Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per \_\_\_\_\_\_\_

## Project: Passport to the Animal Kingdom

# To receive credit for this project you must complete **at least** **one activity from each category** in the matrix below. This project is worth 35 points (5 + 10 + 20 = 35). You may earn up to 10 points of extra credit if you complete an extra activity. Information in your project must be accurate and demonstrate that you have significant learning - so do your research!

This project counts as your Standard 12 Exam: Taxonomy and the Evolutionary Relationships of Animals. **Circle the activities you selected in the rubric below**. Due date is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  | **Category Points** |
| **5 points:**  Category 1:  Know and Comprehend | **Activity 1a**  **Draw** and **label** the three animal body plans: acoelom, pseudocoelom, coelom. Your drawings must be color coded and include a description of a representative animal for each body plan. | **Activity 1b**  **Label** the cladogram found here:  <http://bit.ly/njBFoZ>. Then, write a paragraph explaining the significance of shared derived characteristics. | **Activity 1c**  **Draw and label** a timeline that illustrates the appearance of the major invertebrate and vertebrate animal phyla. |  |
| **10 points:**  Category 2: Apply and Analyze | **Activity 2a**  Using a Venn Diagram, **compare** and **contrast** the three major groups of mammals: monotremes, marsupials and placental mammals. Give an example of each and in a brief paragraph, **describe** how each type of fetal development represents an evolutionary change from the previous group. | **Activity 2b**  You are a reporter for Animal Planet who is interviewing various members of invertebrate animal phyla for a new special to be aired next spring. The program is designed to educate others about invertebrate organisms. Choose an invertebrate phylum and **interview** a representative of that phylum. For guidance about what to ask, check out this document:  <http://bit.ly/mRyWHg>. | **Activity 2c**  Using an advertisement format, **diagram** an amniotic egg and **outline** its significance in the evolution of reptiles, birds, and mammals. |  |
| **20 points:**  Category 3: Synthesize and Evaluate | **Activity 3a**  Using the various biological specimens available to you in class, **create** a character matrix and an illustrated cladogram of the organisms provided. For a reminder of what a character matrix looks like, check page **310** in your textbook. Your cladogram must contain at least 8 organisms. | **Activity 3b**  Choose a vertebrate animal class and **create** a Fakebook page, complete with the following information:  Birthday: When the class appeared along the geologic timeline  Location: Where you would find examples of them  Friends: What they might eat   About Me: Describe the class and notable characteristics  Wall: Make a wall with 10 posts between your phylum and others.  Wall posts should describe significant characteristics of the posting phylum.  Use <http://classtools.net/fb/home/page>  Print your completed product. | **Activity 3c**  **Compose** an answer to the following free response question about animal evolution:  <http://bit.ly/oPnXA1>. |  |
| **Comments:** | | | **Total Points** | ----------  **35** |