

# (Arthropods)

Jointed foot

## Defining Characteristics

- 1) Segmented & specialized Parts  
 ↳ nearly identical, ↳ such as wings, antennae  
 gills, pincers, claws
- 2) Jointed limbs → Jointed limbs, legs, body parts  
 - easier locomotion
- 3) Exoskeleton → made of chitin, support the body  
 - allows for precise movements  
 - protection, prevents dehydration
- 4) Well developed Nervous system  
 - Head w/ brain & nerve cord  
 - Sense organs (eyes, bristles, & antennae)

Subphylum myriapoda - class Chilopoda & Diplopoda	Centipedes 1 pair legs — ↓ Millipedes 2 pair/leg	one pair legs/segment <del>one pair antennae</del> - hard head - pair mandibles - mouth parts for chewing & piercing food
--	--	---

## Crustaceans

- Shrimp
- Barnacles
- Crabs
- Lobster

- most live in  $H_2O$

- gills

- mandibles

- 2 compound eyes

- eyes on eye stalks

- 2 pairs of antennae



## Arachnids

- Spiders
- Ticks & Scorpions
- mites

- Cephalothorax = head + thorax

- most have 4 pair (8) legs

- no antennae

- no mandibles

- Instead have chelicerae (claw-like)

- simple eyes

- Ticks = Parasites

-

# Insects

- Beetles, mosquitos, bees, ants, flies
- Most abundant group
- All have 3 main body parts: Head, thorax, <sup>96/100</sup>abdomen
- live everywhere
- most helpful  $\rightarrow$  pollinators <sup>except</sup> oceans
- some pests <sup>nts of legs</sup> <sup>are wings</sup> <sup>on X</sup>

Complete Metamorphosis  
 egg  $\rightarrow$  larvae  $\rightarrow$  pupae  $\rightarrow$  adult

---

Incomplete Metamorphosis  
 egg  $\rightarrow$  nymph  $\rightarrow$  adult

$\sim 12\%$  of insects