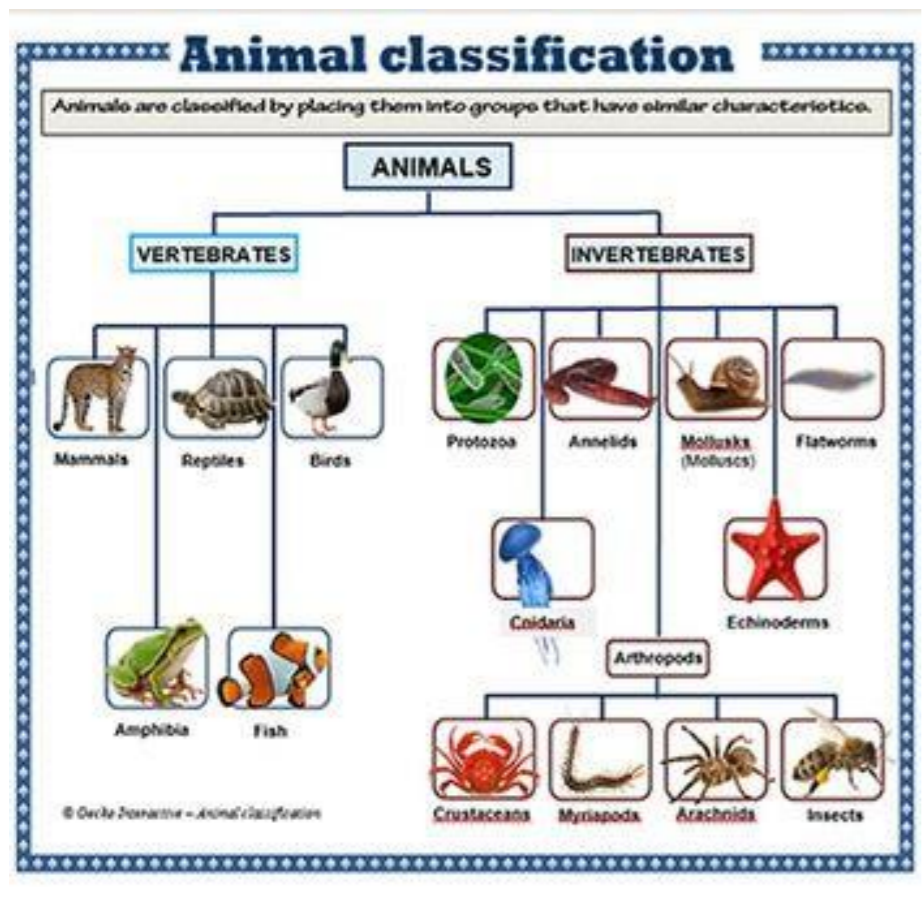


Definition

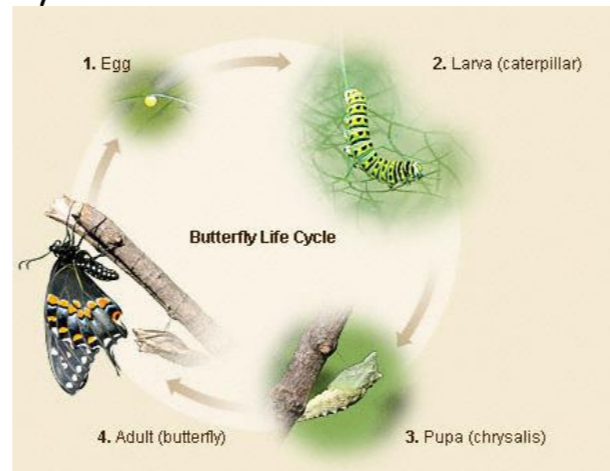
A mini-beast is a small animal without a spine, called an invertebrate. To protect their soft bodies, some mini beasts have developed a hard, outer shell called an exoskeleton.



