- *Class Oligochaeta* —> E.g. earthworm - lack of cephalisation (no distinct head), few chaetae, No parapodia, nocturnal (only come out at night), Hermaphrodite - cross-fertilisation via clitellum, Direct life cycle, no eyes, Detrivore (feeds on dead vegetation and matter), maintain sold structure and fertility, aerate soil - improving drainage and allowing oxygen to reach plant roots. Reproduction: Clitellum of 2 earthworms align - each possess a cocoon- exchange gametes & fertilise each other.
- *Class Hirudinea* —> E.g. leech - no distinct head, no parapodia, clitellum present, ectoparasite, 3 chitinous teeth in a Y-shape, used in medicinal practice since they remove any blood clots and help in cleaning the wound.

Arthropoda
- Jointed limbs
- Most successful phylum - 80% of all living animal species.
- Bilateral symmetry, Triploblastic, Coelomates, Metameric segmentation, mouth & anus present
- Jointed appendages present, exoskeleton made of chitin/calcareous matter.
- Segments fused into a magmata (specialised segments), haemocoel present (blood filled region between ectoderm and mesoderm)
- Open circulatory system & internal fertilisation present.
- *Class Insecta* —> Mostly terrestrial, have 3 segments - head, thorax and abdomen, pair of simple & compound eyes, pair of antennae, internal fertilisation, 3 pairs of legs attached with 1 or 2 pairs of wings, Dioecious (male + female),undergo complete & incomplete metamorphosis, important for the environment & ecosystem - production of honey and silk and as decomposers.
- *Class Crustacea* —> Mostly aquatic, gills present, larval form occurs, dioecious, cephalothorax (head and thorax combined), appendages modified for swimming, mandibles hold and cut, 2 pairs of maxillipeds to shred and pass food.
- *Class Arachnida* —> terrestrial, simple eyes, no larval form present, no antennae, no 'true' mouthparts, 4 pairs of legs present, cephalothorax present, respiration through lung books.

Mollusca
- Soft bodied animals that have an internal or external shell.
- Snails, oysters, slugs, clams, octopuses and squids.
- Bilaterally symmetrical, Triploblastic, Coelomates, Unsegmented, Haemocoel, Body divided into a head, ventral muscular foot (adapted for locomotion, attachment, food capture), and a dorsal visceral hump (contains excretory, digestive and circulatory organs), Except for Cephalopoda all have an open circulatory system, respiratory pigment is haemocyanin - blue pigment containing copper, presence of trochophore larva, Most engage in external fertilisation.
- *Class Gastropoda* —> E.g. Helix aspersa (land snail) - asymmetrical, anus is anterior, large flat foot present - used for locomotion which contains a slime gland that secretes a film of mucus over which the snail moves by means of wavelike contractions of the muscular foot, Visceral mass is contained in a spirally coiled shell due to rotation of hump during growth (torsion - anus near mouth), distinct head with eyes & sensory tentacles, presence of radula - rasping tongue-like structure used for feeding, internal fertilisation, hermaphrodite, cross fertilisation, land forms lost gills and converted mantle cavity into a lung.
- *Class Bivalvia* —> E.g. Ostera (oyster) - aquatic, bilateral symmetry, posterior anus, filter feeders, external fertilisation, head greatly reduced in size, no tentacles, foot reduced in size, shell consists of 2 hinged halves called valves, no torsion of visceral mass, adductor muscle present - keeps shell closed for protection, gills present 0 used for respiration and are covered with cilia causing water currents and allow water to enter through the inhalant siphon, moved toward the mouth and digestion takes place.
- *Class Cephalopoda* —> E.g. Octopus vulgaris (octopus) - aquatic, bilateral symmetry, no torsion of visceral mass, shell often reduced and internal or absent (octopus), head highly developed, tentacles with numerous suckers present, well developed eyes, anus is posterior, internal fertilisation, gills are present, adapted for fast swimming, food modified to form part of the head and the tentacles, radula/horny beak present, carnivorous predators, able to inject a poison from the mouth into the organism to paralyse it, ink sac near anus to distract predators, have highly