

# Build a Simple Motor Lab Activity

## SPH4C

Construct a motor according to the directions attached to the kit. When you have your motor working (spinning freely), show it to your teacher and have your teacher initial this space:

\_\_\_\_\_

Is this a DC or an AC motor? \_\_\_\_\_

What part of the motor is the armature? \_\_\_\_\_

What part of the motor is performing the same function as the split ring commutator?

\_\_\_\_\_

In your own words, explain how the motor works:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Identify at least two difficulties you had in constructing the motor. How did you solve each of these difficulties?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Does the motor work if the magnet is above the coil instead of below? Explain why.

\_\_\_\_\_

\_\_\_\_\_

Something else to try:

What happens if you put a light bulb in series with the motor? Explain why.

What happens if you put a light bulb in parallel with the motor? Explain why.