**Purpose:** The purpose of this ecological survey is to familiarize you with the concept of biodiversity and to provide a way for you to practice identifying various ecological features in your everyday surroundings.

**Procedures:**

**\*\*\*IMPORTANT- During the survey:** **When we go out to the “nature area” please stay on task and work efficiently. If you forget something, you will not be able to go back.\*\*\***

***Part 1: Predictions about the Nature Zones***

Before you explore the nature zones around the campus, please take a moment and write down what you predict to see for each of the 3 areas. Specifically, write down whether you will see a lot of plants/not many plants, a lot of animals/no animals, etc.

*Zone 1: Parking Lot/Side of School \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

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*Zone 2: Quad \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

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*Zone 3: Football Field \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

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***Part 2: Exploring the Nature Zones***

**Zone 1: Parking Lot/Side of the School**

|  |  |
| --- | --- |
| *Abiotic Features (Temperature, wind, soil texture, etc.):* |  |
| *Biotic Features (Plants, insects, other animals, etc.):* |  |
| *Do you see any type of interactions occurring between abiotic/biotic features of the environment? If so, briefly describe them:* |  |

**Zone 2: Quad**

|  |  |
| --- | --- |
| *Abiotic Features (Temperature, wind, soil texture, etc.):* |  |
| *Biotic Features (Plants, insects, other animals, etc.):* |  |
| *Do you see any type of interactions occurring between abiotic/biotic features of the environment? If so, briefly describe them:* |  |

**Zone 3: Football Field**

|  |  |
| --- | --- |
| *Abiotic Features (Temperature, wind, soil texture, etc.):* |  |
| *Biotic Features (Plants, insects, other animals, etc.):* |  |
| *Do you see any type of interactions occurring between abiotic/biotic features of the environment? If so, briefly describe them:* |  |

***Part 3: Chaparral Research***Murrieta is situated in the chaparral biome. To learn more about this biome and to make sense of the environmental features that you observed during this activity, go to the following website and answer the questions that follow: <http://www.blueplanetbiomes.org/chaparral.htm>

1. How would you summarize the climate that makes up a chaparral?
2. Hypothesize how the climate of the chaparral helps explain the types of plants/animals that you observed.

Next, go to the following website: <http://www.californiachaparral.org/chaparralfacts/cplantsanimals.html>

1. What types of animals would you expect to find in the chaparral? What do some of these animals have in common?
2. What similarities do plants that live in the chaparral have in common?

***Part 4: Conclusion*-** Use all of the information from this investigation to answer these conclusion questions:

1. Give an example of a population from our exploration.
2. Briefly explain how the climate of the chaparral biome influences biodiversity here in Murrieta.
3. Briefly explain how humans have had an impact on the biodiversity that surrounds the school campus- do you think that there was more/less biodiversity in the past before the school was built?