

Chapter 5 Test

For questions 1 to 6, write the term from column B that matches the definition in column A.

A	B
1. A pathway for the flow of an electric current: _____	a) electricity
2. The difference in electric energy from one side of a load to the other: _____	b) amperes (A)
3. The units of measurement of voltage: _____	c) volts (V)
4. The units of measurement of electric current: _____	d) potential difference
5. A steady flow of electricity: _____	e) electric circuit
6. The ability to do work. For example, the ability to move something: _____	f) electric current
	g) energy

7. Decide whether each of the following statements is true or false. If it is false, rewrite it to make it true.

a) **True/False** LEDs produce a lot of waste energy.

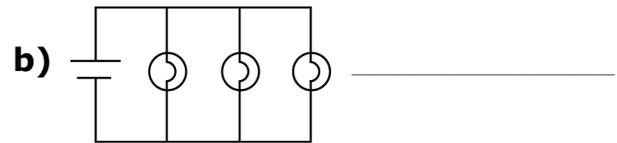
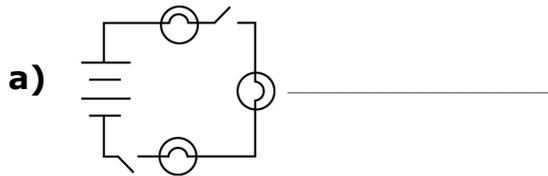
b) **True/False** Power is the amount of energy used in a certain period of time.

c) **True/False** Most energy companies measure electric energy in joules (J).

d) **True/False** An electric current is smaller when it enters a load.

8. Use the correct term from the box to describe each of the circuits below.

series circuit	parallel circuit
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Circle the correct answer for **c)** and **d)**.

c) Circuit **a)** provides ONE MORE THAN ONE complete pathway for the electric current.

d) In circuit **b)**, the current will be THE SAME DIFFERENT throughout.

e) What do you need to do to allow electric current to flow in circuit **a)**?

9. Complete each flowchart to show the energy conversion.

a) electric energy → _____ → heat

b) _____ → indicator LED on power bar → _____

c) _____ → subway → _____

10. a) You use a 10 W LED reading lamp for 5.0 h. How much energy in kWh does the reading lamp use? Show your work.

b) If 1 kWh costs 11.0¢, how much did it cost to use the LED reading lamp for 5.0 h? Show your work.