

The Power Is Yours!

Try It Out

1.



Make sure the two clips leading from the hand crank are connected to the posts on the meter.

2.



Hold the handle of the hand crank with one hand and turn the crank with the other.

How high can you make the meter go? Now disconnect the clips from the posts and try it again. How bright can you make the lightbulb on the end of the hand crank?

What's Going On?

You just became your own personal power plant. The mechanical rotational energy of the crank was converted to electrical energy. This electrical energy makes the needle move on the ammeter (electrical current measuring device) and it also makes the light bulb light up.

Why Does It Matter?

The electricity in your home is generated in the same way, whether it comes from a coal, nuclear, wind, or hydroelectric power station. How bright did the light bulb get when you turned the crank? Probably not very bright, right? Think of how much harder or faster you'd have to turn the crank to make a light bulb in your home light up bright. Electrical power plants are *very* hard working and make a huge impact on our daily lives.

Wonder While You Walk...

Most of the electricity we use comes from fossil fuels, nuclear energy, wind, and water. What other ways can you think of to generate electricity? Why do you think these other ways are less popular?



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