

PLANARIAN OUTREACH PROGRAM

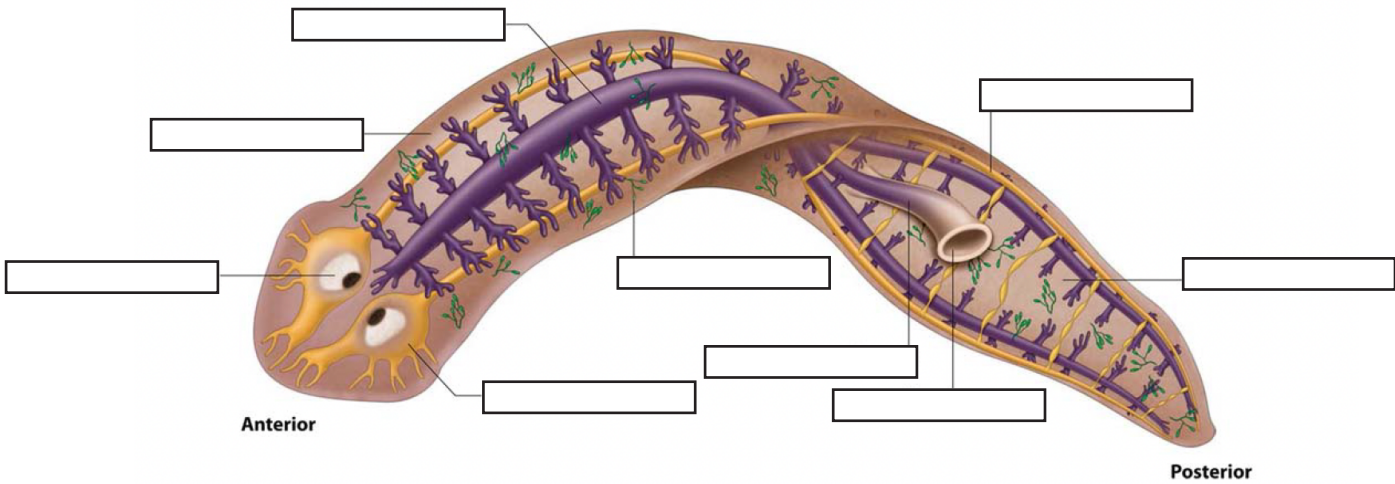
Student Lecture Handout

Name: _____ Class: _____ Period: _____

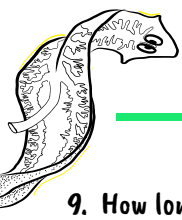
1. What is regeneration?
2. Why is regeneration important?
3. What animals regenerate and what do they regenerate?
4. What is planarian?
5. What is a planarian's ecosystem?

6. Using the following words, label the external and internal planarian anatomy.

Dorsal surface, Ventral surface, Protonephridia, Brain, Pharynx, Mouth, Gastrovascular cavity, Eyespot, Ventral nerve cord



7. How does planarian naturally reproduce?
8. How do we stimulate regeneration?



9. How long does it take for a planarian to regenerate?

10. Describe the process of planarian regeneration?

days post amputation (dpa)	description: What features are regenerating? What new tissue has formed?
1	
3	
7	
14	

11. What are stem cells?

12. How do stem cells know what to do?

13. What are the types of cell signaling?

14. What is RNA interference?

15. What happens when we remove an important gene?

What do you hypothesis will happen when we perform Beta-catenen RNAi and APC RNAi?

beta-Catenin RNAi description:	APC RNAi description:
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