEY

Number_____ Class_____

# *Metric Study Guide*

1. In what country was the metric system developed?

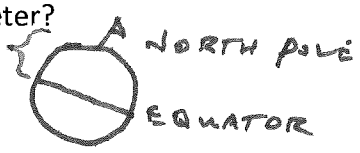
   FRANCE 1789

2. What were the three goals that the metric system attempted to fix?

   - MULTIPLES OF 10 - REGULATE TRADE - HELP SCIENTISTS COMMUNICATE

3. How did they first come up with the distance of the meter?

   1/10,000,000 DISTANCE BETWEEN




***Fill in the charts with the missing information below***

| Kilometer km | Hectometer hm | Decameter dam | Meter m | Decimeter dm | Centimeter cm | Millimeter mm |
|---|---|---|---|---|---|---|

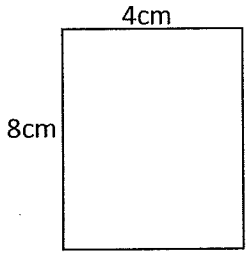
| Kiloliter KL | Hectoliter hL | Decaliter daL | Liter L | Deciliter dL | Centiliter cL | Milliliter mL |
|---|---|---|---|---|---|---|

| Kilogram kg | Hectogram Hg | Decagram dag | Gram g | Decigram dg | Centigram cg | milligram mg |
|---|---|---|---|---|---|---|

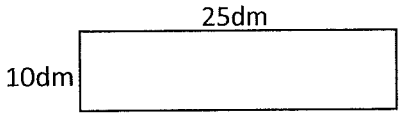
***Metric Conversions***

- 45.62 km= 456,200 dm
- 0.3421 hl= 3421.0 ml
- 994.6 g= 99.46 dag
- 85 cm= 850 mm
- 532.14 kl= 53,214 dal
- 76 cm= 760 mm
- 1,000 kg= 1,000,000 g
- 5,300,620 cg= 530.062 hg
- 12m= 12,000 mm
- 0.000089 Hg= 0.089 dg

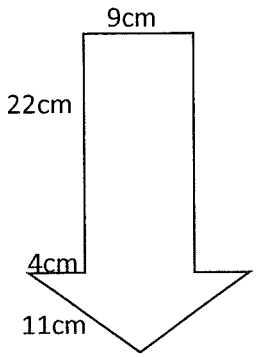
***Find the Perimeter of the following (P= S+S+S+S)***



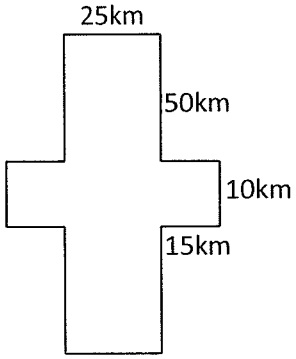

24cm




70dm

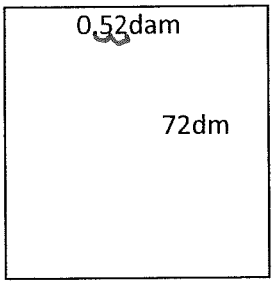



83cm

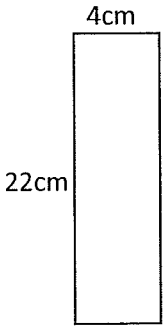



330 km

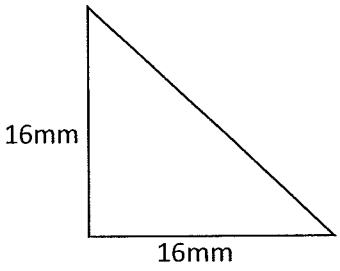
***Find the Area of the following (A=L x W)***



