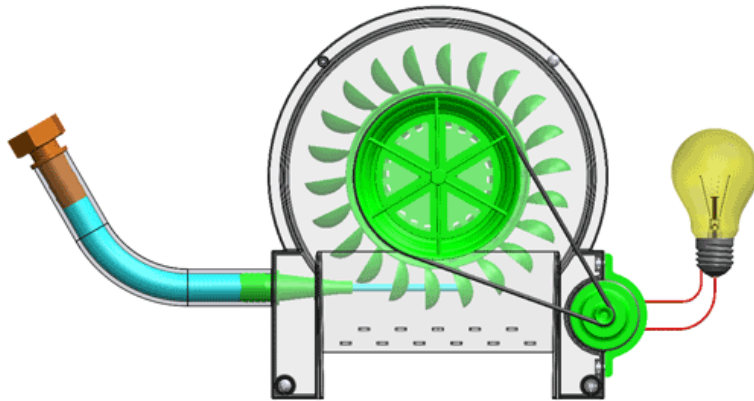


## Water Turbine Exercise



In this activity, you will measure the Energy into the water turbine and power produced by the water turbine.

Remember:

1. This is a team project
2. Take proper care of the materials provided
3. Ask questions
4. Have fun 😊

❖ What type of energy is going into the water turbine?

❖ How much energy is going into the water turbine if water comes out of the nozzle at 8 m/s with a flow of 0.15 kg/s? Show your calculation below:

- ❖ What type of energy is coming out of the system?
  
  
  
  
  
  
  
  
  
  
- ❖ How much energy is coming out? Using the voltmeter find the Voltage and Current that the turbine produces. How much power is produced? Remember  $\text{Power} = \text{Voltage} \times \text{Current}$
  
  
  
  
  
  
  
  
  
  
- ❖ Compare the energy in and the energy out of the system. Which one is bigger?
  
  
  
  
  
  
  
  
  
  
- ❖ Why is it that one of the energies is bigger than the other? Where did the energy difference go?