

Vocabulary

Write the word next to the description it matches.

electromagnet	motor	generator
----------------------	--------------	------------------

1. _____ a device that uses electromagnets to change electrical energy into mechanical energy.
2. _____ a machine that produces electrical energy by turning coils of wire around powerful magnets
3. _____ a magnet that only works when electricity is provided

Explain

Tell if each statement is true or false. Explain your choice.

4. Generators transform solar energy into electrical energy.

This statement is _____ because _____

5. A magnet sliding back and forth through a coiled wire 100 times per minute produces more electricity than an identical magnet sliding back and forth 50 times per minute.

This statement is _____ because _____

Apply Concepts

6. Your friend wants to make an electromagnet strong enough to lift a heavy metal object. What are some suggestions you would give him or her on how to make the electromagnet strong enough?
