

Energy Unit Review Sheet

Name: Key

I can identify the system vs. surroundings in a situation or model.

1. Identify the system and the surroundings in the following scenarios:

a. When putting ice in a glass of water, one falls to the floor and melts.

System = ice Surroundings = floor, air, universe

b. A glass of cold apple cider is placed in the microwave to warm.

system = apple cider Surroundings = microwave, air, universe

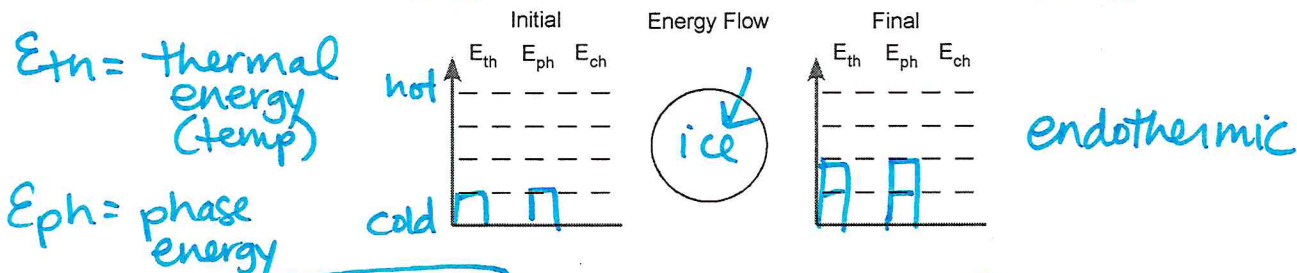
c. Hot steam from the shower condenses on the mirror in the bathroom.

system = steam Surroundings = mirror, air, sink, universe

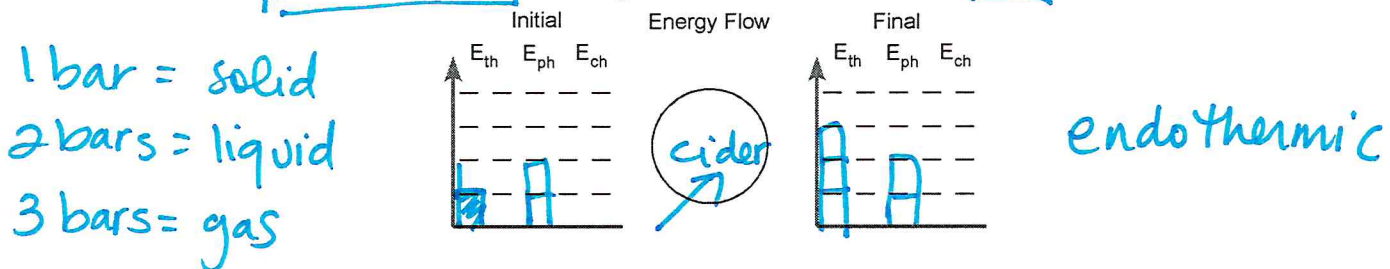
I can model the exchange of energy between the system & surroundings.

2. Complete an energy bar chart for each of the following scenarios:

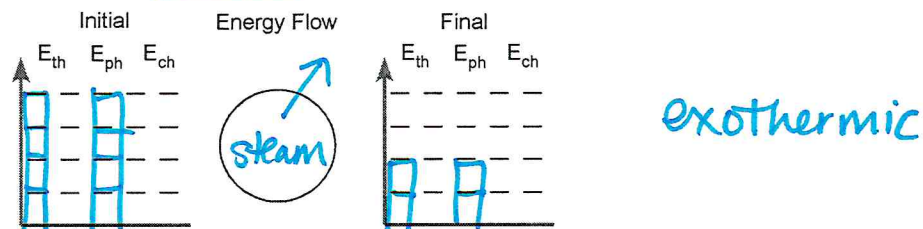
a. When putting ice in a glass of water, one falls to the floor and melts.



b. A glass of cold apple cider is placed in the microwave to warm.



c. Hot steam from the shower condenses on the mirror in the bathroom.



I can predict the transfer of energy between objects of different temperature due to particle collisions.

3. Describe how the energy transfers between the hot steam and the mirror in the scenario in 2c above.

Energy is transferred from the system (steam) to the surroundings (mirror) due to particles colliding.

I can apply the law of conservation of energy to a system.

4. What is the law of conservation of energy?

Energy is not created or destroyed but TRANSFERRED due to particles colliding.