



Herbivores



Carnivores



Omnivores



Autotroph  
Producers



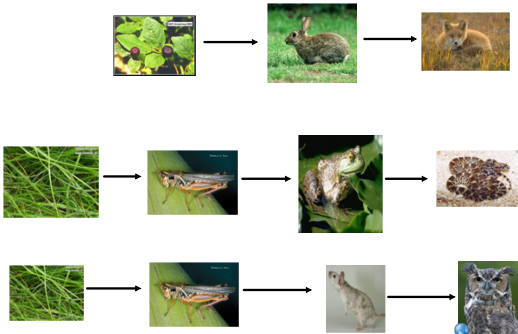
Consumers  
Heterotrophs

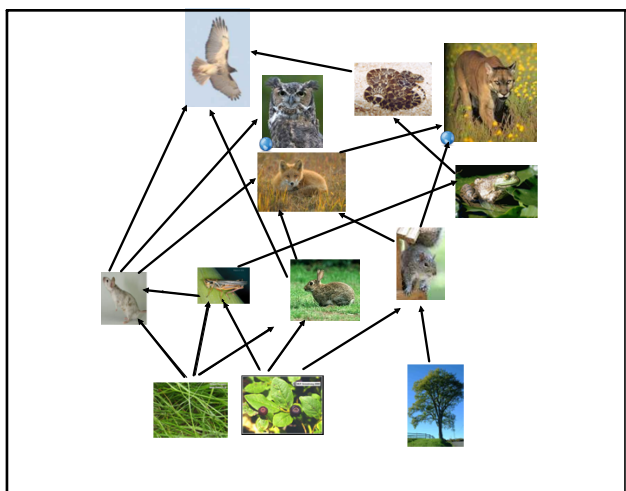


Decomposers



Food Chains





## Types of consumers

Primary (1°) -

Secondary (2°) -

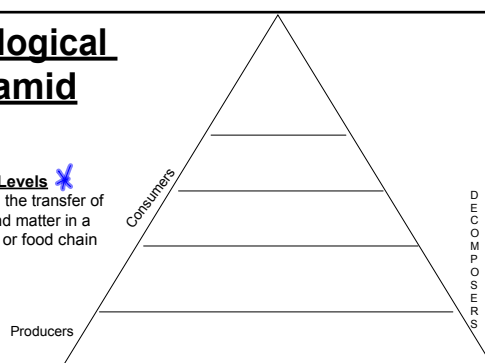
Tertiary (3°) -

Quaternary (4°)-

## Ecological Pyramid

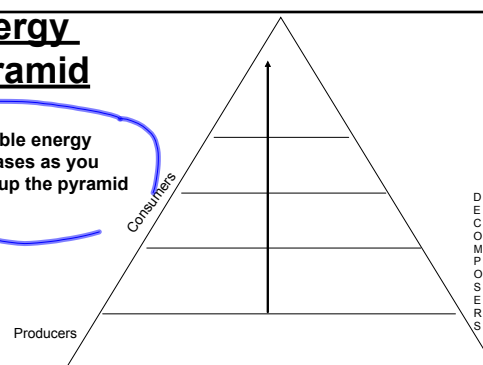
### \* Trophic Levels \*

- Steps in the transfer of energy and matter in a food web or food chain



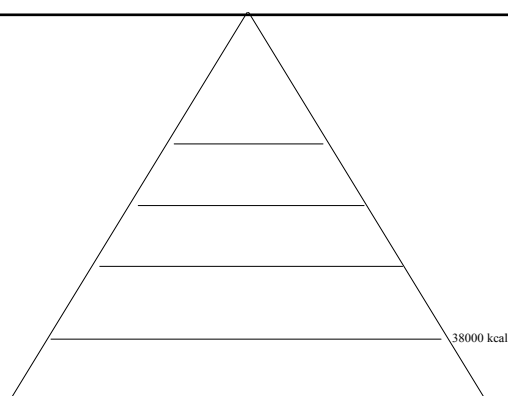
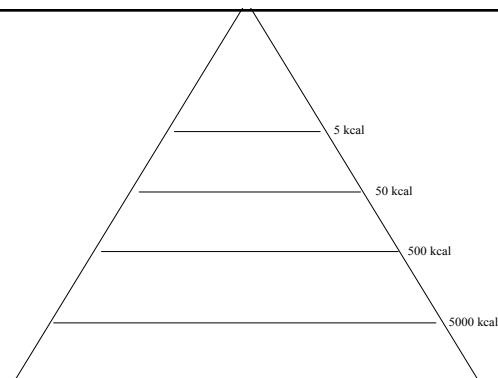
## Energy Pyramid

Available energy decreases as you move up the pyramid



### Law of 10%

- Energy is lost as you move up trophic levels on the energy pyramid
- 90% of the energy is lost with each food transfer in the food chain
- Heat, feces, cellular respiration, growth, etc
- 10% is stored as biomass in the next level of the food chain
- Amount of energy is small to top level consumers compared to lower level consumers

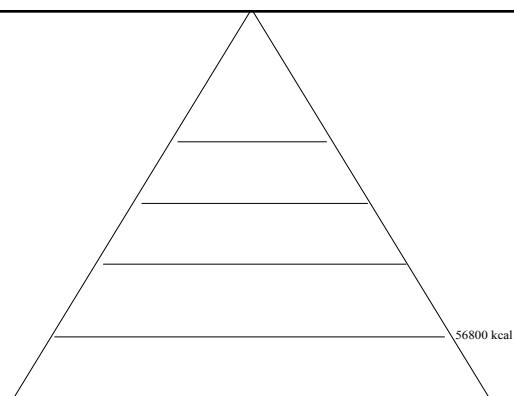


How much energy will be available to a tertiary (3<sup>rd</sup>) consumer?

- A. 38000    B. 380    C. 3800    D. 38

How much energy is lost from the level of producer to the secondary level?

- A. 34200    B. 37620    C. 37692    D. 38000



1) How much energy will be available to a secondary (2<sup>nd</sup>) consumer?

- A. 5680    B. 568    C. 56800    D. 56.8

2) How much energy is lost from the level of producer to the tertiary level?

- A. 51120    B. 56232    C. 56743.2    D. 56800

3) Define the following:

Carnivore  
Omnivore  
Herbivore

4) What is another name for a producer (not plant, grass, tree, etc)?

5) How much energy is brought forward to the next trophic level in an energy pyramid?

6) Write 4 out of the 8 characteristics of living things