Name: _____Per_____

Conversions Practice

Practice Sheet #2

Due: _____

Use Conversion Technique to solve the following problems. ***SHOW ALL WORK*** *for full credit. Include units in the answer.*

1. In Europe gas is sold by the liter. A liter of gas in Germany costs 1.62 Euros. Since there are four liters in a gallon, the cost of four liters would be the cost of a gallon, **which is 6.48 Euros per gallon**! The exchange rate on August 25, 2014 was **0.76 Euros = 1 US Dollar**. *How much does a gallon of gas in Germany cost in dollars?*

   Known:

   1 gallon x ——————————— x ——————————— = _____ dollars ($)

   Answer: $8. 50

2. If you ordered 1.50 kg of sodium over the internet, how many pounds is this?
   1.00 lb = 454 g.

   Answer: 3.30 lbs

3. It took you 0.142875 days to finish your homework the other day. How many seconds is this?

   Answer: 12344.4 sec

4. If the ratios below are true, then determine how many karches are in 2.963 zots.

6 timps= 3.5 weps	5 karches=3 weps	4 fips= 3 gruls
2.5 fips =1.0 zot	7 hax = 1 timp	2 grul = 3 hax

   Answer: 1.2 karches

Name: _____Per_____

5. On average, cows are slaughtered for meat at the age of three years. The typical cow will give 200 kg of boneless beef **(200. Kg beef/1 cow**). During the cow's three year life, it will require 31,000 L for drinking and servicing of the stall, and 3.06 x 10^6 L for producing the grains and grasses it eats. This is a total of **3.091 x 10^6 L water/1 cow**. *How much water is therefore required to produce 1.0 kg of beef?*

Answer: 1.5 x 10^4 L

6. On average chickens are slaughtered for meat at the age of ten weeks. The typical chicken will give 1.7 kg of boneless chicken meat **(1.7 kg chicken meet/1 chicken**). During the chicken's ten week life, it will require 30 L of water for drinking and servicing of the coop, and 6435 L of water for producing the grains it eats. This is a total of **6465 L of water / 1 chicken**. *How much water is therefore required to produce 1.0 kg of chicken?*

Answer: 3800 L

Compare the amount of water to bring you 1.0 kg of beef versus chicken!

7. In the examples in the notes packet, we learned that an incandescent bulb would use 3.6 x 10^9 J of energy in 10,000 hours. *How many J of energy does this bulb use in 4.0 hours?*

Answer: 1.4 x 10^6 J

8. In the examples in the notes packet, we learned that a compact fluorescent light bulb (CFL) would use 1.2 x 10^9 J of energy in 15,000 hours. *How many J of energy does the CFL bulb use in 4.0 hours?*

Answer: 3.2 x 10^5 J

9. According to recycling-revolution.com, Americans use about 2,500,000 plastic bottles every hour! These of course, end up in the trash and either go into a landfill or get recycled. *How many bottles are used in America in 6 months?*

Answer: 1 x 10^{10} bottles!