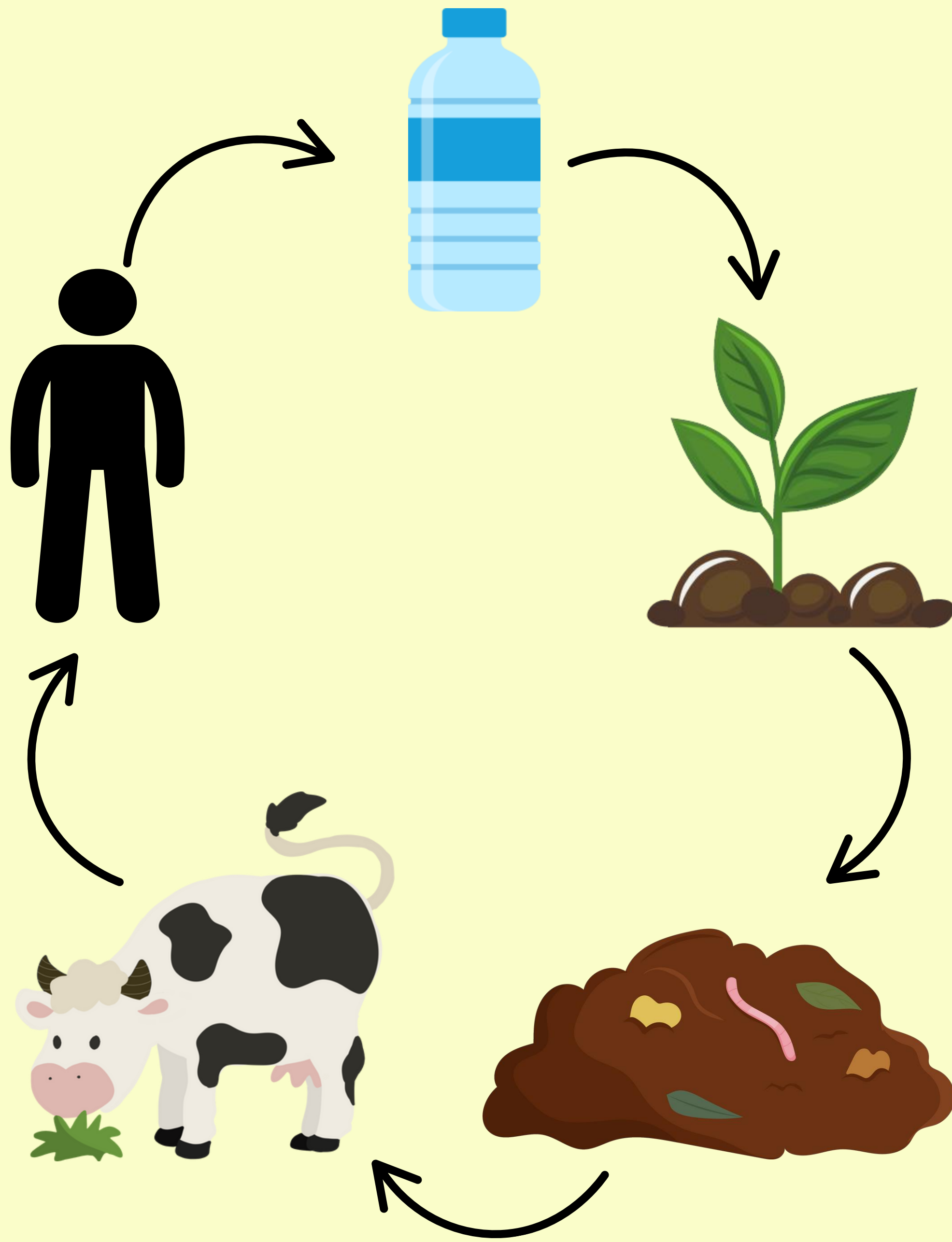


Microplastics

Emma Trotta, Anusha Venkataraman, Naowarat Cheeptham

Plastics can enter the body through ingestion, inhalation and across the skin barrier, which may cause inflammatory, respiratory and cellular distress.



- Millions of microplastic tons are contaminating soil
- Ground contamination is 2-24 times higher than water

Where do microplastics come from?

- food packaging, plastic cutting boards, un-recycled bottles, clothing, cosmetics



- can come in different shapes like fragments, fibers, beads, flakes ect.

Why it's important?

