



## Heat and work function type

**Heat and work are:**

Answer: path functions

Work and heat transfer are quantities that are transferred to or from a system during an interaction. They are not properties since the amount of such a quantity depends on more than just the state of the system. Heat and work are energy transfer mechanisms between a system and its surroundings. There are many similarities between them:

- both are boundary phenomena, as they cross the boundary of a system.
- systems possess energy, but not heat or work.
- both are associated with a process, not a state. Unlike properties, heat or work has no meaning at a state.
- both are path functions (this is their magnitude depends on the path followed during a process).

Properties are quantities that depend on a state like pressure, temperature, internal energy, entropy. Those are state functions.