

CH101 CLUE: System and Surroundings

Names: \_\_\_\_\_

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Section: \_\_\_\_\_

Draw a picture of a beaker with ice and water at 10 °C. Label the system and the surroundings.

Since the temperature is at 10 °C what will happen to the ice-water?

What will be the sign of  $\Delta H$  for the system? (Which way does the energy transfer?)  
Show this on your diagram (use an arrow)

What will be the sign of  $\Delta H$  for the surroundings?

What is the sign of  $\Delta S$  for the **system** - explain your answer?

What is the sign of  $\Delta S$  for the **surroundings** - explain your answer?