

# Millipede Facts



**Common Name:** Millipede

**Scientific Name:**

*Eurymerodesmus spp.*

**Kingdom:** *Animalia* **Phylum:**

*Chordata* **Class:** *Diplopoda*

**Order:** *Polydesmida* **Family:**

*Eurymerodesmidae* **Genus:**

*Eurymerodesmus* **Species:** *spp*

Millipedes are worm-like docile decomposers with like many tiny legs, but not thousands as their name suggests. They're often seen in moist microhabitats like rotting logs, under rocks and in leaf debris.

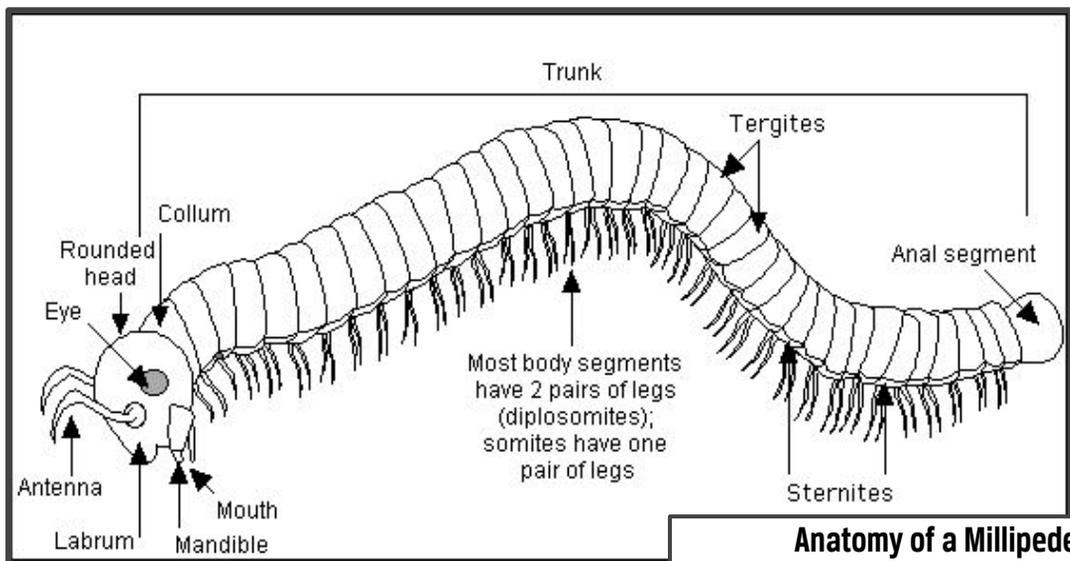
## Habitat, Anatomy and Life Cycle

- ★ There are over 12,000 species of millipede around the world. They are usually seen in moist deciduous forests, mountains and even deserts.
- ★ Some species can survive floodplain areas and can be submerged in water for 11 months.

# Millipede Facts

- ★ Millipedes are arthropods, meaning they are invertebrate animals with segmented bodies and an exoskeleton like insects, spiders and crabs.
- ★ The term “millipede” comes from the Latin word *mil*, which means thousand and *ped* meaning feet. Despite their name, millipedes do not have thousands or millions of feet. They usually have 47 to 197 pairs of legs depending on the species, while the greatest number known is 750 feet.
- ★ Aside from many legs, millipedes have a segmented body.

Each body segment has two pairs of legs called diplosomites. The first segments have only one pair called somites, while the anal segment or the second-to-last pair has no legs. The top of a segment is called tergite (tergum) while the underside located between the pair of legs is called sternite (sternum). Most species have 25 to 100 segments, wherein each pair of legs move in a wave-like motion. Their body is divided into two: the head and trunk. They have poor vision and breathe through spiracles. Spiracles are holes located along the body. They have an elongated body that can be 1 to 12 inches long.



# Millipede Facts

- ★ Most species of millipede are black or brown in color, while some are brightly colored. The brightly colored species are usually toxic to predators.
- ★ At birth, most millipedes have six body segments and three pair of legs. Each time they molt, body segments and legs increase in number. This process is called *anamorphic* development.
- ★ Millipedes are covered with a hard shell called an exoskeleton. Since they have poor vision, they have antennae, which help them sense their surrounding.
- ★ Unlike other arthropods with relatively short lives, millipedes can live between 7 and 10 years.
- ★ Most male millipede species do not have legs on the 7th segment to give space for the gonopods or sex organs. They use modified legs to transfer the sperm packet to a female during mating. Females receive the spermatophore through the vulvae located behind the second pair of legs.



## ***Millipedes mating***

- ★ After mating, most female millipede species lay 20 to 30 eggs, while some give birth to live young. Female millipedes burrow in warm soil where they can lay their eggs and cover them with a protective capsule usually out of their own feces.
- ★ The eggs hatch into legless larvae. During their first molting, millipedes develop legs and continue to develop more each time they molt. After molting, they eat their old exoskeleton.
- ★ Most millipedes are herbivores that eat plants and decaying plant matter, while few are carnivores or meat-eaters.

