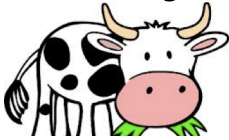


ENERGY FLOW IN AN ECOSYSTEM

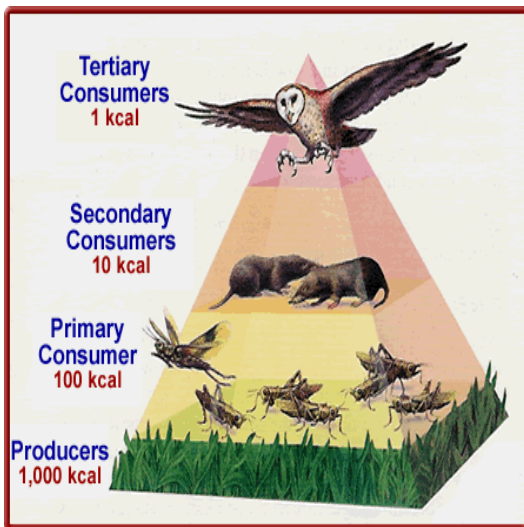
Interactions in the Environment #4

What do organisms need energy for?



Energy Pyramids

Only about ____% of the energy that an organism eats is passed on to the next level of a _____. As a result, there are usually no more than ____ levels to a food chain. There is just not enough energy to feed the top consumers.

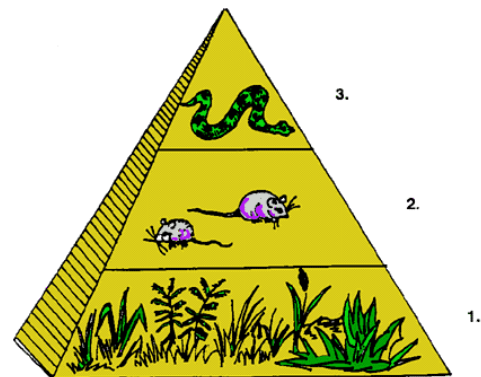


As you move higher in the food chain you will notice:

- Levels of energy get _____.
- Population sizes get _____.
- Organisms must eat _____ food in order to get enough energy (so you will see greater population sizes near the _____).

To maintain stable populations in an ecosystem, there must be _____ numbers of producers to provide enough food energy for all the levels of the ecosystem.

The wider the base (of _____), the more _____ can live in the ecosystem



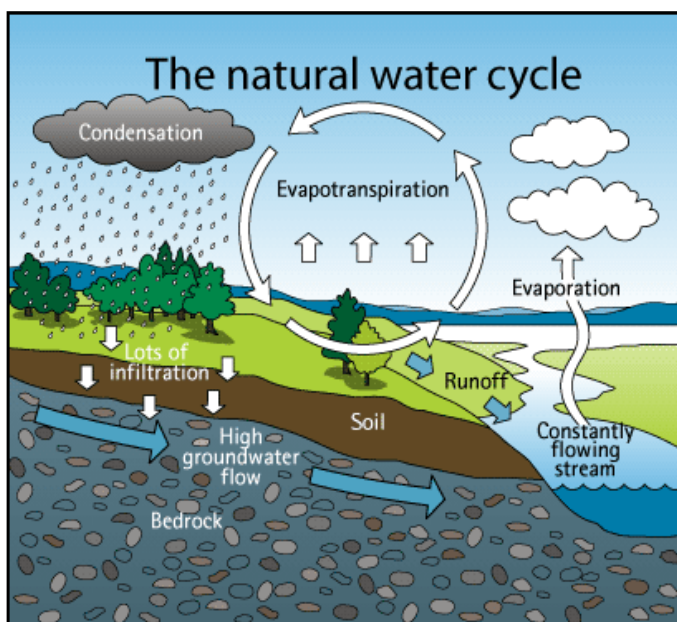
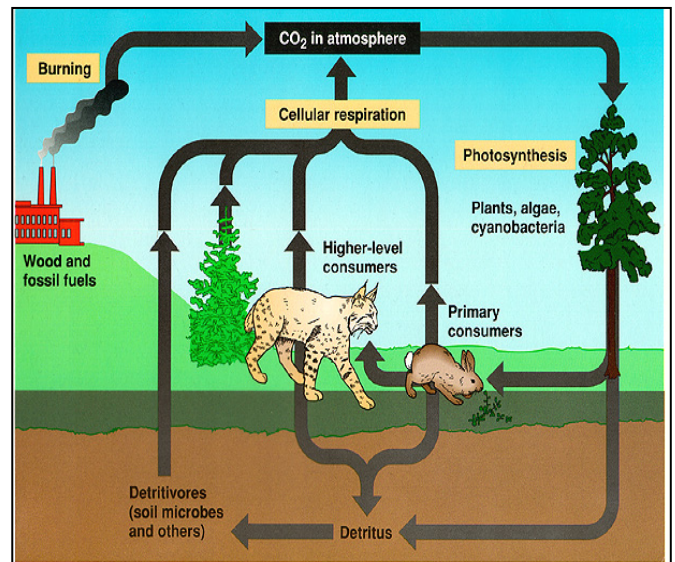
Cycling of Matter

- When organisms die, _____ and _____ break down organic matter in order to recycle the nutrients.
- These important nutrients include _____, _____, and _____.



Carbon Cycle

- _____ makes up all living things.
- Carbon is released into the atmosphere when _____, _____, and _____ is burned.
- Carbon is also released when organisms _____, _____, and when they _____.
- Producers take the carbon (as CO₂) out of the atmosphere and return it to the ecosystem.



Water Cycle

- Water keeps all living things _____.
- Water runs off along the surface (_____, _____) and collects in basins (_____, _____).
- Water also filters into and flows through _____ and _____.
- It evaporates into the _____ and condenses as _____.
- Water reenters the ecosystem as _____ and _____.