



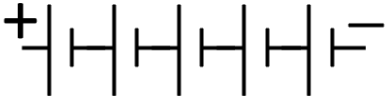
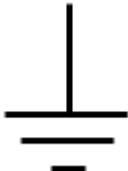
Chapter 1-2 - Answers


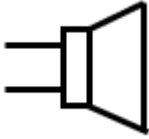

Q1 Complete the following table.

| | Power (W) | Voltage (V) | Current (I) | Resistance (R) |
|----|------------------|--------------------|--------------------|-----------------------|
| 1 | 15 W | 13.63 V | 1.1A | 12.39 Ω |
| 2 | 167 W | 105 V | 1.59 A | 66 Ω |
| 3 | 15 W | 12 V | 1.25 A | 9.6 Ω |
| 4 | 0.05 W | 5 V | 0.01 A | 500 Ω |
| 5 | 4.6 W | 24 V | 0.192 A | 125 Ω |
| 6 | 1 W | 1000 V | 1 mA | 1 MΩ |
| 7 | 7W | 1400 V | 5 mA | 280 KΩ |
| 8 | 10.5 W | 15 V | 0.7 A | 21.42 Ω |
| 9 | 2 W | 0.3 V | 6.66 A | 45 mΩ |
| 10 | 5.29 KW | 2300 V | 2.3 A | 1 KΩ |
| 11 | 2.66 W | 2 V | 0.75 A | 1.5 Ω |
| 12 | 0.2 W | 5 V | 0.04 A | 125 Ω |
| 13 | 6 W | 24.49 V | 240 mA | 100 Ω |
| 14 | 1000 W | 31.6 KV | 31 mA | 1 MΩ |
| 15 | 2 W | 4.47 V | 44 mA | 10 Ω |
| 16 | 0.06 W | 6 V | 10 mA | 600 Ω |
| 17 | 15 W | 15 V | 1 A | 15 Ω |
| 18 | 10 W | 12 V | 0.83 A | 14.45 Ω |
| 19 | 13 W | 8.84 V | 1.47 A | 6 Ω |
| 20 | 1000 W | 244.94 V | 4.08 A | 60 Ω |

$$P = I^2R \quad P = IE \quad P = E^2/R$$

Q2 Name or draw the following symbols.

| Symbol | Name |
|---|-----------------|
|  | Resistor |
|  | Lamp |
|  | Battery |
|  | Earth |

| | |
|---|----------------|
|  | <p>Antenna</p> |
|  | <p>Speaker</p> |
|  | <p>Fuse</p> |

Q3 How do you tell the size of the resistor?

Coloured bands around the resistor.

Q4 What is a resistor that is variable called?

Potentiometer