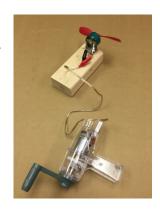
Name

Darwin wonders about the hand cranked generator and red propeller



Darwin, the dog, watches Tomas explore electrical energy. Tomas turns the handle of a generator which is connected by wires to a motor and red propeller. Darwin sees that when Tomas turns the handle in one place the propeller is spinning in another place.



- 1. Think about the red propeller.
- a. When Tomas begins to turn the handle of the generator, does the red propeller
 - ☐ Gain energy?
 - ☐ Lose energy?
 - ☐ Neither gain nor lose energy?
 - \square Both gain and lose energy?

The statement makes sense to me because:

- b. Tomas keeps turning the handle and sees that the propeller spins in a steady way. While it is spinning, does the <u>red propeller</u>
 - ☐ Gain energy?
 - ☐ Lose energy?
 - ☐ Neither gain nor lose energy?
 - ☐ Both gain and lose energy?

This statement makes sense to me because:

2. Darwin sees that when Tomas turns the handle of the generator the propeller turns. But the wires that connect them don't move at all. He wonders how this is possible.



Explain how this is possible. (Use diagrams, words and/or the Energy Tracking Lens to tell the energy story).