

Student Page

Name:

Title: Planaria Asexual Reproduction Lab

Introduction:

Planaria are a nonparasitic flatworm. They can reproduce both sexually and asexually. Planaria have many stem cells which gives them the ability to regenerate tissues. In this lab you may cut your planaria to observe regeneration of tissue from stem cells and asexual reproduction.

Question

1. List a question you hope to answer as you conduct this experiment.

Procedures:

1. Obtain a Petri dish and write your name and today's date on it.
2. Place some spring water in the Petri dish.
3. Obtain a planaria using a small plastic pipet or water dropper.
4. Observe your planaria for a few minutes.
5. Write down 5 observations using complete sentences.
6. Draw a picture of your planaria. Draw dotted lines to show how you plant to cut the planaria.
7. Carefully cut the planaria into however many pieces you choose.
8. Draw a picture of the planaria to show how you cut it.
9. Place the planaria in a dark cupboard.
10. Check your planaria daily and record your findings in a journal or data table.
11. Feed the planaria a tiny piece of hard boiled egg yolk once or twice a week. Change the water after you feed it.

Data:

| Date | Picture | Observations |
|------|---------|--------------|
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Analysis:

1. What type of reproduction did this planaria undergo?
2. How will the DNA and genetic information of the new planaria compare to the DNA and genetic information of the parent planaria?
3. Why would asexual reproduction be beneficial to the planaria?
4. When might sexual reproduction be beneficial to the planaria?

Conclusion: (Write a complete paragraph describing what you learned about asexual reproduction and planaria through this lab.)