

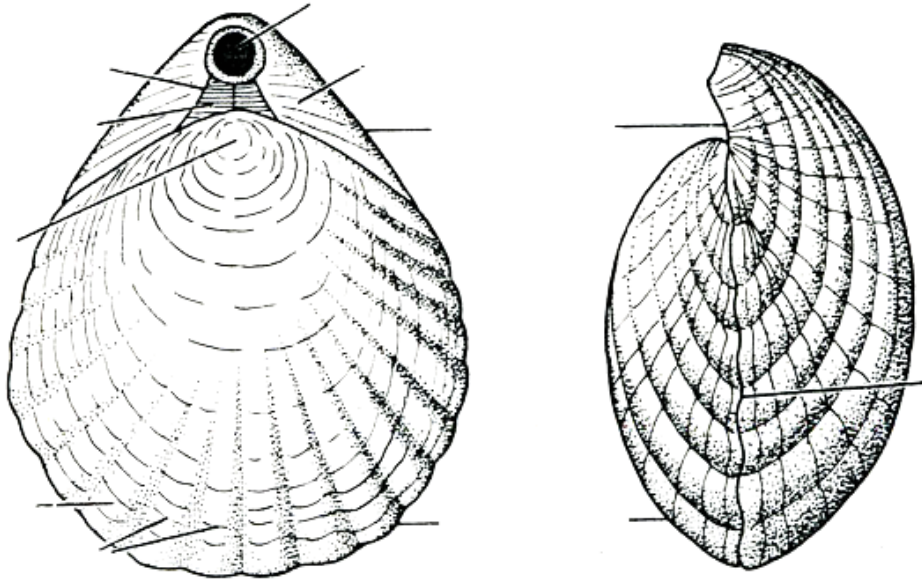
Name: \_\_\_\_\_

LECTURE EXAMINATION #2

# *Invertebrate Paleontology*

November 2, 2017

1. Let's start with our friends the brachiopods. Label all that you can on the exteriors of these brachiopod images. You need not use the lines provided. Be sure to include shell shape, valve names, orientation terms, etc. To what order or orders does it likely belong? [10 points]



2. What is the primary difference between a **fixed-walled** bryozoan and a **free-walled** bryozoan? Please use labeled diagrams. [5 points]

2. Identify, define and/or describe any **three** of the following terms. Be sure to include organisms, functions, dates, examples and diagrams where appropriate. [15 points total]

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brachidium

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homeomorphy

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pteropods

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siphuncle

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avicularium

3. Gastropods have three types of **radula**. Please list and briefly describe the functions of each type below. For each type, give one example of a gastropod group (as specific as possible) that has it. [9 points]

4. Polyplacophorans are considered the “least derived” (what we used to call “primitive”) of the mollusks. What features do they have that place them near the base of the molluscan family tree? [8 points]



7. What are the evolutionary trends we see in the ammonoids? List and briefly describe them. [10 points]

8. Please describe in general terms bryozoan **astogeny**, starting with the larvae and ending with an adult colony. [8 points]

9. You knew this had to come. Please describe the process of **torsion** in the gastropods and list the advantages the class gains by it. [8 points]

10. Finally, something easy. Please distinguish between a **limpet**, a **fissurellid** and a **monoplacophoran**. Tell me what features distinguish each group from the other two. Drawings always help. [9 points]