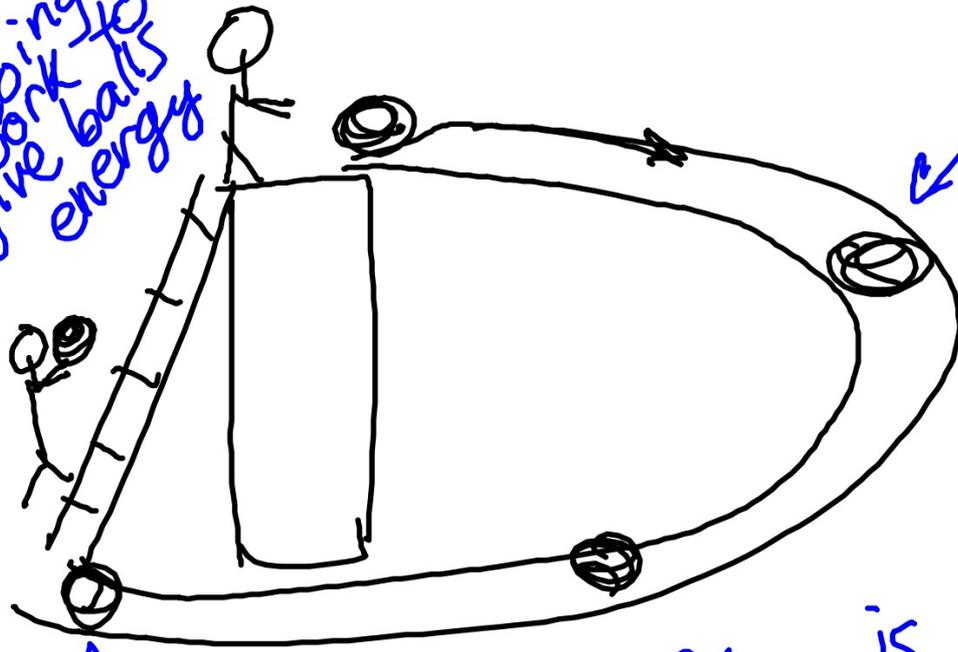


Bellwork 5/16

What happens when
storm clouds become
negatively charged?

Circuit analogy

doing work to give balls energy



losing potential energy

potential energy is zero

Notes

Charge (units: Coulombs "C")

- Smallest amount of charge - electron/proton
- 1 electron has $1.602 \times 10^{-19} \text{ C}$

Current - (units: amps "A")

charge symbol: q

current symbol: I

$$I = \frac{q}{\Delta t}$$

Voltage (units: $\frac{\text{Joules}}{\text{Coulomb}}$ or Volts)

Symbol: V

- The energy per Coulomb of charge

AA Battery (1.5 V) does 1.5 J of work on every 1 C it moves through the circuit.

To make electrons flow
↳ need a closed path (loop)
↳ need battery to be part of loop

