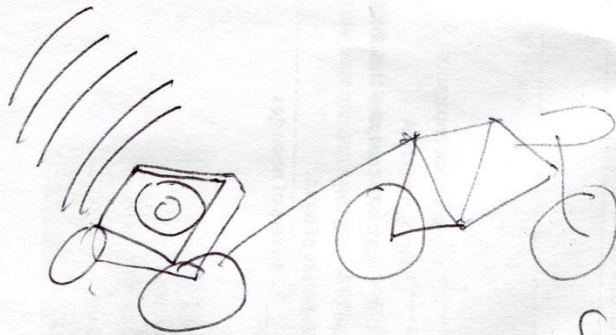


PURPOSE: LAY THE FOUNDATION FOR
RELATING ENERGY TO PHASE.

ENERGY - anything that can
give a push



KINETIC ENERGY - energy from
things that are moving

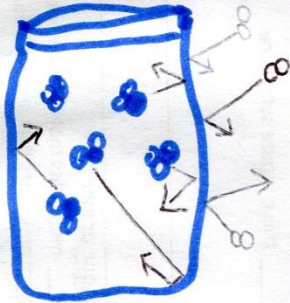
A magnet is an example of
non-kinetic energy

NOTE: this page is from a demo we did called "CAN CRUSH"

WHAT HAPPENED

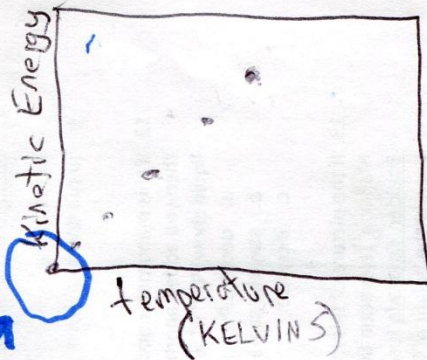
WHY:

① Before



② After
we touch the water to cool steam





"ABSOLUTE ZERO"

"KINETIC ENERGY is exactly proportional to temperature in Kelvins"

To convert from Kelvins to degrees Celsius, subtract 273

example

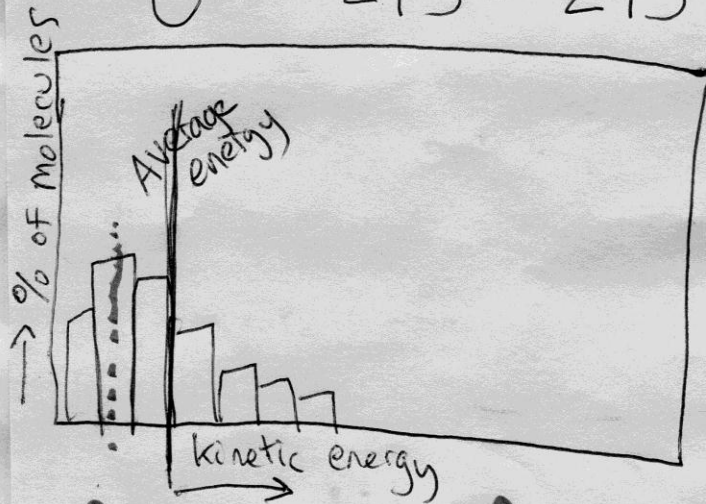
A 300 Kelvins room would be

$$300 - 273 = 27^{\circ}\text{C}$$

example

Find absolute zero in Celsius:

$$0\text{K} - 273 = -273^{\circ}\text{C}$$



If the right half
evaporates the
new average liquid
temperature
would be low.

UNITS of pressure for this room:

these are all equal pressure

1.0 "atmosphere" (atm)

101000 "pascals" (Pa)

760 . millimeters of mercury (mmHg)

101.000 ~~Pa~~ kilopascals (kPa)

Name several forms of energy in each drawing.
Bonus: name at least one form of energy in each which is NOT kinetic energy (challenging!)



Electric Kettle



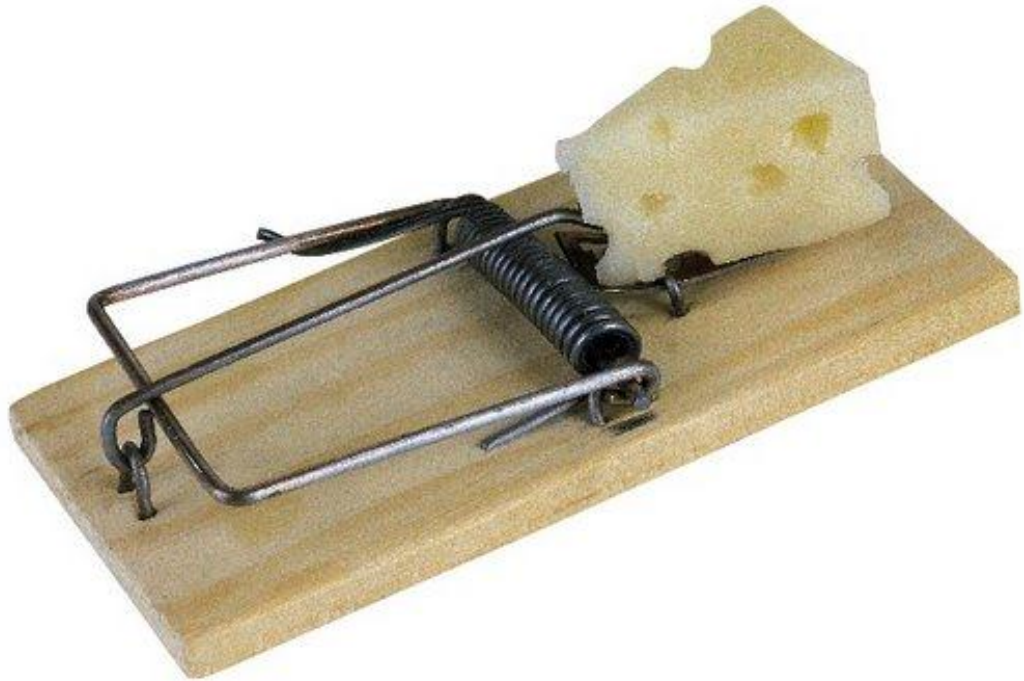
Traffic accident



Battery powered helicopter



mousetrap





Balloon blown up too far