

ENERGY FLOW

Habitat - place where an organism lives.

Community - all living things in a particular habitat.

Ecosystem - the communities of several habitats and the non-living parts that interact together to form a distinct environment
e.g. Rain forests / coral reefs.

Producers - Plants (they make their own food) at the start of the food chain.

Consumer - Animals that eat other organisms for food.

Herbivore - consume only plants.

Carnivore - consume only meat.

Omnivore - consume plants and meat.

Detritivore - consume dead and decaying material.

The Sun provides the energy for all living things. Green plants capture some of this during photosynthesis, the energy is stored in the plants cells, the energy is passed on to other organisms that eat the plant. The transfer of energy can be represented in a food chain.

A pyramid of number shows the amount of organisms at each trophic level. Can end up oddly shaped.

A pyramid of biomass shows the mass of living material at each level per square metre. Always get a pyramid shape as the biomass decreases at each level.

Energy is lost at each stage of the food chain by:

- excretion
- reproduction
- respiration (for growth and energy)
- movement
- heat loss (particularly in mammals and birds, warm-blooded)

The efficiency of food production can be improved by:

- reducing the number of stages in food chain
- limiting movement