

1309 POWER PROBLEMS (10pts x 3 = 30pts)

- Write out all problems showing your math of conversions
 - The power company charges you \$0.14 kW_r for all problems
 - Box your final answer.
 - Upload a picture of your answers to google classroom
 - This will be graded for accuracy!!
- 1) What is the resistance of a 120W flood light running at 110v?
 - 2) If you run this 120w flood light for 1hr, what would be the cost?
 - 3) If you ran this flood light from 6pm to 6am for 30 days what would be the cost?
 - 4) If you ran this flood light 6pm to 6am for an entire year (12hrs a day) what would be the cost?
 - 5) You buy a deep freezer; the energy guide says it uses 252kWh a year. What are the watts per hour?
 - 6) How much would it cost to run the deep freezer for 1 year?
 - 7) How much would it cost to run deep freezer for 1 month?
 - 8) You have a 1500w hair dryer and you use it for 20 minutes a day for 30 days. What does it cost you?
 - 9) Your charger on your laptop draws 25watts an hour to completely charge it overnight (10hrs) how much did this cost?
 - 10) You build a Tesla coil that uses 15,000V running at 30mA
 - A) how many watts is it using?
 - B) If watts remain the same, and you step the Volts up to 1,500,000, what must be the current?