**Wildlife Explorer Field Journal**

*Use complete sentences in your Journal so others can understand you clearly!*

**Team Members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Day One**

**Date – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Base-camp Training:**

1. Use the arrows to work your way through the training module (there are four circles of information total) and answer the questions below.
   1. Define adaptation in your own words. How long does it take for them to develop?
   2. How is a Polar Bear adapted to its cold environment?
   3. What is the purpose of adaptations that give an animal camouflage?
   4. How does the video define adaptations?

**Next task: Exploring the Naked Mole Rat!**

**Day One (continued)**

**The Naked Mole Rat**

1. Visit the National Zoo in Washington D.C. to observe mole rats.
   1. Based on the set-up, where do you think these animals live in the wild?
   2. List some initial features you notice and write an (A) next to those you suspect are adaptations that help Mole Rats survive in their environment.
2. Review the fact sheet provided by the National Zoo to answer the questions below.
   1. What is the scientific name of the Naked Mole Rat?
   2. Where does this animal live on Earth and in what type of environment?
   3. What do they eat?
   4. List two other unique facts about Naked Mole Rats.
3. Meet with other experts in the field! As you listen, record information about the mole rat in *Chart 1* on the next page of the journal. Be sure to determine a general location in the wild to put in the central box. Then, environment characteristics (bright vs. dark, cold vs. hot, etc. – include quantitative information when available) go in the boxes on the left and adaptations with their benefits to the mole rats go on the right. Remember that the environment includes abiotic (nonliving) AND biotic (living) factors. Adaptations that help animals hunt or interact with each other area also influenced by the environmental conditions. Additional notes or observations can be recorded below the chart for up to 2 points extra credit.

*Chart 1.* Naked Mole Rat Environment Characteristics and Adaptations

Environment Characteristics

Adaptations & Benefits

Naked Mole Rat

Environment

Additional notes and observations (up to 2 points extra credit):

**Day Two**

**Date – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Choosing a new subject for study:**

Welcome to day two of the expedition! Yesterday, you explored adaptations of the Naked Mole Rat. Today, you will again travel to the National Zoo, but this time you will choose an animal to study. The choices are below; write your choice on the line provided and don’t forget to write it in “Animal” box on *Chart 2*.

**Animals available for research:**

* Cheetah
* Clouded Leopard
* Giant Pacific Octopus

Your Team’s Animal: ­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Visit the National Zoo in Washington D.C. to observe your animal
   1. Based on the set-up, where do you think these animals live in the wild?
   2. List some initial features you notice and write an (A) next to those you suspect are adaptations that help it survive in its environment.
2. Review the fact sheet provided by the National Zoo to answer the questions below.
   1. What is the scientific name of your animal?
   2. Where does this animal live on Earth and in what type of environment?

**Your animal (cont.):**

* 1. What do they eat?
  2. List two other unique facts about your animal.

1. Meet with other experts in the field! As you listen, record information about your animal in *Chart 2* on the next page of the journal. Be sure to determine a general location in the wild to put in the central box. Then, environment characteristics (bright vs. dark, cold vs. hot, etc. – include quantitative information when available) go in the boxes on the left and adaptations with their benefits to the mole rats go on the right. Remember that the environment includes abiotic (nonliving) AND biotic (living) factors. Adaptations that help animals hunt or interact with each other area also influenced by the environmental conditions. Additional notes or observations can be recorded below the chart for up to 2 points extra credit.

**Change your animal:**

1. Now you and your teammate will choose a new environment for your animal. For best results, try to make it very different from its natural environment. Once you choose from the biome list and investigate factors of the new environment, give your animal new adaptations to help it survive. Keep in mind these changes would be gradual over hundreds to thousands of years in real world evolution, but we are speeding it up for learning purposes! Also, remember to justify the adaptations to your animal in terms of surviving in the environment. Be prepared to describe your new animal to the class!

*Chart 2.* Environment Characteristics and Adaptations of Your Animal

Environment Characteristics

Adaptations & Benefits

Animal

Natural Environment

New Environment

Additional notes and observations (up to 2 points extra credit):