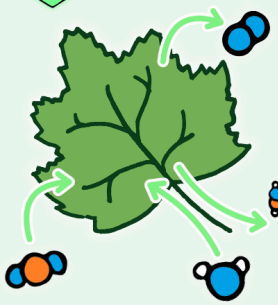
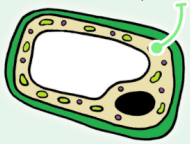
PRODUCERS

Organisms that produce their own food molecules by using energy from the sun



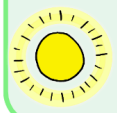
occurs in palisade cells which have lots of chloroplasts



GLUCOSE is produced which is converted and stored as STARCH which can be used to produce fruit or root vegetables that can be eaten by animals

"light" "making"

PHOTOSYNTHESIS



carbon dioxide + water → glucose (sugar) + oxygen (in air)

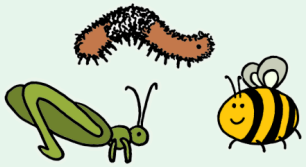
CO_2 H_2O $C_6H_{12}O_6$ O_2

CONSUMERS

Organisms that get their energy by eating other organisms: plants, animals or both

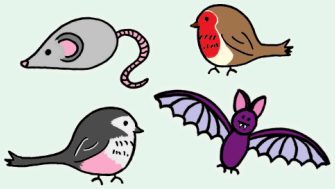
PRIMARY consumer

the first consumer in the food chain meaning it eats only plants



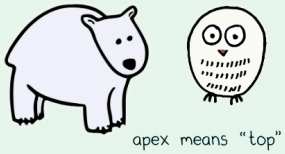
SECONDARY consumer

the second consumer in the food chain that may eat only animals or both animals and plants



APEX predator

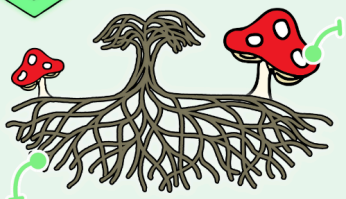
organisms at the end of a food chain that eat animals or both animals and plants AND do not get eaten themselves



apex means "top"

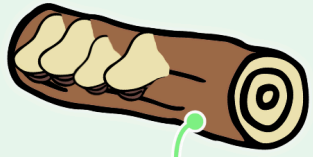
DECOMPOSERS

Organisms that get their nutrition by breaking down dead organisms via decay



the fruiting parts of the fungus is the mushroom which can be eaten but many are poisonous so don't try it!

mycelium is the fungal network in and beneath the soil that can be thousands of miles long and is important for other plant growth



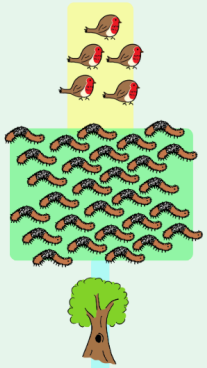
fungi break down dead organisms such as fallen leaves or wood into nutrients that can be used by other plants to grow

BIOMASS

bio = dead or living tissue

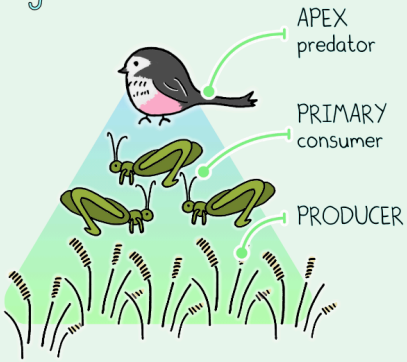
mass = amount of material in g or kg

Pyramid of NUMBER



often not a pyramid and doesn't show mass

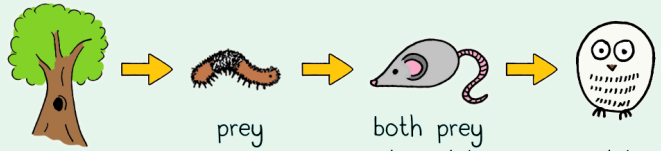
Pyramid of BIOMASS



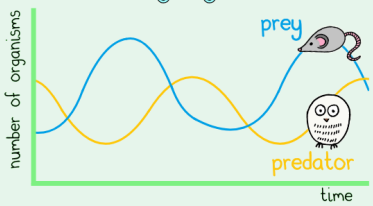
pyramids of BIOMASS are always a pyramid shape as the most mass is always the producer at the bottom

FOOD CHAINS

The sequence of organisms that eat one another from producer to apex predator



predator-prey cycle



the more prey available to eat, the more food there is for predators

UNTIL

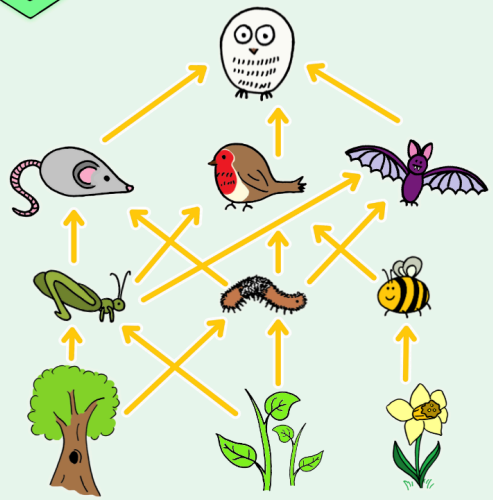
the prey cannot reproduce fast enough to feed the predators so the predator numbers decrease

THEN

with fewer predators, prey numbers can once again increase

FOOD WEBS

The combination of food chains that show multiple food sources for different organisms



if one organism dies out, it affects the whole web

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