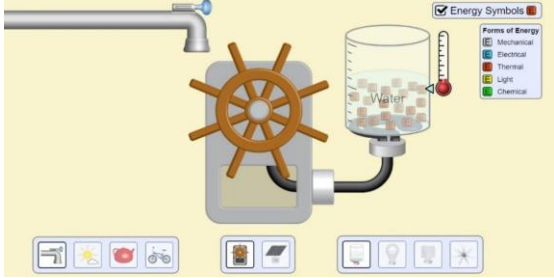
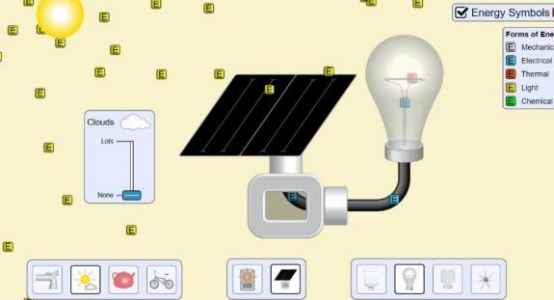
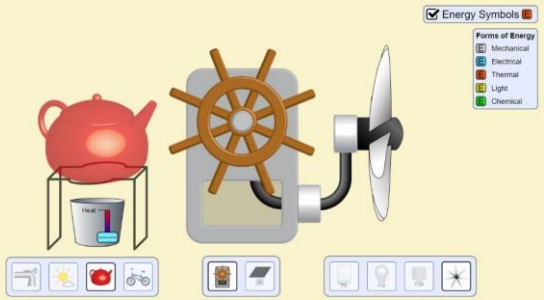
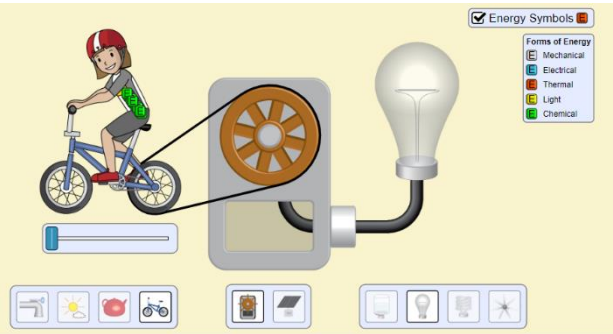
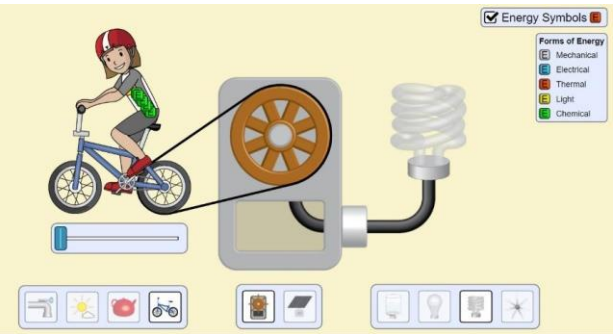


Energy Transfers Simulation

1. Open the pHet simulation: [Energy Forms and Changes](#) and the “Systems” tab. Be sure to click the box with “energy symbols” so you can see the energy types
2. Arrange the simulation to create each of the different configurations pictured below. Then, run the simulation for at least 30 seconds.
3. Describe what occurred and then name the transformations that you saw

Configuration	Description of what occurred	Transformation
	<p>Tap on high, water wheel, heating beaker of water</p>	<ul style="list-style-type: none"> • Mechanical → Electrical • Electrical →
	<p>Sun without clouds, solar panel, incandescent light</p>	<ul style="list-style-type: none"> •
	<p>Kettle, water wheel, fan</p>	<ul style="list-style-type: none"> •

 <p>Bike, water wheel, incandescent light</p>		<p>•</p>
 <p>Bike, water wheel, fluorescent light</p>		<p>•</p>

Questions:

1. Which is more efficient, the incandescent or fluorescent bulb? Explain your choice
2. Why did you have to feed the biker?
3. There are 5 forms of energy in this simulation, but we discussed 9 in class
 - a. Which 4 are missing?
 - b. Of those 4, should any of them be included in this simulation? Explain why/why not.