**Development and Worms Review:**

*Go over TOC 12 – Development Notes and TOC 14 – Worm notes*

1. Cleavage: What is it (in development)
2. What is key about gastrulation?
3. What is the hollow ball of cells called?
4. Ceolom:
   1. Why have one:
   2. Where is it?
   3. What makes it different than a pseudocoelom?
5. Cephalization:
   1. What is it?
   2. Which worms have it?
   3. Why have it?
   4. Why/How is it connected to bilateral symmetry?
6. What is the difference between a 1-way gut and 2-way gut?
   1. Which is more advanced?
7. What is the benefit of being hermaphroditic and still relying on sexual fertilization?
8. What evidence can you give for flatworms being less complex than roundworms and roundworms being less complex than annelids?

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| Annelids  References:   * <http://faculty.fmcc.suny.edu/mcdarby/Animals&PlantsBook/Animals/06-Segmented%20Worms.htm> * <http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookDiversity_8.html#Phylum%20Annelida:%20Segmented%20Worm>  1. What are the advantages of a segmented body? 2. A “closed” circulatory system means the blood is in separate vessels from the rest of the body fluids, what is the benefit of this? 3. What are the differences between the polychaete and oligochaete worms? Also – give a few examples of each. 4. How are leeches used medicinally in modern times? |

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| Roundworms  Read p.298 (“Some Nematode Parasites”) to top of p. 305   1. What does being an Acoelomate have to do with there low level of organ development and specialization? 2. What does it mean to be a parasite? 3. Describe “penis fencing” and what it means to be the looser of the battle: |

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| Platyhelminthes  Read p. 274 – bottom 280. Answer the following questions.   1. What type of symmetry do the flatworms exhibit? 2. Why are they referred to as “acoelomate”? 3. Why are they referred to as “triploblastic”? 4. What does a “manus” have to do with their digestive system? 5. How do they move? |