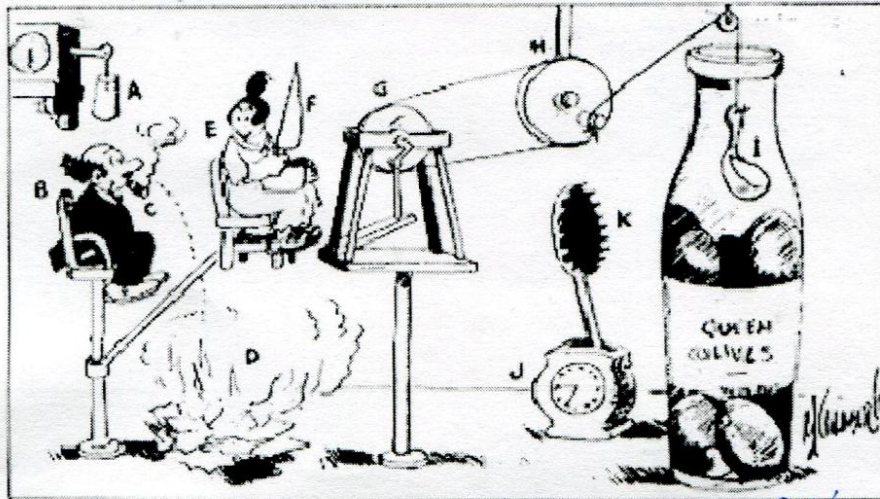


Fish an Olive Out of a Long-Necked Bottle



	before	after	HIDDEN ENERGY gained? lost energy?
A	RAISED BRICK	DROPPED BRICK	gravity energy
B	CLOSED JAW	OPEN JAW	chemical energy
C	—	—	—
D	Paper	BURNING PAPER	chemical energy
E	Leg	MOVING LEG	chemical energy

1. Energy (something that can give a push)

a. kinetic energy (KE)

describes something that is currently moving

b. potential energy (PE)

hidden energy: examples: chemical energy
: gravitational energy

(heating water)
2. Three parts of every diagram

a. universe everything that exists

b. system the objects you're describing

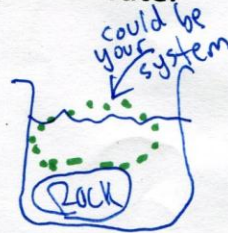
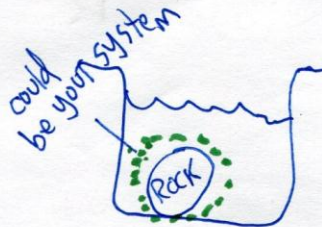
c. surroundings everything else

d. example: rocks in fire

this could be a system



e. example: rocks dropped in water



3. Exothermic - heat going out from the system

4. Endothermic - heat going into the system

5. symbol for heat - q

symbol for "enthalpy" - H

6. symbol for change of ~~heat~~ enthalpy

ΔH

7. Equations to describe heat gain, loss

a. General

before \rightarrow after

b. Heat leaving: $A \rightarrow B + \text{heat}$

c. Heat leaving: $A \rightarrow B$ ($\Delta H =$)

Some negative number

d. Heat entering: $A + \text{heat} \rightarrow B$

e. Heat entering: $A \rightarrow B$ ($\Delta H =$)

Some positive number

d. Heat exiting: $A \rightarrow B + \text{heat}$

e. Heat exiting: $A \rightarrow B$ ($\Delta H =$)

Some negative number

f. example
the rock on the fire:

cold rock + heat \rightarrow hot rock

cold rock \rightarrow hot rock ($\Delta H = +66\text{J}$)

d. example: rocks in fire

cold rock + heat \rightarrow hot rock

cold rock \rightarrow hot rock ($\Delta H = +99\text{J}$)

TEST RETAKES:

Show up any Tuesday, Wednesday, or Thursday. It'll take me ten minutes to dig up an alternative test for you to take.

Limit: One make up test per semester.