**Electricity Review** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Word Bank**

static electricity static discharge electric field

conductor current voltage

insulator resistor circuit

electric power

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Potential difference between two points in a circuit

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_2. Flow of electrons at a given point

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_3. A material that lets electrons move through it easily

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_4. Space around an object where something can be affected by its electric force

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_5. Complete, closed path that electrons flow through

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_6. A material that does not let electrons move through it

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_7. Opposes the flow of electrons

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_8. An electric charge at rest on an object

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_9. The release of electricity stored in an object

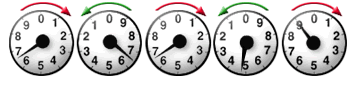
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_10. The rate at which electric energy is changed into different forms

**Questions**

1. What are 3 ways to charge a neutral object and describe how it works

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* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ -
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ -

1. An atom that gains electrons has a ( positive, negative ) charge.
2. An atom that loses electrons has a ( positive, negative ) charge.
3. Which is the equation for ohms law?
4. I = R/V b. I = V/R c. V = I/R d. R = I/V
5. What is the current if a wire is receiving 10 volts and has a resistance of 2 ohms? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. What is the voltage across a 25 Ω resistor if a 0.3 current is flowing through it? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. What is the equation for electrical power?
8. Power = volts/amps b. power = volts x amps c. power = amps/volts
9. How many watts of power are used if a hair dryer draws 10 A of current at 120 V? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. What is the current if 60 Watts of power are used from a 15 v battery? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. 2000 W = \_\_\_\_\_\_\_\_\_\_\_\_ kW
12. 45 kW = \_\_\_\_\_\_\_\_\_\_\_\_\_ W
13. What is the equation for electrical energy?
14. kWh = kiolowatts x time b. kWh = Watts x volts c. kWh = Watts x amps
15. If 5 kW are used in 3 hours, how much energy is used? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
16. How many kW are used if something runs for 5 hours and takes up 30 kWh of energy? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
17. Circle all the conductors and cross out the insulators:
18. Plastic b. metal c. glass d. rubber e. dirty water f. graphite
19. What number does the meter read?



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1. Circle the one from each pair that has the most resistance in a wire
2. Thick or thin
3. Long or short
4. c. Copper or plastic
5. d. Warm or cool
6. What is the difference between a direct current and an alternating current

DC –

AC –

|  |  |  |
| --- | --- | --- |
|  | Draw the circuit in symbol form  Is it: series or parallel |  |