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American Chemical Society including ACS Legacy Collection (1995-present)

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Thermodynamics

PATHFINDER

Thermodynamics

Thermodynamics is the study of the effects of work, heat, and energy on a system. Thermodynamics is only concerned with large-scale observations.

Zeroth Law: Thermodynamic Equilibrium and Temperature

First Law: Work, Heat and Energy

Second Law: Entropy



Image Source: <http://www.scienceclarified.com/everyday/Real-Life-Physics-Vol-2/Thermodynamics-Real-life-applications.html>

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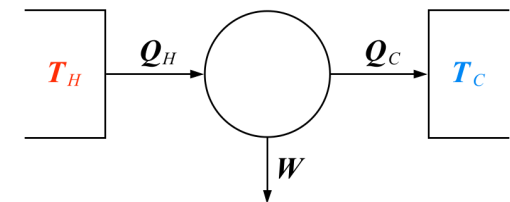
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Carnot engine diagram (modern) - where an amount of heat Q_H flows from a high temperature T_H furnace through the fluid of the "working body" (working substance) and the remaining heat Q_C flows into the cold sink T_C , thus forcing the working substance to do mechanical work W on the surroundings, via cycles of contractions and expansions.

Source: https://en.wikipedia.org/wiki/Carnot_heat_engine