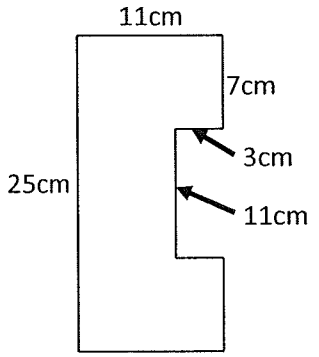

3,744 dm²




88cm²



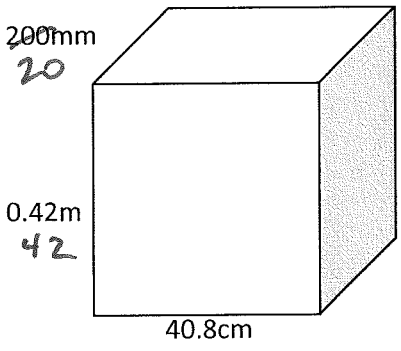

128mm²



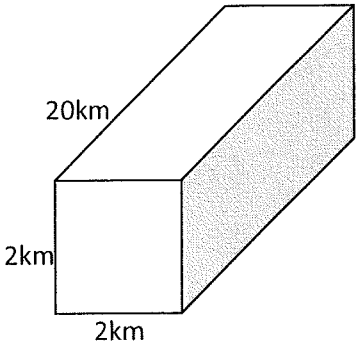

275
- 33
242

242 cm²

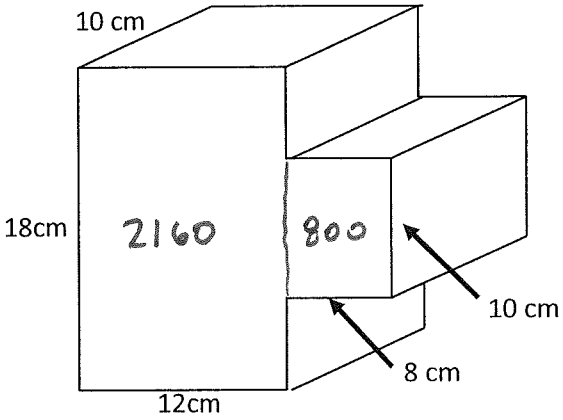
***Find the Volume of the following (V= L x W x H)***




