

# Entropy and Heat

## Thermodynamics

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College of the Atlantic.

A 1.5 liter container of water is at 5 Celsius. It is placed in a room whose temperature is 20 Celsius. After a while, the water warms up to 20 C. The room, being so much larger than the water, remains at 20 C.

1. What is the change in entropy of the water?
2. How much energy has flowed from the room into the water?
3. What is the change in entropy of the room?
4. What is the change in entropy of the universe? (Or, less ambitiously, the water-room system?)