

# Motors and Generators

Sunday, March 1, 2015 1:39 PM

Physics Reading

Assignment: \_\_\_\_\_

## List of Key Words

Put a list of all technical words that you think are important to the reading. Scan the work before reading it closely, and try to pick out words that you will need to understand during reading that you did not know from previous work.

Motor, generator, capacitor

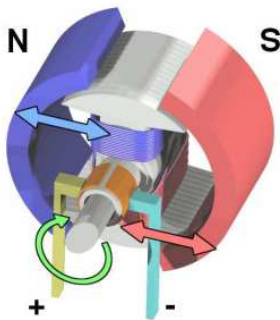
## Key Concept

Put here, in a clear sentence or two, what is/are the key concept(s) in the reading. Any time an equation is included, make certain to define all of the terms.

- motors work because magnets and current can have forces on one another that can cause electrical energy to transfer to mechanical

## Evidence and Examples

Put your annotations to the reading here. This can include real-life examples, key concepts, diagrams, concept maps, and your own personal questions about the material. This must include at least one completely annotated sample problem that demonstrates the concepts in the reading, although annotating all problems in a reading is in your best interest.



A DC motor with permanent magnets on the sides (image shows the N and S poles of the inside of the magnets) comprising the stator, an iron core and wire coil on the inside comprising the rotor, and two copper plates making contact with the positive and negative potential sources acting as the commutator.

(image from the Wikimedia Commons)

- motors usually use direct current but can use alternating
- generators turns mechanical to electrical energy
- changing the orientation of a loop will induce a current to reduce the change