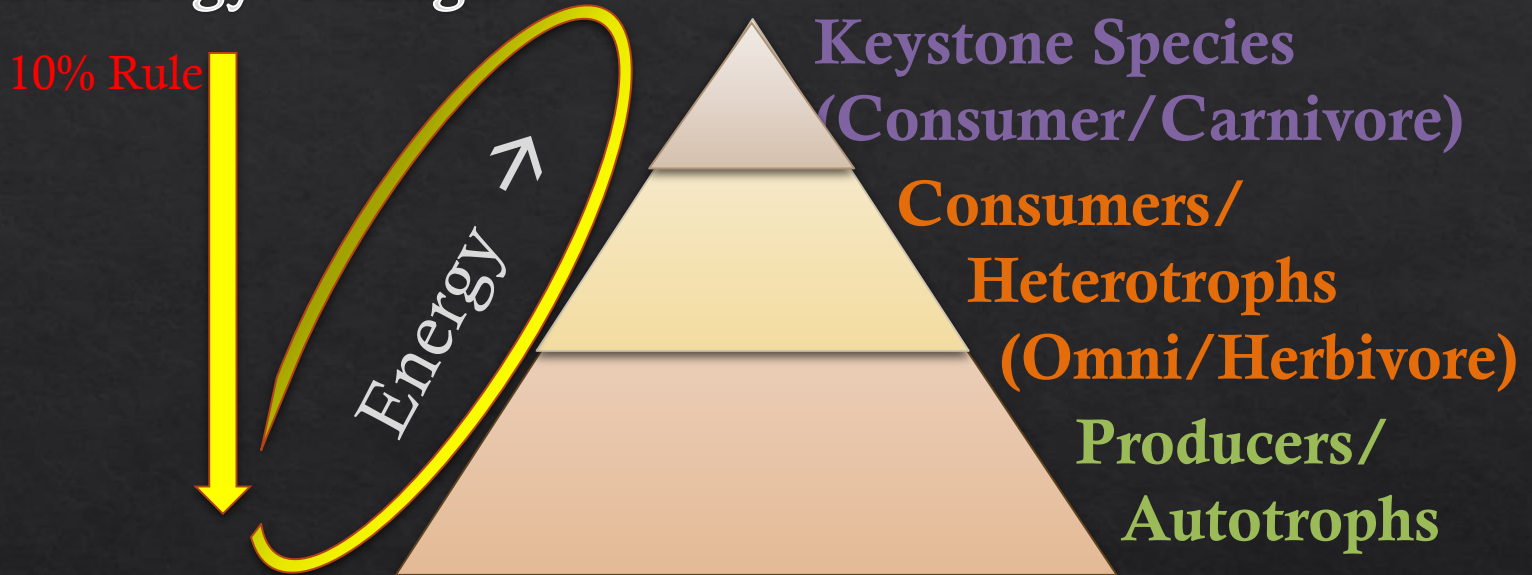


Flow of Matter and Energy

EQ: How does matter flow between abiotic and biotic factors?

Main Energy: Sunlight



- The energy from the Sunlight is absorbed by Autotrophs producing Glucose through Photosynthesis
- The energy from Glucose (Food) goes through Cellular Respiration or Fermentation to produce ATP.

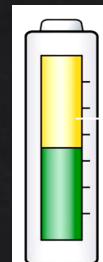
Energy (Cont.)

◇ Adenosine Tri-Phosphate: the usable energy of cells.



- Living things need energy to survive.
- Energy stored as ATP in cells.
- Energy is released by breaking the chemical bond between the 2nd and 3rd phosphates.

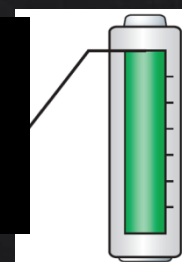
Adenosine Di-Phosphate



Partially
charged
battery

Adenosine Tri-Phosphate

Energy



Fully
charged
battery

Flow of Matter and Energy

Photosynthesis and Cellular Respiration have three important elements: Carbon, Hydrogen, and Oxygen

H_2O	Water (liquid)
CO_2	Carbon Dioxide
O_2	Oxygen (gas)
$C_6H_{12}O_6$	Sugar/Glucose

There are more elements and molecules involved, but these are the main molecules you'll need to learn.

