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

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

1) $3060=3$
2) $-110.07=5$
3) $0.00409=3$
4) $0.0040=2$
5) $5750 .=4$

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) $5750 . \rightarrow 5800$

Metric conversions:
11) $123.4 \mathrm{~g}=0.1234 \mathrm{~kg}$
12) $0.488 \mathrm{damol}=\underline{4880} \mathrm{mmol}$
13) $56.0 \mathrm{~cm}=\underline{0.560} \mathrm{~m}$

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 $7.66 \mathrm{~g} / \mathrm{cm}^{3}$ ? $45.7 \mathrm{~cm}^{3}$
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 $8.20 \times 10^{24}$ atoms Na to mol Na . 13.6 mol Na
17) Convert 0.127 moles of $C$ to grams of $C .1 .53 \mathrm{~g} \mathrm{C}$
18) Convert $12 \mathrm{~mol} \mathrm{CO}_{2}$ to $\mathrm{LCO}_{2}$ at STP. $270 \mathrm{LCO}_{2}$

