Source: [KBPhysicsMasterIndex]

1 | Circuits

1.1 | Some key vocab...

1.1.1 | Current

Current is a measure for the flow of electrons. Think about it as "how much water goes through this arbitrary box on this river per second".

See [KBhPHYS201Current]

1.1.2 | Resistance

Resistance is a measure of the restriction of electron flow (and hence decrease of voltage — the pressure of electrons), for instance, a lovely resistor.

KBhPHYS201Resistance Resistance

Rule of thumb:

- current does change when resistors are parallel, current does not change when resistors are in sequence.
- voltage splits in half when encountering a parallel circuit, current splits, but not in half, based on the capacitance on each of the parallel circuits.

1.1.3 | Capacitors

[KBhPHYS201Capacitors]

1.2 | Circuit Calculations

Learning all this map and vocab is not really helpful in itself. However, it becomes super helpful when it could help you figure out mathematically different expected values in a circuit!

See [KBhPHYS201CircuitCalculations]]