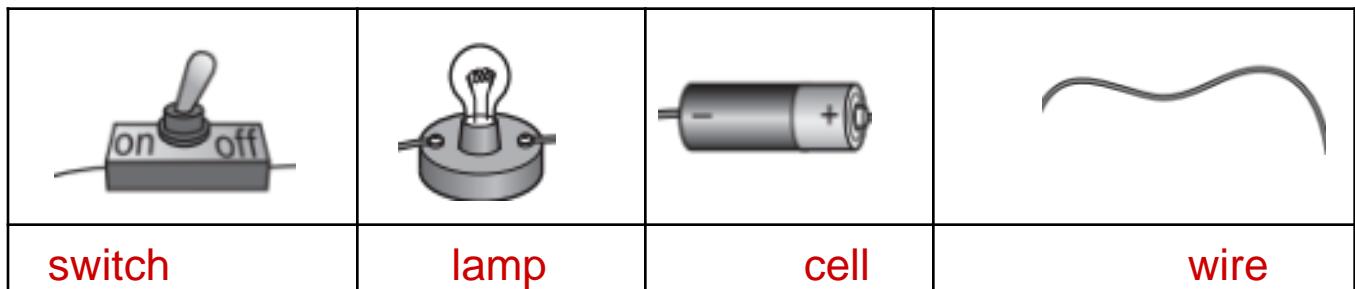


Date: _____

Chapter 8, Practice Worksheet (8.C.3)

1. Label the electrical components.



2. Answer with **true** or **false**.

a. The human body is a good conductor of electricity. (**true**)

b. The most common metal used in wires is silver. (**false**)

c. The switch is the source of the electric current. (**false**)

d. Wires connect the electrical components of a circuit

together. (**true**)

3. Circle the correct answer.

a. Ann wonders how the electric current is affected.

- When adding more cells to a circuit, the electric current ____.

increases

decreases

- When using longer wires in a circuit, the electric current ____.

increases

decreases

b. Using identical lamps and same number of cells but changing the

length of wires only, is an example of:

classifying

fair testing

research

4. Macy investigates electrical circuits.

She makes this circuit.

What does Macy do to make lamp A brighter?

Circle all the correct answers.

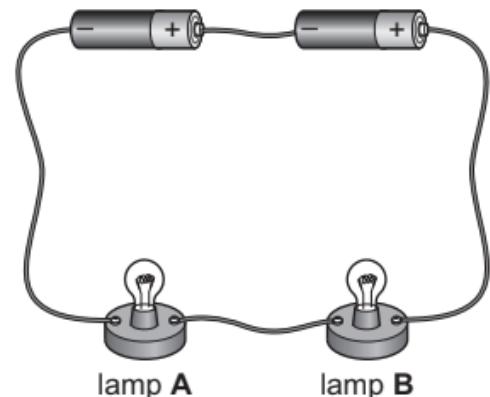
add another cell

add another lamp

remove a cell

remove lamp B

add a switch



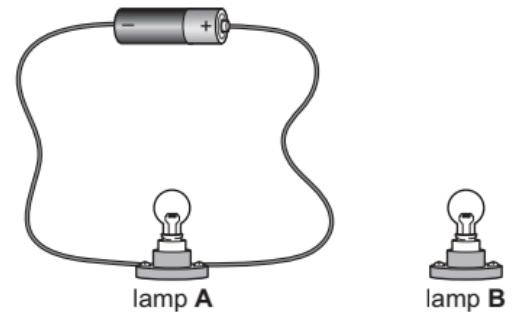
5. Carlos makes this electrical circuit.

Lamp A is bright.

Carlos adds Lamp B to the electrical circuit.

a. Predict what happens to lamp A.

The brightness of lamp A will decrease.

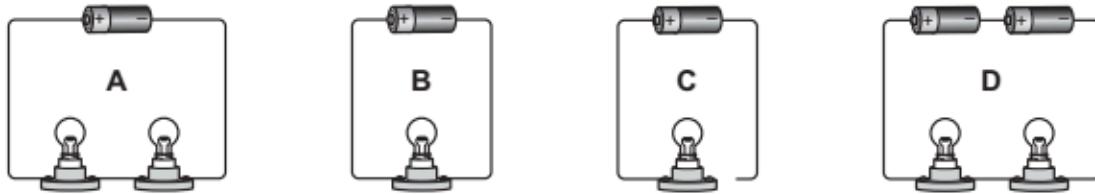


b. Carlos wants to turn the lamps on and off.

Write down the name of the component he adds to the electrical circuit.

switch

6. Here are four electrical circuits.



a. One of the electrical circuits does **not** work.

Which electrical circuit does **not** work?

Circle the correct answer.

A

B

C

D

b. Why are the wires in the electrical circuit **made of** the metal copper?

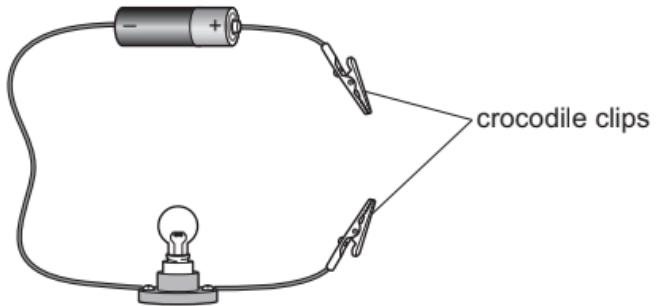
Copper is an electrical conductor it allows electric current to pass through.

c. Why are the wires in the electrical circuit **covered** with plastic?

Plastic is an electrical insulator. It protects from electric shocks.

7. Alia makes this electrical circuit.

Alia completes the circuit by attaching both the crocodile clips to different materials.



a. Complete the table to predict her results.

The first one has been done for you.

material	lamp lights (yes or no)
wood	no
paper	no
aluminium	yes
steel	yes
rubber	no

b. Alia writes a conclusion from her results.

Complete her conclusion.

The lamp lights because some materials are electrical conductors.

The lamp does **not** light because some materials are electrical insulators.

8. Fill in the blanks.

electrical insulators _____: materials that do not allow the electric current to flow through easily

control set-up _____: set-up with no variables tested

brighter _____: shining with more light

electrical conductor _____: materials that allow electric current to flow through easily

dimmer _____: shining with less light

switch _____: an object that can open or close a circuit