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Student:

## Thermodynamics: Heat and Heat Transfer

### Question 1: Heat vs. Temperature

**Scenario:**

You have a cup of water and a big pot of water, both very close to boiling but at the same temperature.

**Question:**

Explain which container (the cup or the pot) contains more heat and why. Also, describe how the amount of heat is different from the temperature in this scenario.

### Question 2: Heat Transfer

**Scenario:**

Two people are walking outside on a sunny day. One person is using an umbrella, while the other is not. They both feel warm but to different extents.

**Question:**

Discuss which method(s) of heat transfer (conduction, convection, radiation) are affecting each person and how the umbrella alters the heat transfer. Explain why the person with the umbrella feels cooler.