Observing a rotifer

You have found a rotifer

Use this guide to help you observe it.
Rotifers are tiny **invertebrate** animals that live in water around moss. They have a short body and a "wheel" of moving hairs at their head.

The key things to look for at x40
- Identify the tail and the head ends.
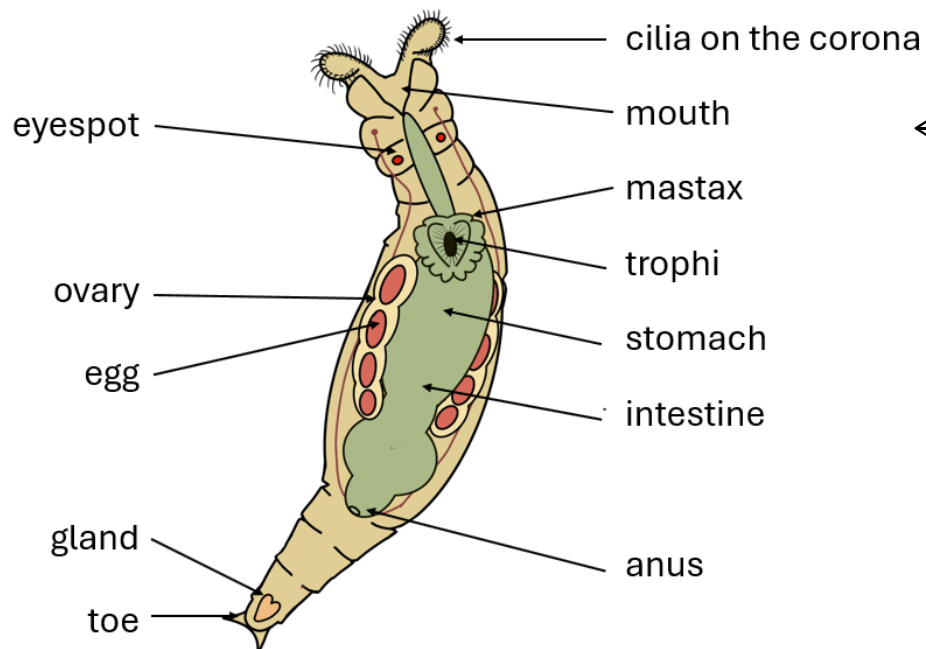- Use the diagram (right) to identify key features of your rotifer.

The key things to look for at x100
- Watch how the wafting microscopic hairs (cilia) pull food into the mouth.
- See if you can spot the eyes near the head.

Draw your rotifer and label the features you can see.
Use a scale bar to show its length.
Find out how the rotifer uses these features to survive.

Labels: cilia on the corona, mouth, mastax, trophi, stomach, intestine, anus, eyespot, ovary, egg, gland, toe
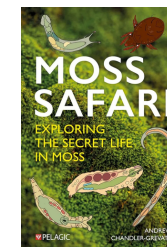
Scale
0.25 millimetres

Diagram from
www.mosssafari.com
A.Chandler-Grevatt (2025) *Moss Safari. Exploring the secret life in moss.* Pelagic Publishing
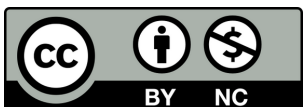
What is it doing?
Rotifers use their spinning hairs to swim and to pull in food. Sometimes they crawl slowly over surfaces, using their sticky toes. Often you will see them with their toes stuck down, corona open and waving back and forth as it feeds. If conditions are dry, they may stop moving, curl into a ball and wait until water returns.

So what?
Rotifers are like mini filters of moss water. They filter out food particles in the water, crush it up in their jaws and take in any nutrients. This recycles nutrients in the moss ecosystem.
This type of rotifer are all female. There are no male rotifers of this kind. Females reproduce by producing fertile eggs themselves.