

Box 1: Keywords

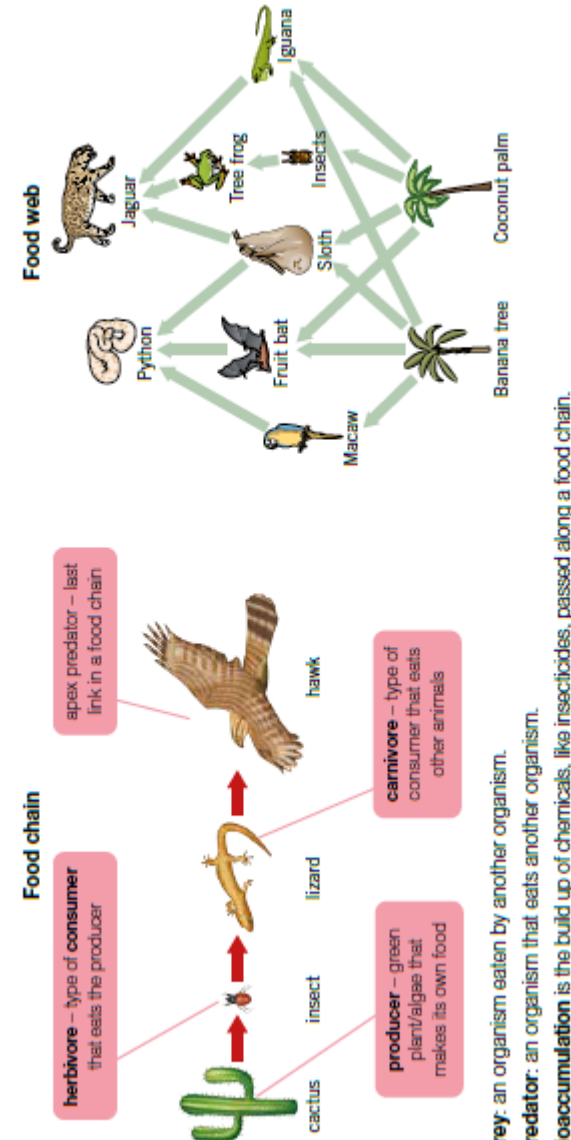
Word	Definition
adaptation	Features that allow an organism to be successful
bioaccumulation	Build up of toxic chemicals up a food chain
community	Different types of organism present in an ecosystem
decomposer	Organisms that break down dead materials returning nutrients to the soil
ecosystem	Interaction between plant, animals and their habitat in a location
environment	Conditions found in a habitat
Food web	Set of linked food chains for an area
producer	Organism that makes its own food using photosynthesis

Box 2: Key skills

Interpreting diagrams of feeding relationships; using graphs to model predator/prey relationships, use quadrats to sample populations

Box 3: Food chains and webs

Food chains show the transfer of energy between organisms – the arrows represent the direction of energy transfer.
Food webs show how lots of food chains are connected in an ecosystem.



Box 4: Competition

Adaptation

- Adaptations are characteristics that help an organism to survive and reproduce.

For example, the cheetah is the fastest land animal. This speed makes it a very successful predator.

Environmental changes

- Plants and animals adapt to changes in their environments.
- Habitats can change through fire, climate change, or disease causing reduced food supplies.

For example, deciduous trees look different in each season, and bears hibernate somewhere warm in the winter.

Interdependence

- Predator and prey species are **interdependent**.
 - This occurs when a change in the population of one animal directly affects the population of the other.
- For example, Canadian lynx and the snowshoe hare are interdependent:
- When the prey (hare) population increases, the predators (lynx) have more to eat, the lynx survive longer and reproduce more, so the number of predators increases.
 - The increase in predators means that more prey are eaten, so the prey population decreases.
 - The predators then do not have enough food, so their numbers decrease, and the prey population increases again.



Box 5: Competition

Animals compete for food, water, space(to hunt/shelter) and for mates. Plant compete for light, water, space and **minerals**.

Predator/Prey

When a predator feed on just one type of prey, there is an interdependence between the predator population and the prey population. This means that changes to one affect the population of the other

Many populations are interdependent and rely on other organisms, out side their own species, to survive, grow and reproduce

Box 6: Pathway

KS1 – Plants and animals live in a habitat which provides them with the things they need

KS2 – animals and plants are adapted to the habitat in which they live

KS4 – Organisms in an ecosystem are affected be biotic and Abiotic factors

KS5 – measuring populations

Box 7: Cross curricular links