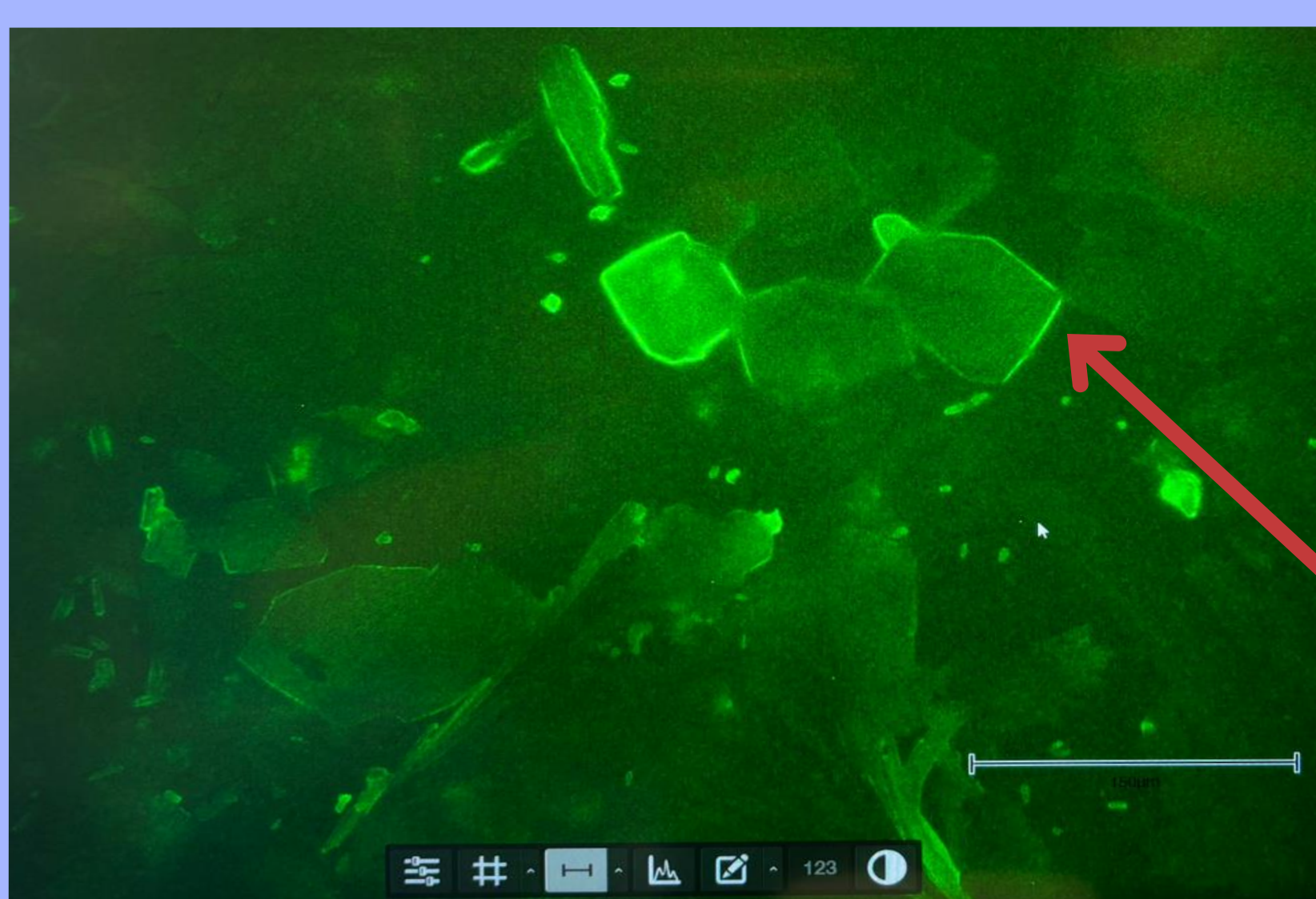
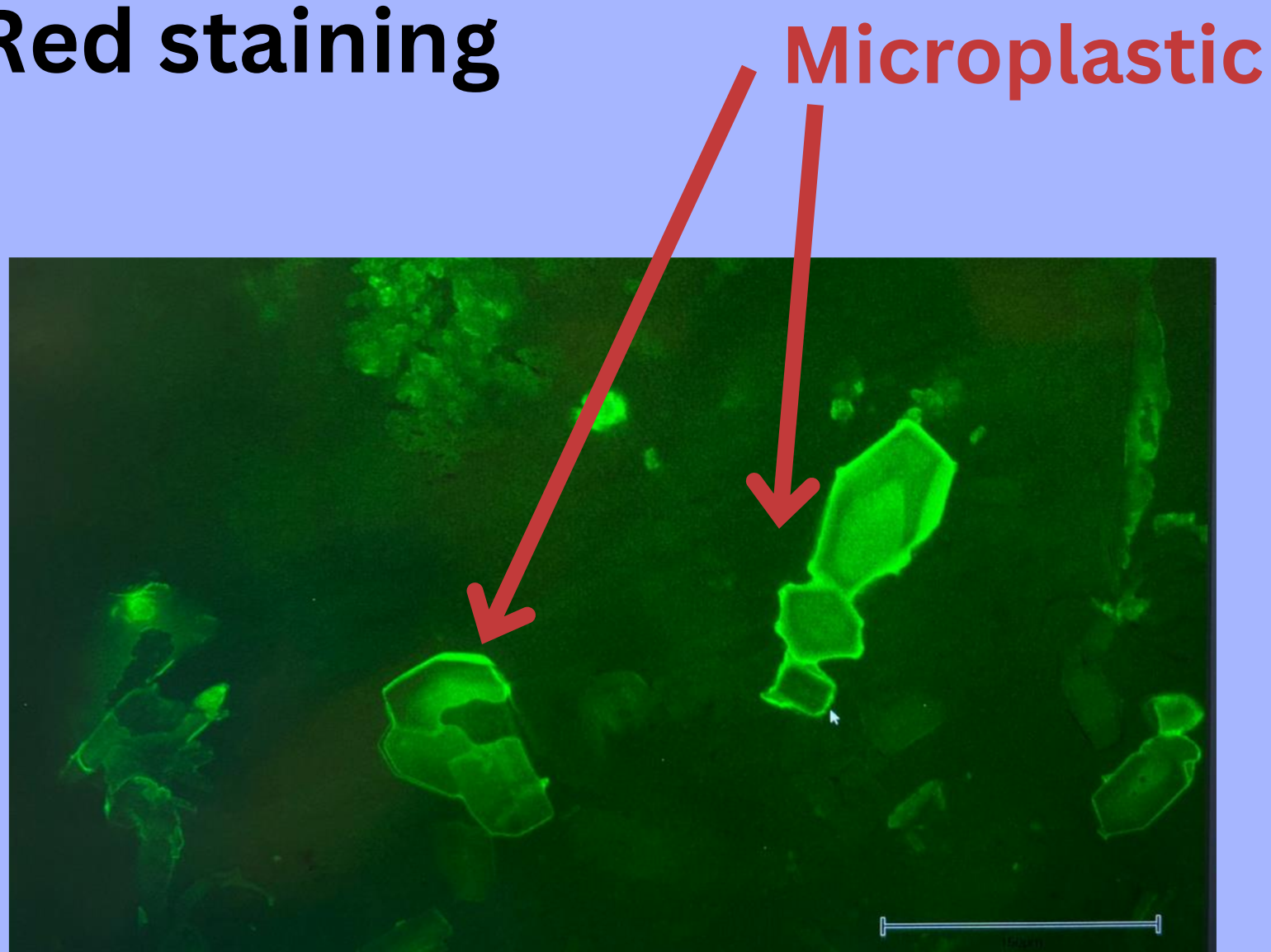
Plastic in compost can travel through ecosystems, causing widespread harm—including damage to wildlife and potentially impacting human health as it reenters our food system

