

# Power It with Sunlight!

## Procedure

- 1. Collaborate** Work in a small group. Examine the solar panel and the motor. Find the wires that will connect the panel to the motor.
- 2. Use Models** Connect one wire from the solar panel to one of the contacts on the motor. Connect the other wire from the solar panel to the other contact on the motor. Hold the motor so that the fan can rotate freely, or mount the motor on a piece of cardboard or wood.
- 3. Observe** Place the solar panel in direct sunlight or under a bright lamp. Observe the fan. Then move the panel out of the light. Record your observations on the lines below.

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## Conclusion

Write the answers to the questions below.

- 1. Infer** Using your knowledge of electricity, propose an explanation for your observations of the solar panel, the wires, and the fan.

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**2. Compare** How is the solar panel similar to a battery? How is it different?

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**3. Use Models** Create a series circuit by connecting two or more solar panels to the motor. Place the panels in the light and observe the motion of the fan. Compare the motion of the fan using one solar panel to the motion using more solar panels.

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## Investigate More!

**Be an Inventor** Using a solar panel and a motor, design and test your own solar-powered invention. You may use other objects, such as empty cans, bottles, straws, rubber bands, or wheels. Present it to the class.