



Observing the Regeneration of Planarian Worms



Name: _____

Date: _____

Goal: To observe and record how planarian worms regenerate missing body parts.



MATERIALS

- Planarian worms (from a reliable supplier or collected from a clean freshwater source)
- Shallow white dish or Petri dish
- Spring water or dechlorinated water
- Dropping pipette or turkey baster
- Razor blade or sharp scalpel
- Forceps (tweezers)
- Magnifying glass or microscope
- Ruler (millimeters)
- Notebook or lab sheet
- Paper towels



SAFETY FIRST

- Handle blades with care. Ask an adult for help.
- Do not cut toward your fingers.
- Wash hands before and after the experiment.
- Dispose of planarians responsibly. Do not release non-native species into the wild.



BACKGROUND

Planarians are flatworms with an amazing ability: they can regrow missing body parts! If a planarian is cut into pieces, each piece can regrow the parts it is missing and become a whole worm.



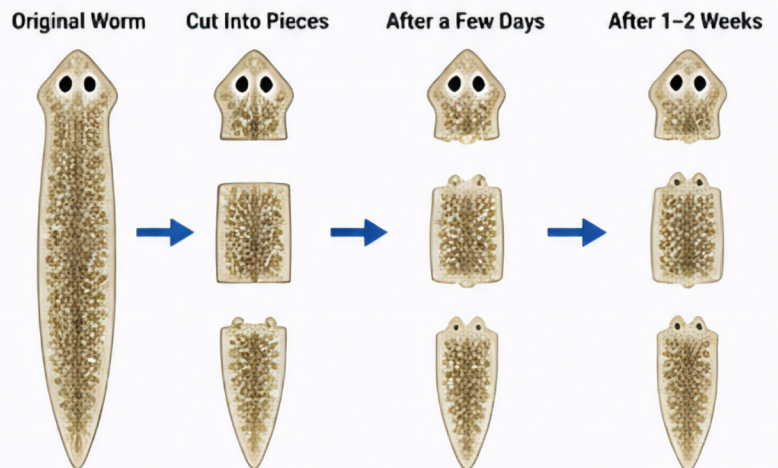
PROCEDURE

1. Place 1–2 planarians in a dish with clean water and let them settle for a few minutes.
2. Using a pipette, gently move a planarian to a clean area of the dish.
3. Using a razor blade or scalpel, cut the planarian into 2–3 pieces. Common cuts:
 - Cut behind the head (just behind the eyes)
 - Cut in the middle
 - Cut near the tail end
4. Observe each piece. Record which end has a head and which end has a tail.
5. Gently return the pieces to the dish with fresh water.
6. Observe your planarians every day for 7–14 days. Record your observations and measurements.
7. Keep the water clean. Change the water every 1–2 days. Use spring or dechlorinated water.



Be gentle! Planarians are delicate.

WHAT TO EXPECT



Each piece will regrow the parts it is missing and become a whole worm.

OBSERVATION DATA

Measure in millimeters (mm)

Date	Piece (Head / Middle / Tail)	Length (mm)	Head Regrowth (Yes / No)	Tail Regrowth (Yes / No)	Notes / Observations



TIP: Patience is key! Regeneration takes time. Keep observing and recording.



REFLECTION QUESTIONS

1. What did you notice about the pieces that had a head? A tail?
2. Which piece regenerated the fastest? Which was the slowest?
3. What part of the planarian seemed to be the most important for survival?
4. What did you learn from this experiment?