# Millipede Facts

- ★ Based on fossil evidence, millipedes were among the earliest animals to move from water to land.
- ★ The oldest fossil specimen found was the *Pneumodesmus newmani* embedded in Silestone in Scotland. The spiracles date back to 428 million years ago.



## Behavioral Traits

- ★ Millipedes are nocturnal and prefer to live in damp places. Compared to centipedes, millipedes walk slowly. They do not have stings or fangs to protect themselves from predators, but they can produce a foul odor and secrete a substance that may cause a burning sensation through their stink glands called *ozopores*. Their usual predators are assassin bugs, slugs, dung beetles, birds and frogs.
- ★ In times of danger, millipedes curl their body into a tight spiral exposing the hardened plates while protecting the soft underside.
- ★ Male millipedes court females for mating. During this time, males walk on the female's back and give her a relaxing massage and produce a calming sound to arouse his partner. When females are uninterested, they usually coil up to prevent males from transferring sperm.

# Millipede Facts



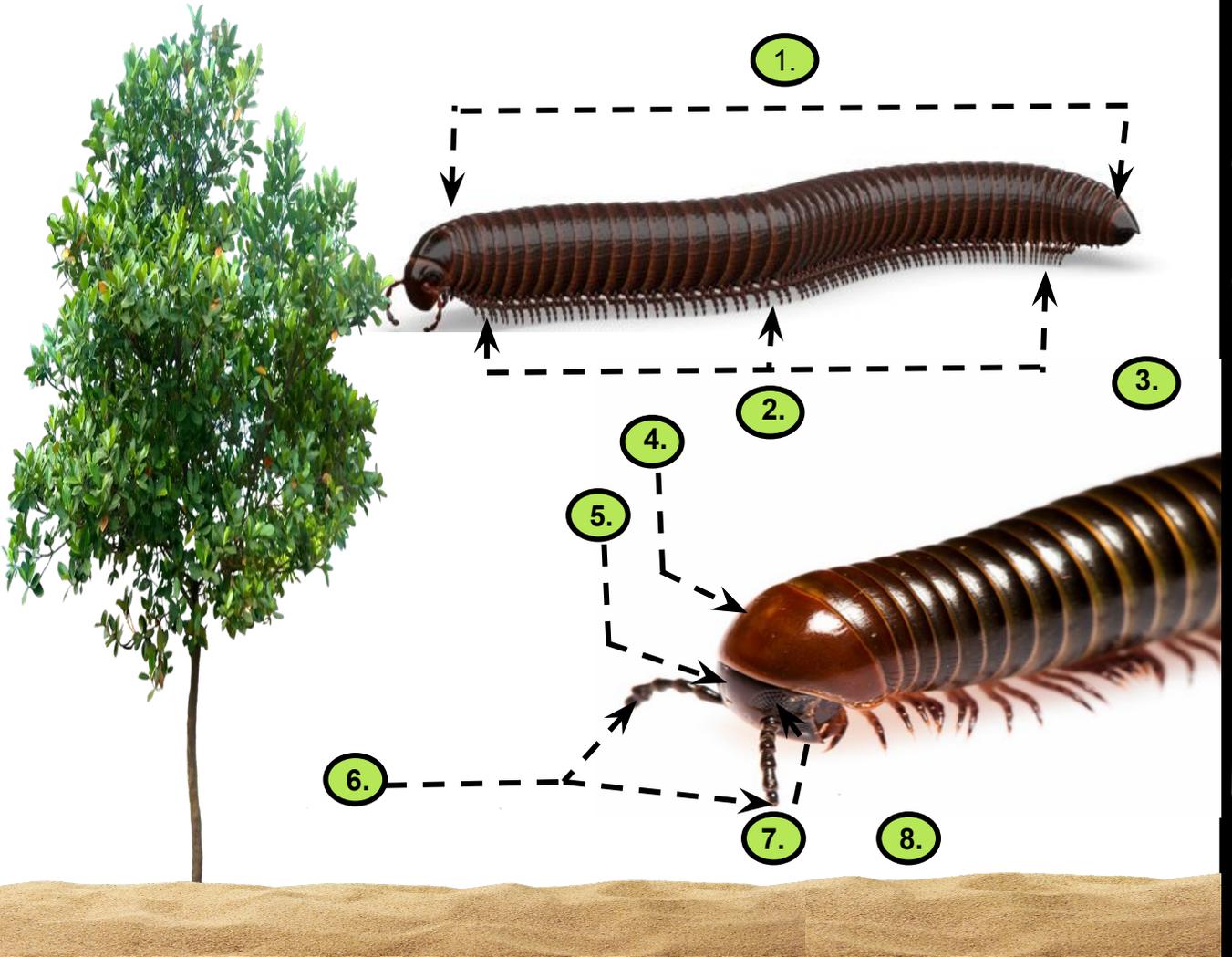
- ★ Another reason to find a millipede curled up is because they are dead.

