Current Electricity & Circuits
(Sect. 12.1, 12.2, and 13.1)

In current electricity, electrons are allowed to _____ through a _____ in a _____ manner.

For current electricity to be used in a safe manner we use both _____ and _____

We use _____ (made up of cells) or energy that comes from _____.

Circuits

Much like your circulatory system, an electric circuit needs to have a _____ path in order for electrons to flow.

The following components make up a simple circuit:

Source: _____

Load: _____

Conducting Wire: _____

Switch: _____

Circuits and Diagrams

Part of Circuit	Symbol
Source	
Conducting Wire	
Switch	
Load	

Series vs. Parallel Circuits

Series Circuits

In a series circuit, electrons only follow _____. For example, if the toaster and coffee make are plugged into the same outlet and the circuit breaks, both the toaster and the coffee make will stop working.

Parallel Circuits

Go downstairs and check your circuit panel (breaker panel) at home. Note how your house is organized by area (kitchen, bathroom, mudroom, living room, etc...). This is an example of a parallel circuit. In a parallel circuit, electrons can flow down _____. These paths split in the same way water split into different streams from a river. If you blow the fuse regulating the pathway of your fridge, your stove will still work if it is regulated by a fuse on a different pathway.