Name _____ **Date** _____

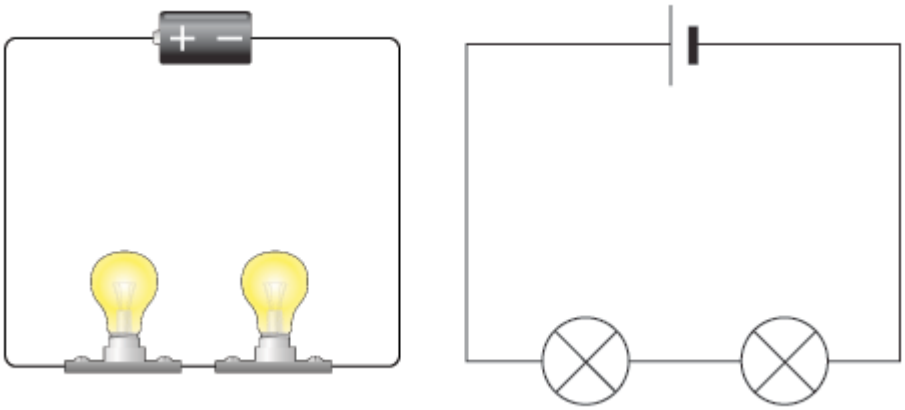
West Islip Technology Department **Period** _____

Introduction to Series & Parallel Circuits

- _____ and _____ are two important concepts when dealing with electricity.

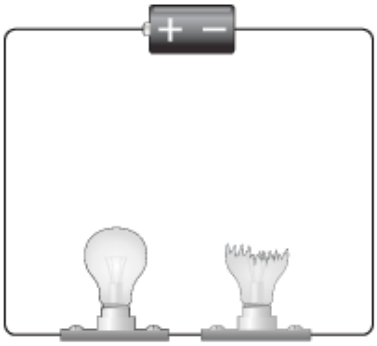
- There are ____ ways that a _____ can be connected in a circuit, either series or parallel.

- The circuit below has two lamps connected to a battery. In this circuit, there is only _____ over which the electrons can flow. When electrons only have one path to follow, that circuit is called a _____. The lamps are said to be wired in series with respect to each other.



- When _____ lamps are added to a series circuit, the lights will become _____ than before.

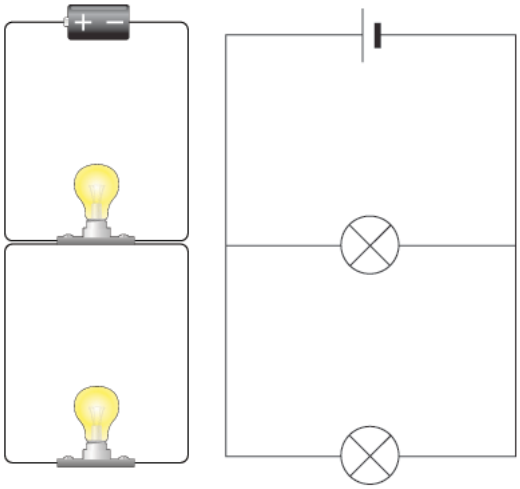
- In a series circuit, if a lamp _____ or a component is _____, the circuit is _____and all the components stop working. See the image below.



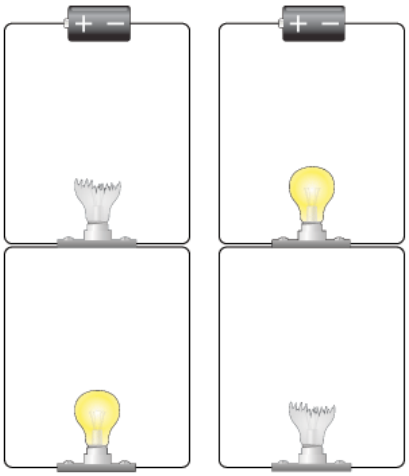
- Series circuits are useful if you want a _____ that one of the components in the circuit has failed. They also use _____ than parallel circuits.

Introduction to Series & Parallel Circuits cont…

- The circuit below has two lamps connected to a battery and they are connected in _____. In this circuit, there are _____ different paths for the electrons to follow from battery terminal to battery terminal. When electrons have more than one path to follow, that circuit is called a _____.



- In a parallel circuit, if a lamp breaks or a component is disconnected from one _____, the components on different branches _____. And, unlike a series circuit, the lamps _____ if you add more lamps in parallel. See the image below.



- Parallel circuits are useful if you want _____, even if one component has failed. This is why our _____ are wired up with parallel circuits.