

Name\_\_\_\_\_ Date\_\_\_\_\_

### Section 10.1 Pushing Charges Around

- 1) What are the two locations on a battery called where contact is necessary?
- 2) Define *circuit*.
- 3) Define switch.
- 4) Draw the symbols for the following words; Conducting wire, cell, battery, lamp, switch and resistor.
- 5) Define circuit diagram.
- 6) Define *battery*.
- 7) Define *resistor*.
- 8) Define *loads*.
- 9) What do all resistors have in common?
- 10) Define *current*.
- 11) Compare electrical current to water current.
- 12) What is the formula for calculating current? Write it in symbols and words.

13) What is charge measured in?

14) What is current measured in?

15) Write table 10.1 in your notes.

16) What does an ammeter do?

17) Where do electrons leave the battery?

18) On average, how far do electrons move in one minute?

19) Compare the distance electrons travel in a wire to water in a pipe.

20) Do electrons need to touch each other in order to repel?

21) If 300 C of charge pass a point in a conductor in 6 minutes, what is the current through that point in the conductor?

22) Compare the current required by appliances that convert electrical energy into heat, to the current required by devices that convert electrical energy into light or sound. What pattern do you see?

23) Which current will be greater, the current passing through an electric iron or the current passing through an electric razor, when each is plugged into a 120V outlet?