## Additional Milli Facts

- ★ Great African millipedes are the world's largest known species of millipede and can grow up to 12 inches long with 30 to 40 segments.
- ★ The North American millipede can grow up to 3.9 inches. It is dark reddish-brown or black with a red line on each segment.
- ★ Millipede species like Badplaas black millipede, Ruby-legged black millipede, and Zululand black millipede are considered endangered due to pollution and habitat loss.
- ★ Most species are abundant in the wild. Some can even cause problems in the garden by eating seedlings and leaves.
- ★ Compared to millipedes with round elongated bodies, centipedes are flat. Moreover, each segment of their body only has one pair of legs.

Name: \_\_\_\_\_

# Millipede Anatomy



1. \_\_\_\_\_

5. \_\_\_\_\_

2. \_\_\_\_\_

6. \_\_\_\_\_

3. \_\_\_\_\_

7. \_\_\_\_\_

4. \_\_\_\_\_

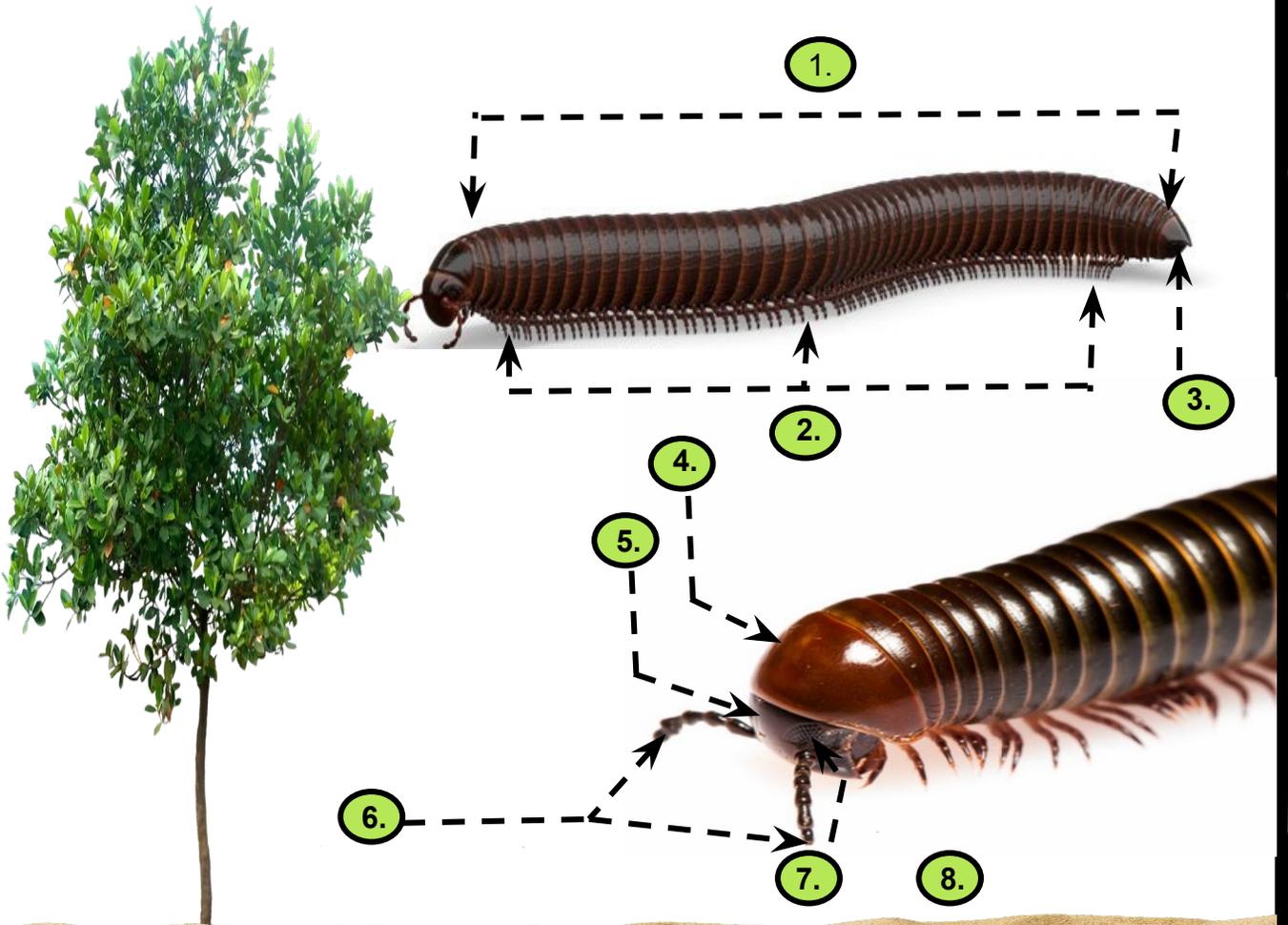
8. \_\_\_\_\_



Millipede

Millipedes are arthropods with an exoskeleton and body composed of segments. Label their body parts properly.

# Millipede Anatomy



- |                        |                        |
|------------------------|------------------------|
| 1. <b>Trunk</b>        | 5. <b>Rounded head</b> |
| 2. <b>Legs</b>         | 6. <b>Antenna</b>      |
| 3. <b>Anal segment</b> | 7. <b>Eye</b>          |
| 4. <b>Column</b>       | 8. <b>Mandible</b>     |



Answer Key

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