34,272 cm³



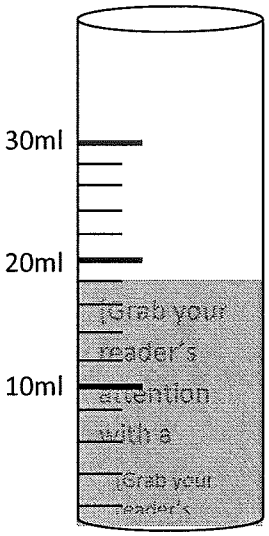

80 Km³



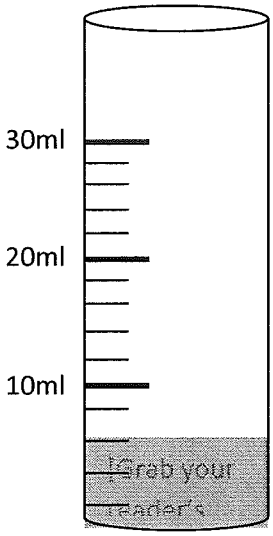

2,960 cm³

2160
800
2960

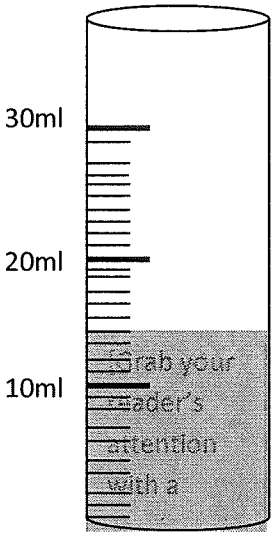
***Find the Volume of liquid (ml)***




18mL

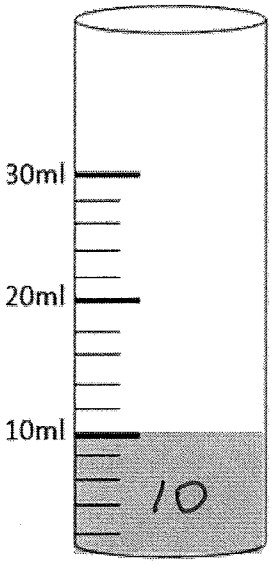


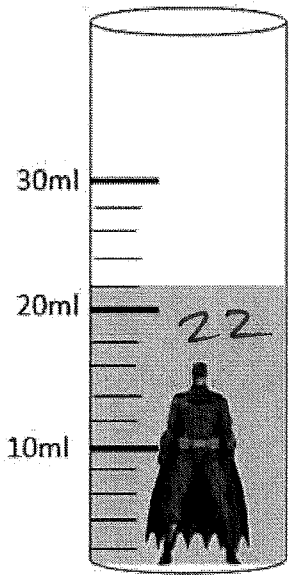

6mL




14mL

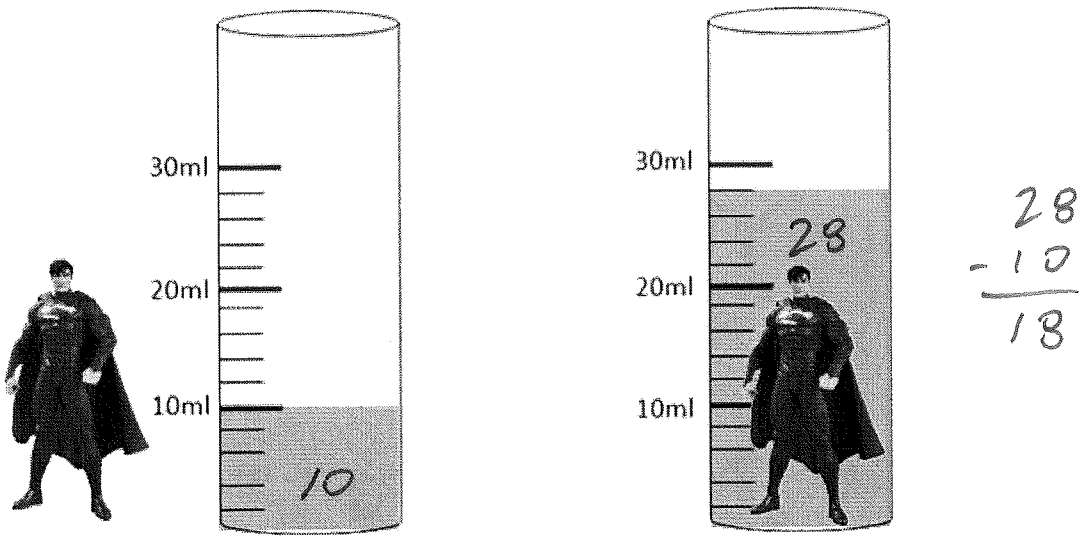
***Find the Volume of Irregular Solid Shapes ($cm^3$)***




22
-10
12

12 $cm^3$




28
-10
18

18 $cm^3$

***Weight, Mass, and Gravity (3 steps) (Weight = Mass x Gravity)***

4. Jedd has a mass of 57 kg. He is on planet LeRoy (5.5 m/s/s). What is his weight?

   W = M · G
   W = 57 kg · 5.5 m/s/s
   W = 313.5 N

5. Fran has a mass of 3,000,000 cg. She is on Earth. What is her weight?

   W = M · G
   W = 30 kg · 9.8 m/s/s
   W = 294 N

6. Joe has a mass of 195 lbs. He is on planet Metric (16.8 m/s/s). What is his weight?

195
x 0.45
87.75

   W = M · G
   W = 87.75 kg · 16.8 m/s/s
   W = 1,474.2 N

***Safety Science (draw and label) p.27***