**Outcome Practice: Evolution of Kingdom Animalia**

**(Outcome 17)**

**Name: Biology 11**

1. What are the key characteristics that define an organism as being a part of Kingdom Animalia?
2. The cladogram below shows the evolutionary path kingdom animalia. Each of the derived characteristics are represented by a dot. Label each derived characteristic (evolutionary change) that occurred at each phylum using the list of derived characteristics found in the first column of the chart. Give a brief explanation of what each means in the 2nd column of the chart. You can use the Bozeman Science video by Mr. Anderson as well as textbook pages 660 – 662 to help you, both are found on the online classroom.



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| **Derived Characteristics** | **Description of Characteristic** |
| Tissues |  |
| Radial Symmetry |  |
| 3 Germ Layers; Bilateral Symmetry |  |
| Protostome Development |  |
| Pseudocoelom |  |
| Coelom |  |
| Deuterostome Development |  |

1. What are the 4 criteria that define a animal as complex vs. simple? Explain what each criteria means. Use textbook page 660 to help you.

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| **Criteria for simple vs. complex** | **Explanation of Criteria** |
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1. Give 3 examples of complex animals and 3 examples of simple animals. Justify why you think each animal falls under that category.

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| **Examples of Simple organisms** | **Justification** |
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| **Examples of Complex organisms** | **Justification** |
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