

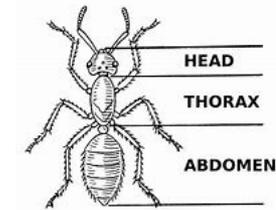
Roly and Myrie



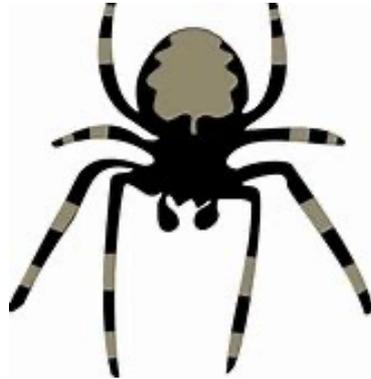
Crustaceans and Myriapods

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Arthropods have exoskeletons; that means that their skeletons (hard structures) are outside their bodies like a suit of armor. Their exoskeletons are made of a cellulose like material, chitin, and minerals.



They also have bodies in segments (parts) and jointed (like our knee or shoulder) legs. There are appendages (like our legs and arms) or body parts, attached to the segments.

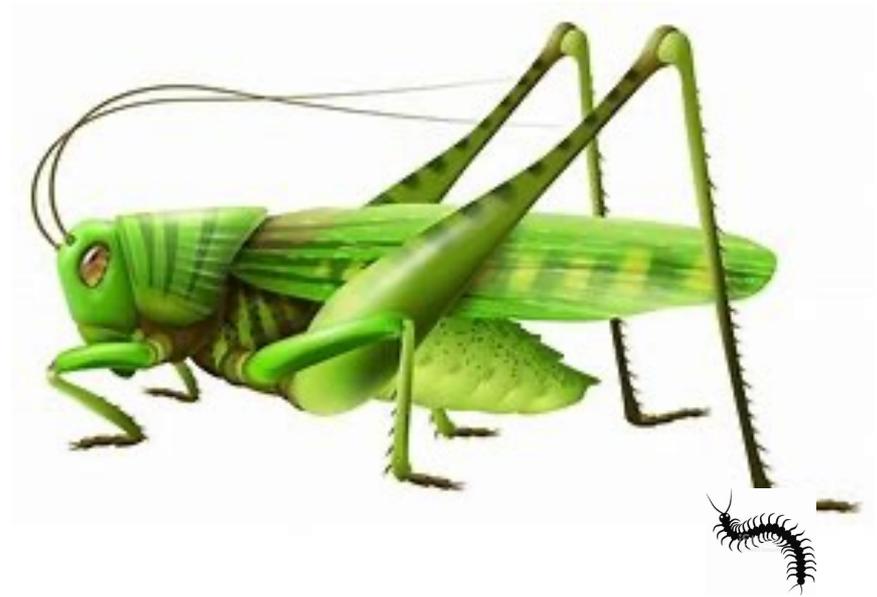


Arthropods or Creepy Crawlies

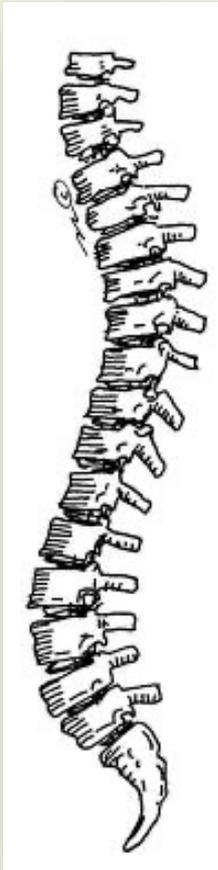
- Arthropods include insects like ants and bees, arachnids like spiders, myriapods like millipedes and centipedes, and crustaceans like pill bugs.
- Tap your forehead, elbow, knee. Can you feel the hard bone under your soft skin? Those bones are part of our skeletons that give structure to our bodies. Our skeletons are inside our skin.



- There are several kinds of arthropods (segmented body, exoskeleton, segmented legs)
- Arachnids—8 legs, chelicerae (used for eating), 8 eyes, pedipalps (used for bringing food to the mouth), 7 segments in legs, 2 body parts (cephalothorax =combined head and thorax, and abdomen)
- Insects—6 legs, some wings, antennae, variable eyes but generally 2 compound eyes and 3 simple eyes, 3 body parts (head, thorax, abdomen)
- Crustaceans—like woodlice or pill bugs—long segmented body and segmented legs—some crustaceans have claws and antennules (small antennae).
- Myriapods—long segmented bodies and many legs.



Arthropods



- Exoskeleton=skeleton outside so they moult to grow,
- no backbone,
- jointed legs,
- segments=body divided,
- appendages=parts attached,
- cuticle made from chitin.

Pill bugs Sow bugs Roly polies Woodlice—Isopods

Land isopods have bodies flattened top-to-bottom, segmented, oval so t head, thorax, and abdomen aren't distinct, compound eyes, 2 pairs of antennae, chewing mouthparts, 7 pairs of walking legs the same, 5 pairs of 2-parted gills protected by an operculum, uropods and a telson at the rear.

Common land isopods include:

The common woodlouse, pillbug, or roly-poly and sowbugs.



Millipedes and centipedes—same and different



Millipedes have two sets of legs per segment under their body. Centipedes have one set of legs per segment on the side of their body. Centipedes mostly eat insects.. Millipedes feast on decomposing plants.

Creepy arthropods!

My appendages are attached (fingers wiggling)

And my body is divided (fingers straight out)

Into segments with jointed legs (fingers curled)

And skeleton outsided! (patting body)





Creepy,
Creepy
Crawlie to
Clementine

I'm a creepy, creepy crawlie (fingers wriggling)

And my body does divide, (hands parting)

Jointed legs and many segments, (touching chest)

And the skeleton outside! (hands over body)

Crustaceans have 3 body parts, with the middle segmented with a pair of appendages per segment. They have antennae and antennules by the mouth. Woodlice, also known as Pill Bugs or Roly Polies have seven segments with a pair of legs on each, 2 pair of antennae, and three pair of mouthparts. They get most of their sensory information through their antennae.



Myriapods include centipedes and millipedes. They have a head with a pair of antennae and pair of jaws, long body formed by rings, divided into head and trunk, with 1-2 pairs of legs per ring.





Roly Poly (crustacean) and myriapod (many segments, many legs) snacks....

As you walk in the park, look in the leaf litter for pill bugs; is that a centipede on the wall?

Be an arthropod engineer!

Could you use play dough for the body, a fork to make the segments, and toothpicks for legs and antennae?



Pill Bug Doodles



the lifestyles of roly polies

Mike Marshall

Pill bugs
have
lifestyles!
