Using Motors

Procedure

1. **Collaborate** Work in a small group. Attach a propeller to a motor.

2. Make a circuit using a battery, a switch, the motor with attached propeller, and three wires. Make sure the switch is in the off position.

3. **Observe** Hold the motor so the propeller can turn. Turn the switch on. Observe the propeller. Record your observations.

4. **Experiment** Turn the switch off to stop the motor. Disconnect the wires from the battery. Reattach each wire to the opposite end of the battery.

5. **Observe** Turn the switch back on. Observe the propeller. Record your observations.
Conclusion

1. In step 3, what did you observe to be the response of the propeller when the switch was turned on?

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2. **Compare** In step 5, what change did you notice in the response of the propeller?

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3. **Predict** What would change if you reversed the order of the switch and the motor in the original circuit? Explain your answer.

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Ask Questions

What else could be attached to the motor? Invent a device that is useful. Write a question that you would need to answer in order to test the device. **Hypothesize** the answer to your question.

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