



# How can light energy create motion?

## Form a Hypothesis

A radiometer spins when exposed to sunlight. What do you think will happen if it is exposed to different sources of light? Write your answer as a hypothesis in the form "If a radiometer is exposed to different light sources, then . . ."

**Materials**

- radiometer
- light sources
- black cloth

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## Test Your Hypothesis

- 1 Place the radiometer in bright, natural sunlight. Record your observations.

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- 2 Try using different light sources and light sources with different intensities. Record your observations. Does the radiometer speed up, slow down, or stay the same?

Light Source	Light Intensity	Observations

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- 3 Place a black cloth over the radiometer. Look underneath and observe the vanes. Record your observations.

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**Draw Conclusions**

- 4 **Analyze** How would you explain what you observed?

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- 5 Did your observations support your hypothesis?

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- 6 **Infer** Do you think there is air inside the radiometer? Why or why not?

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**Explore More**

How do you think the motion of the radiometer would change if it were placed in direct sunlight for a whole day? Form a hypothesis and test it. Then analyze and present your results.

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