

Physics 110 – Electrical Power Worksheet

Name: _____

Pledged: _____

Part 1

Electrical appliances have a great variety of power ratings. Find as many electrical appliances in your dorm room / apartment as you can (up to eight) and record the power ratings of each below along with the forms of energy they produce (heat, light, sound, etc.) Using the Power Rating, calculate the amount of current used by each of these appliances.



| Name of Appliance and Brand | Power Rating (Watts) | Form(s) of Energy Produced | Current Used (Amperes) |
|-----------------------------|----------------------|----------------------------|------------------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |

1. What pattern, if any, do you think exists between the "power rating" of the appliance and the form of energy it is designed to provide?

2. Rank the appliances in order from the one likely to draw the most current to the one that would draw the least amount of current.

3. Is there likely to be a problem if all of the appliances are turned on at the same time on a single circuit fused at 20 A?