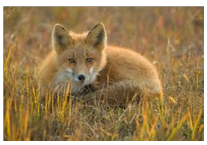
## Herbivores

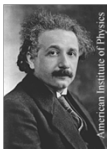
* EATS PLANTS ONLY

## Carnivores

* EAT MEAT ONLY



## Omnivores



EAT MEAT + PLANTS

## Autotrophs
## Producers



* MAKE THEIR OWN FOOD
- photosynthesis

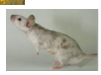
## Consumers

HETEROTROPHS







* MUST EAT TO GET ENERGY

## Decomposers


* BREAK DOWN DEAD/ DECAYING MATTER

## Food Chains

* All start w/ a producer



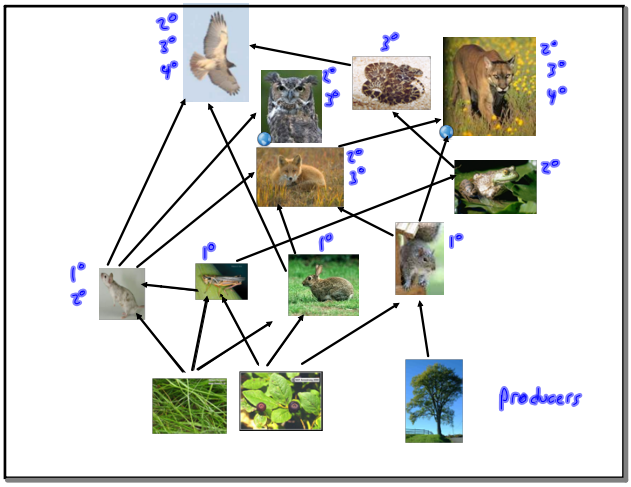








* Arrows represent the FLOW OF ENERGY




Types of consumers

Primary (1°) - EAT PRODUCERS

Secondary (2°) - EAT 1° CONSUMERS

Tertiary (3°) - EAT 2° CONSUMERS

Quaternary (4°)- EAT 3° CONSUMER

5° " 4° "

6° " 5° "

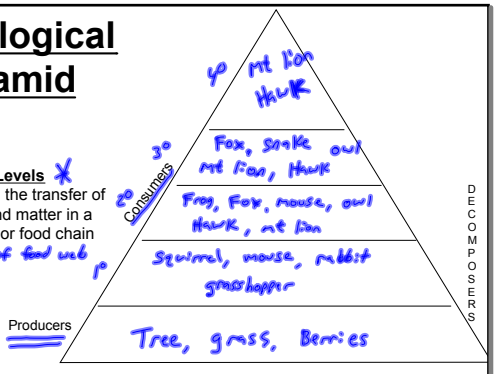
7° " 6° "

* Organisms can be *
at multiple levels
1°, 2°, 3°

## Ecological Pyramid

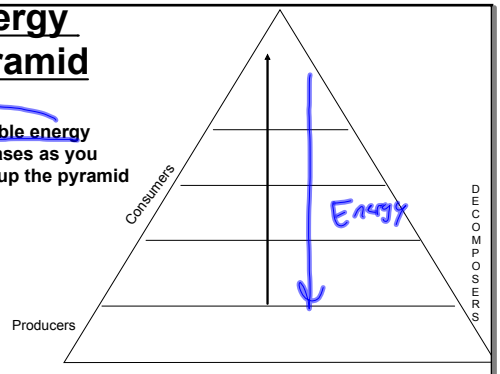
**Trophic Levels**
• Steps in the transfer of energy and matter in a food web or food chain

Levels of food web



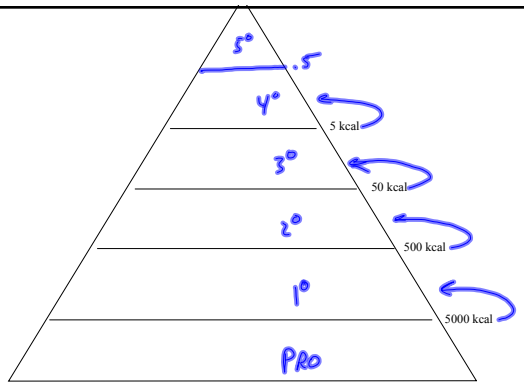

## Energy Pyramid

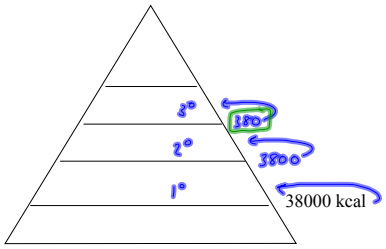
**Available energy decreases as you move up the pyramid**



## 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



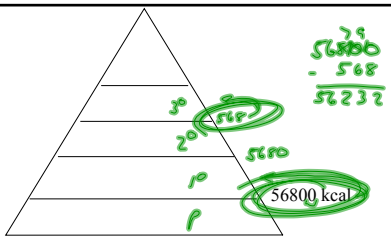




How much energy will be available to to a tertiary (3) consumer?

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

How much energy is lost from the level of prouducer to the seconda level?

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




1) How much energy will be available to to a secondary (2) consumer?

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

2) How much energy is lost from the level of prouducer 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