Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lab Section \_\_\_\_\_\_\_\_\_\_\_

 CALM

 California Living Museum

Download the app before you go!

 Modified from Joe R. Saldivar

 Revised Nov. 2018 K. Estill

**ABOUT CALM:** California Living Museum is a local zoo, botanical garden and natural history museum. CALM displays a wide variety of plants and animals which are native to California. The animals are all unreleasable (that is, they would not survive in the wild) due to medical disabilities or lack of proper parental imprinting and training while young. These animals are used for educational purposes, and because of the care they receive at CALM, they will usually outlive their counterparts in the wild. Some 250 animals are on display at CALM. Over 2000 native plants are displayed at CALM, many of them in the communities in which they would be found in the wild. The fossils displayed in the education center are native to the San Joaquin Valley, and give us a feeling for the local areas during prehistoric times.

Some of the animals at CALM are protected by State and/or Federal laws. Look up what each of the categories mean and find examples of each. Note that the signs for each species have a scale identifying their need of protection. Find one species for each category. Enjoy!

|  |  |  |
| --- | --- | --- |
| Category | What does this mean? | Example  |
| Critically Imperiled |  | Common Name:Scientific name: |
| Imperiled |  | Common Name:Scientific name: |
| Vulnerable |  | Common Name:Scientific name: |
| Secure |  | Common Name:Scientific name: |

**Botanical Garden –** there plants around the zoo that are clearly labeled. Fill in the table below.

|  |  |  |
| --- | --- | --- |
| Category | Example | Description |
| Flowering plant | Common Name:Scientific name: | Flower color and shape:Leaf color and shape: |
| Tree | Common Name:Scientific name: | Overall description:Leaf color and shape: |
| Bush or Tree | Common Name:Scientific name: | Overall description:Leaf color and shape: |

**CA Coast Room/Education Display**

1. Why was there a whale bone fossil and sharks teeth found in Kern County?



**Reptile House**

**Class Amphibia - Frogs, Toads, Salamanders...**

The name of this class means “Double-Life.” Most species are tied to water for purposes of reproduction and keeping their skin moist, but they can spend extended periods of time on land. Amphibians are the most primitive terrestrial vertebrates. There are several species available for observation. Select one native species to fill in the chart for Organism #1.

What species on displayed is an invasive species?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Class Reptilia - Snakes, Lizards, Turtles**

These are the first land dwelling vertebrates that can live independently of water. Observe the specimens and fill in the chart for Organism #2.

|  |  |  |
| --- | --- | --- |
|  | **Organism #1****Class Amphibia** | **Organism #2****Class Reptilia** |
| Common name |  |  |
| Scientific name |  |  |
| Habitat (Environment) |  |  |
| What do they eat? |  |  |
| Method of bearing young(Eggs in water/land or Live birth) |  |  |
| Method of capturing prey |  |  |
| Specific behaviors for survival  |  |  |

2. The Gila monster brightly colored? What do bright colors usually indicate about the organism?

3. The California Mountain Kingsnake's colors are very similar that of a coral snake. Why is this advantageous for the California Kingsnake?

4. How can you determine the age or sex of a tortise?

**Desert Habitat**

5. List the species that are currently living in this habitat. Why do you think that these different species can be in housed together in this enclosure?

**Waterfowl Pond Area**

6. Which species in this area is a non-native, invasive species in California? Why are they a problem?



**Mammal Round (Class Mammalia)**

7. What characteristics distinguish mammals from other animals?

8. What are marsupials? What marsupial is at CALM?

9. The zoo has a wide variety of rodents (porcupine, beaver, squirrel, chipmunk, and kangaroo rat) that all have evolved in very different ways to survive in the environment that they live in. Briefly describe the evolutionary traits that made these rodents successful:

 a. beaver:

 b. porcupine:

10. What is the scientific name of the Black Bear? Does the name tell you anything about the region where the bear is found?

11. Black Bear Trivia: Give an interesting piece of trivia from the Trivia board.

12. Compare two different mammals (not listed before) in the chart below.

|  |  |  |
| --- | --- | --- |
| **Class Mammalia** | **Organism #1** | **Organism #2** |
| Common name |  |  |
| Scientific name |  |  |
| Habitat (Environment) |  |  |
| What do they eat? |  |  |
| Method of capturing prey |  |  |
| Specific behaviors for survival |  |  |



**Raptors Area**

**Class Aves – Birds**

Birds may not look like reptiles but they have more in common with their scaly relative than they have differences. Birds are uniquely adapted for flight. They occupy a wide range of terrestrial habitats. They lack teeth, but their beaks reveal a great deal concerning their niche.

13. What similarities and differences between reptiles and birds do you observe?

14. Look at the California Condor:

 a. Why is the head lacking feathers?

 b. What is believed to be the main factor that drove then toward extinction?

 c. What is the purpose of the tags on their wings?

15. How do the beaks and feet of raptors (hawks, owls and eagles) differ from those of water fowl and song birds seen at CALM?

16. Find the American Kestrel. Describe how their hunting technique is different than other birds listed above. (Look for these out in the open areas of the county as they are very unique)

17. Compare two different birds not mentioned before:

|  |  |  |
| --- | --- | --- |
| **Class Aves** | **Organism #1** | **Organism #2** |
| Common name |  |  |
| Scientific name |  |  |
| Habitat (Environment) |  |  |
| What do they eat? |  |  |
| Shape of beak |  |  |
| Specific behaviors for survival |  |  |

**Cats of California**

18. Give an observation about the differences in their behavior that might have increased their chance of survival in their environment.

19. What interesting fact did you learn about the cats at the exhibit?

**Bighorn sheep**

20. Explain the difference between horns and antlers.

21. What is unique about their digestive system that helps to keep them away from predators?

**Miscellanous Questions**

22. Although the animals at CALM are still considered wild, many of the animals at CALM will never be released. Why?

23. What was the most interesting thing you learned at CALM?