### **KEY - Chemistry Ch. 1 part 2 Test Overview practice** (in class – not a grade)

## How many sig.figs. are in the following numbers?

- 1) 3060 = <mark>3</mark>
- 2) -110.07 = <mark>5</mark>
- 3) 0.00409 = <mark>3</mark>
- 4) 0.0040 = <mark>2</mark>
- 5) 5750. = <mark>4</mark>

# Round the following numbers to two sig.figs.:

- 6)  $3060 \rightarrow 3100$
- 7)  $-110.07 \rightarrow -110$
- 8)  $0.00409 \rightarrow 0.0041$
- 9)  $0.0040 \rightarrow same, 0.0040$
- 10) 5750. → 5800

#### **Metric conversions:**

- 11) 123.4 g = 0.1234 kg
- 12)  $0.488 \text{ damol} = \frac{4880}{12} \text{ mmol}$
- 13) 56.0 cm = 0.560 m

## Density: (show all work and units; check sig.figs)

14) How much space would an object take up if its mass is 350.00 g and its density is 7.66 g/cm<sup>3</sup>? 45.7 cm<sup>3</sup>

# D.A.: (show all work and units; check sig.figs)

- 15) How many seconds old are you at the exact moment you turn 16? 504,921,600 sec (used 365.25 days/yr; these time conversions are exact)
- 16) Convert 8.20 x 10<sup>24</sup> atoms Na to mol Na. 13.6 mol Na
- 17) Convert 0.127 moles of C to grams of C. 1.53 g C
- 18) Convert 12 mol CO<sub>2</sub> to L CO<sub>2</sub> at STP. 270 L CO<sub>2</sub>