Answer Sheet: Chapter 17 Electricity

| 1. Electron have a negative | 2. Something like below | 3. | 4. |
|---|--|---------------------------------|-------------------------------|
| charge, protons have a | [] | Series circuits: | |
| positive charge and neutron | | Parallel circuits: | R= 1.2 Ohm (Ω) |
| have no charge. | | | |
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| | | | |
| 5. | 6. They are easier to make | 7. Electrons flow from negative | 8. |
| P=71.92 watts | and they are cheaper to make. | to positive terminal | 1. If one part breaks, |
| | | | the entire circuits |
| | | | Stops working. |
| | | | 2. The more parts the |
| | | | 3. Makes bulbs |
| | | | dimmer |
| | | | |
| 9. | 10. | 11. Potential difference | 12. |
| Direct current (DC) | I= 1.7 amps | | 1. More difficult to |
| Alternating current | - | | make. |
| (AC). | | | 2. The current gets |
| 12 | 14 Current | 15 Flastrons can be | spiits. |
| 13. "Opposite charges attract" | 14. current | transferred from one material | 10. Conductor |
| "Like charges repel" | | to the other. | Examples: Metals or |
| | | | Water |
| 17. Semi-conductors | 18. | 19. Electric force. | 20 |
| | Conductors have low | | Insulator |
| | resistances. | | Examples: |
| | Insulators have high | | wood, |
| | resistances. | | plastic, glass |
| | | | |
| 21. | 22. schematic diagram | 23. | 24. |
| Open Circuit- circuit | | Electrolyte- a solution that | Ampers |
| is disconnected, no | | conducts electricity, | |
| current flows. | | | |
| Closed Circuit- A | | | |
| closed-loop path for | | | |
| electrons to flow | | | |
| through, creating a | | | |
| ourrent. | | | |
| 25. | 26. Electric fields | 27. Voltage = 8 Volts | 28. The tendency for |
| Current= Voltage/Resistance | | | a material to oppose |
| - | | | the flow of electrons. |
| | | | |
| | | | |
| | | | |

| 29. Any of the following are correct. | 30. Switch Open Open | 31. Volts | 32. Power |
|--|------------------------------|---|---|
| | Closed Closed | | |
| 33. The forces move towards the negative charged object. | 34. static electricity | 35. It gets pulled towards the negative charge. | 36. + - BATTERY |
| 37. I can either increase the voltage or increase the current. | 38. Atoms want to be neutral | 39. Ohms Ω | 40. Make wire long, make wire thinner, or heat up the wire. |
| 41. Watts | -MR | 43. It slows the current | 44. It pushes electron within a material. |
| 45. It should look something like the following image. | | | |