How to prevent it?

- reduce single use plastic consumption
- recycle old plastic
- choose biodegradable, glass or metal options

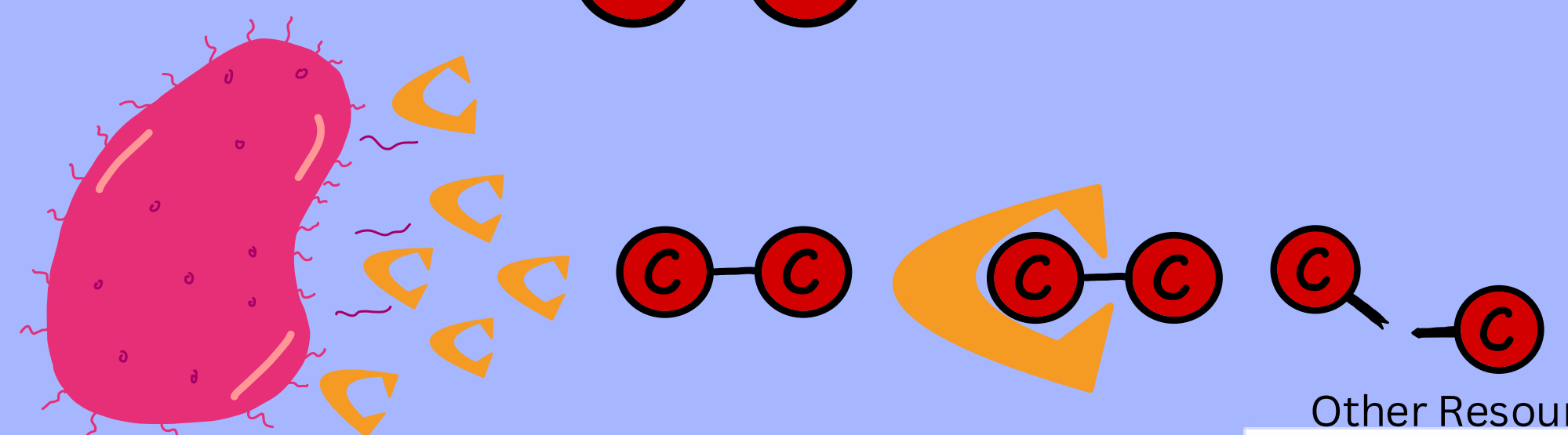
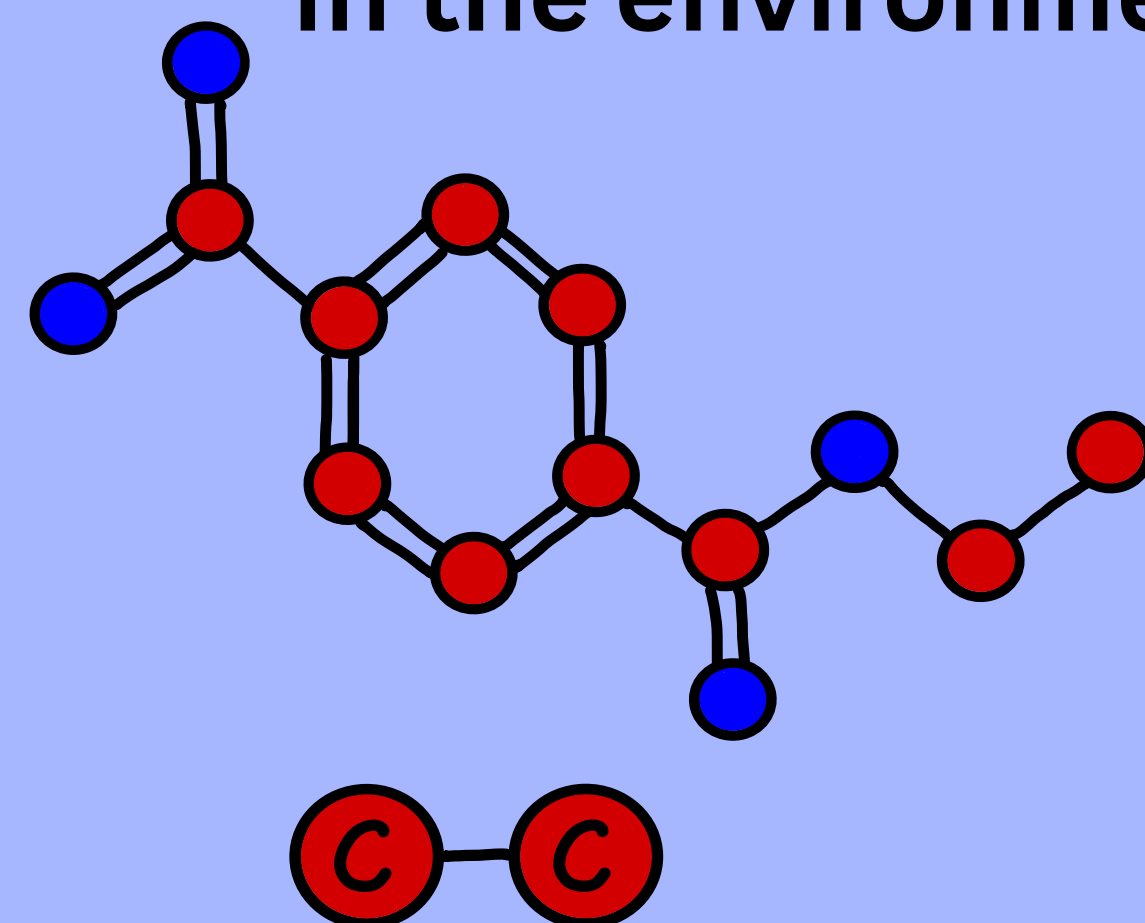
Detection Methods

Fluorescence microscopy using Nile Red staining



Removal

Plastics contain strong carbon-carbon bonds that are very hard to break. However, bacteria can produce extracellular enzymes that can breakdown these bonds in the environment.



Other Resources



References:

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