



17. Then convert 35 tons into grams

$$35 \text{ tons} \times \frac{2000 \text{ pounds}}{1 \text{ ton}} \times \frac{454 \text{ grams}}{1 \text{ pound}} = 31,780,000 \text{ grams}$$

18. Temperature conversions...  $29^{\circ}\text{C} = 302 \text{ K}$        $125^{\circ}\text{C} = 398 \text{ K}$

$250 \text{ K} = -23^{\circ}\text{C}$        $350 \text{ K} = 70^{\circ}\text{C}$        $0^{\circ}\text{C} = 32^{\circ}\text{F}$  (not required, but important anyway)

19. If this wacky situation is true: 1 snew = 2 eeks, and if 1 eek = 17 crids, and if 3 crids = 4 bleezes, and finally, if 3 bleezes = 15 alks, how many alks are in one snew?  
(dimensional analysis only)

[In this problem we have no idea if these are measures or names of strange little animals. Since this is not knowable in any real way, they are all equalities and therefore have unlimited significant figure. That is unless you think that they are individual creatures of some sort, then the answer would have to be rounded to the nearest whole number.]

$$1 \text{ snew} \times \frac{2 \text{ eeks}}{1 \text{ snew}} \times \frac{17 \text{ crids}}{1 \text{ eek}} \times \frac{4 \text{ bleezes}}{3 \text{ crids}} \times \frac{15 \text{ alks}}{3 \text{ bleezes}} = \frac{2040 \text{ alks}}{9} = 226.66 \text{ alks}$$

20. The diagram below shows a graduated cylinder with 5 liquids in layers. They are marked ABCDE. In the small data table are four densities for these four liquids. Place the correct letter, ABCD or E in the spaces next to the densities that correlate with the liquids.

density	Which liquid is it?
$13.456 \text{ g/cm}^3$	A
$3.122 \text{ g/cm}^3$	B
$1.06 \text{ g/cm}^3$	C
$0.91 \text{ g/cm}^3$	D
$0.765 \text{ g/cm}^3$	E