Monarch butterfly life cycle

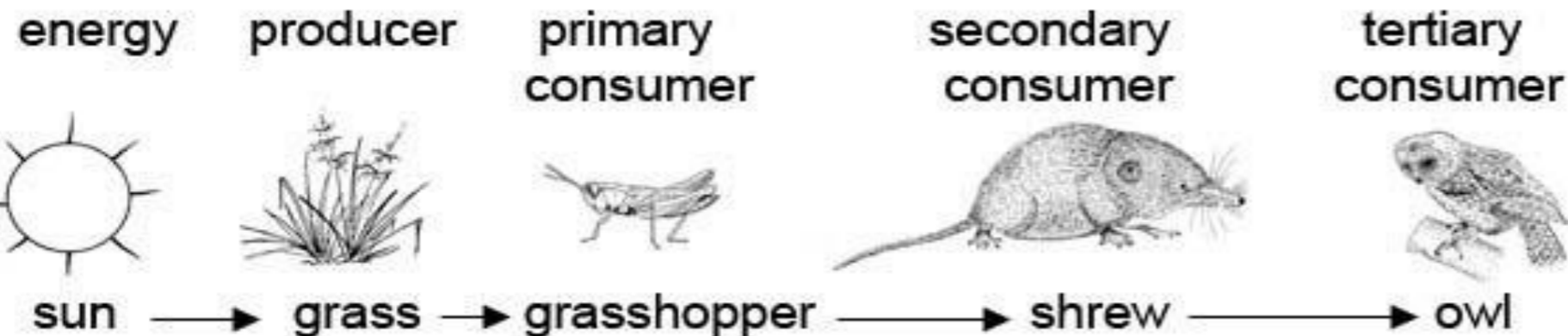
All living things have a life cycle. Some mini -beasts have a life cycle called metamorphosis and experience complete transformations as they move from one stage to the next.

- **Stage 1:** the female butterfly lays hundreds of **eggs** at one time and uses a special 'glue' to stick them to a leaf. This takes around 3-5 days.
- **Stage 2:** Small **caterpillars** hatch from the eggs. Over the next 9-14 days, they eat an enormous amount of food, grow rapidly and shed their skin (moulting).
- **Stage 3:** The caterpillar transforms into a **pupa** called a chrysalis. The pupa is covered in a hard case. Over the next 8-15 days, the caterpillar's body transforms into a butterfly.
- **Stage 4:** The **butterfly** emerges from the pupa and allows its wings to dry. After a few hours, the butterfly is ready to fly. It lives for between 2 and 5 weeks.



Glossary

Antennae	A pair of long, thin sensors attached to the head of an arthropod.
Camouflage	Ability to blend in with surroundings.
Consumer	A person/animal that eats something in a food chain.
Exoskeleton	A hard outer layer that supports and protects an animal's body.
Habitat	The environment where an animal lives.
Invertebrate	An animal with no spine.
Metamorphosis	A process by which an animal's body changes structure.
Mandible	A mouth part that grasps and cuts.
Microhabitat	A smaller place or environment where a living thing lives.
Mimicry	The ability to copy something else.
Moult	To lose skin, feathers or hair as part of a natural change or growth.
Organism	A living thing such as a plant, animal, bacteria or virus.
Predator	An animal that kills and eats other animals.
Producer	A living thing that can make its own food using energy from the Sun.
Segment	A part of an insect's body.
Venom	A poisonous substance that animals use to injure, paralyse or kill their prey.



Food chains show where living things get their energy. Food chains start with a producer that makes its own food. Anything that eats another living thing is a consumer. A food web shows how several different food chains are interconnected.

Protection

Many mini-beasts have developed ways to protect themselves. Some use warning colours, camouflage, mimicry or play dead. Others have developed stings, bites or sprays.



The ladybird's colours act as a warning to predators.



The peppered moth uses camouflage to blend in.



Spots on a peacock butterfly mimic the eyes of a larger animal.