|  |  |  |
| --- | --- | --- |
| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_ | Period: \_\_\_\_\_\_\_ |

Electric Charge and Current

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  P |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | R |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | A |  |  |  | 2  C |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | L |  |  |  | U |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | L |  |  |  | R |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | 3  C | L | O | S | E | D | C | I | R | C | U | I | T |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | L |  |  |  | E |  |  |  |  | 4  C |  | 5  P |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | 6  E | L | E | C | T | R | O | N |  |  | 7  P | R | O | T | O | N |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | I |  |  |  | T |  |  |  |  | N |  | S |  |  |  |  |
|  |  |  |  |  |  | 8  E |  | 9  C |  |  |  | 10  R |  | R |  |  |  |  |  |  | 11  I |  | D |  | I |  |  |  |  |
|  |  |  |  |  |  | L |  | O |  |  |  | E |  | C |  | 12  I |  |  | 13  C | O | N | D | U | C | T | O | R |  |  |
|  |  |  |  |  |  | E |  | N |  |  |  | P |  | U |  | N |  |  |  |  | D |  | C |  | I |  |  |  |  |
|  |  |  |  |  |  | C |  | S |  |  | 14  S | E | R | I | E | S | C | I | R | C | U | I | T |  | V |  |  |  |  |
|  |  |  |  |  |  | T |  | E |  |  |  | L |  | T |  | U |  |  |  |  | C |  | I |  | E |  |  |  |  |
|  |  |  |  |  |  | R |  | R |  | 15  N |  |  |  |  |  | L |  |  |  |  | T |  | O |  | L |  |  |  |  |
|  |  |  |  |  |  | O |  | V |  | U |  | 16  A | T | T | R | A | C | T |  |  | I |  | N |  | Y |  |  |  |  |
|  |  |  |  |  |  | S |  | A |  | C |  |  |  |  |  | T |  |  |  |  | O |  |  |  | C |  |  |  |  |
|  |  |  |  |  |  | T |  | T |  | L |  |  |  |  |  | O |  | 17  N |  |  | N |  |  |  | H |  |  |  |  |
|  |  |  | 18  N | E | G | A | T | I | V | E | L | Y | C | H | A | R | G | E | D |  |  |  |  |  | A |  |  |  |  |
|  |  |  |  |  |  | T |  | O |  | U |  |  |  |  |  |  |  | U |  |  |  |  |  |  | R |  |  |  |  |
|  |  |  |  |  |  | I |  | N |  | S |  |  |  | 19  N |  |  |  | T |  |  |  |  |  |  | G |  |  |  |  |
|  |  |  |  |  |  | C |  |  |  |  |  | 20  O | P | E | N | C | I | R | C | U | I | T |  |  | E |  |  |  |  |
|  |  |  |  |  |  | S |  |  |  |  |  |  |  | U |  |  |  | O |  |  |  |  |  |  | D |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | T |  |  |  | N |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | R |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| --- | --- |
| **Across**  **3.** A \_\_\_\_\_\_\_ is an electrical circuit through which current can flow uninterrupted path.  **6.** carries a negative charge  **7.** Carries a positive charge  **13.** a material that allows electrons to move easily through it  **14.** Is a circuit that has only one path for the electric current to follow  **16.** unlike charges do what  **18.** an object that has more electrons than protons  **20.** A discontinuous (broken) circuit through which no current can flow is called a | **Down**  **1.** Is circuit that has more than one path for the electric current to follow  **2.** The flow of electric charge in an amount of time  **4.** charging an object by contact with a charged object: charging by \_\_\_\_\_\_\_\_\_  **5.** an object with fewer electrons than protons  **8.** A study of electric charges at rest.  **9.** The law that states that charges are neither created nor destroyed but only transferred from one material to another.  **10.** like charges do what  **11.** charging an object by bringing a charged object close to, but not touching. charging by \_\_\_\_\_\_  **12.** a material that does not easily allow electrons to move through it  **15.** location protons and neutrons can be found  **17.** carries no charge  **19.** object with an equal number of electrons and protons |

   neutral       negatively charged       positively charged       Conduction       conductor       insulator       induction       Electrostatics       proton       electron       neutron       parallelcircuit       series circuit       nucleus       attract       repel       open circuit       closed circuit       Conservation       current