



The Microscopic Big Five (Intermediate)

Observing a nematode



Connect with nature
Promote microscopy
Inspire STEM

You have found a nematode

Use this guide to help you observe it.

Nematodes are worm-like, with a long slender, wriggling body.

The key things to look for at x40

- Identify the tail and the head ends.
- Use the diagram (right) to identify key features of your nematode.

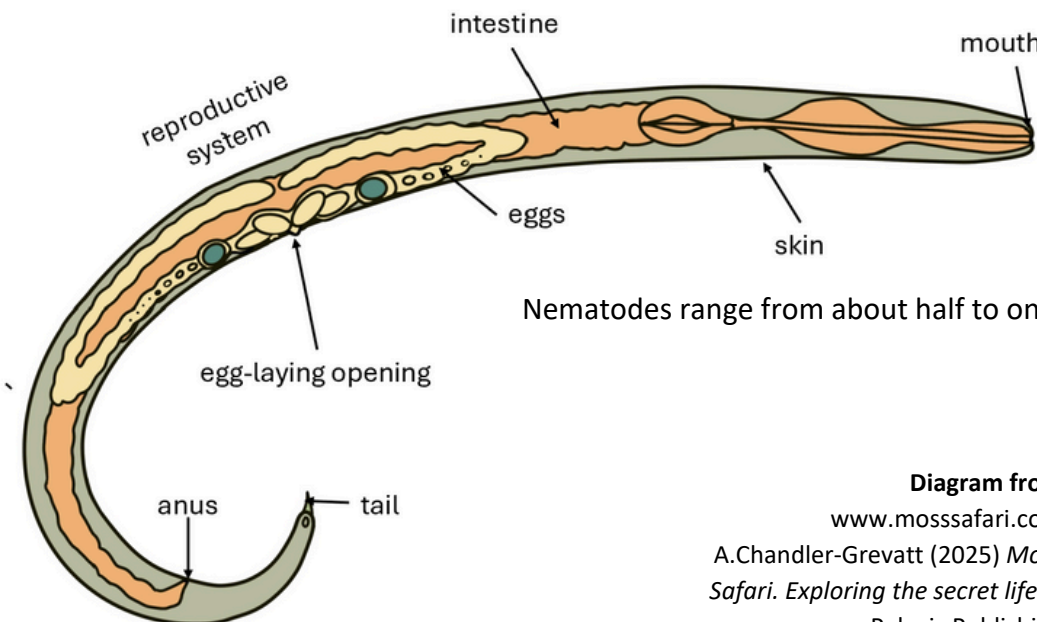
The key things to look for at x100

- If the nematode is adult, you should be able to observe developing eggs.
- Look closely at the mouth parts: fungi and bacteria feeders tend to have flat mouths, whereas carnivorous species have spikes or pointed mouth parts.

Draw your nematode and label the features you can see.

Use a scale bar to show its length.

Find out how the nematode uses its adaptations to survive.



Nematodes range from about half to one millimetre in length

Diagram from
www.mosssafari.com
A.Chandler-Grevatt (2025) *Moss Safari. Exploring the secret life in moss.* Pelagic Publishing



What is it doing?

Nematodes wriggle their bodies to move through moss. When they are drying out, they curl into a circle. Sometimes, you will see the nematode is not moving: it could be resting or dead. They have sticky tails to hold onto a surface.

As they grow, nematodes shed their skin four times.

So what?

Nematodes are important because, although they are tiny, there are so many of them that together they make up a huge amount of living material on Earth (biomass) and play a major role in keeping soils and ecosystems healthy.

Research on nematodes has won three Nobel Prizes in science, including the discovery of the 'death gene'.



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