

| 1. | The mission of the San Francisco Zoo is to  | people with wildlife, inspire      |
|----|---|------------------------------------|
|    | for nature and advance  | action.                            |
| 2. | What is a SSP (Species Survival Plan) and why is it important?                      |                                    |
| 3. | Define a food chain. Draw a food web using least 4 organisms                        | and label.                         |
| 4. | Name one biome and give its defining characteristics. Also, lis that type of Biome. | t one type of animal that lives in |
| 5. | What differences would you likely see between the mammalia carnivore?               | n molars of an herbivore and a     |
| 6. | Name two of California's state symbols.   |                                    |

## **Answers:**

- 1. The mission of the San Francisco Zoo is to **connect** people with wildlife, inspire **caring** for nature and advance **conservation** action.
- 2. SSP stands for Species Survival Plan. An SSP is a management program designed to ensure the survival of threatened or endangered species that live in zoos or aquariums. SSP's play a role in population management. The primary goals of an SSP are to treat an entire population of animals as a single unit and promote cooperation among holding institutions to ensure the long term survival of the species in captivity.
- 3. A food chain is a linear sequence of who eats whom in an ecosystem to obtain nutrition. Plants are the producers and all other living things are the consumers. Primary consumers eat plants (herbivores). Secondary consumers (carnivores) eat herbivores or Tertiary consumers eat other carnivores. A food web is several food chains together:
  - Fox (primary consumer) → Lion (secondary Consumer)
    Grass (Producer) → Rabbit (herbivore) → Hawk (Primary consumer)
    Snake (primary consumer) → Hawk (secondary consumer)

**Notice**: the hawk is a primary and secondary consumer, depending on what it eats.

- 4. A biome is the specific environment in which any given organism or any given population lives. The five principal biomes are defined by their dominant vegetation.
  - The **aquatic biome**: animals adapted for swimming (i.e. Fish, amphibians, turtles, some birds) and plants adapted to water (i.e. ferns, seaweeds). They use water as their support and don't have the woody support of terrestrial plants
  - The **desert biome** includes areas where rainfall is less than 10 inches/year. Plants (ie. cactus) and animals (tortoise, scimitar-horned oryx) must be able to conserve water.
  - The **forest biome** includes areas that are dominated by trees and other woody vegetation. There are rainforests (rainfall >80 inches/year) and temperate forests. In a forest environment you would see birds and the rainforest monkeys and amphibians.
  - The **grassland biome** includes habitats dominated by grasses (not trees and shrubs). Grasslands include tropical savannas and temperate grasslands (prairies). Here you would see plenty of ungulates (horses, antelopes), lions & small rodents.
  - The **tundra biome** is frozen most of the year. Grass, shrubs, lichens grow quickly in a very short growing period. You would see polar bear, wolverine, caribou with their thick fur.
- 5. Carnivores have molars that are sharp and able to tear and cut meat. Herbivores have molars are flattened with ridges to help grind the vegetation.
- 6. Tree: CA Redwood/Flower: CA Poppy/Insect: CA Dogface Butterfly/Fish: CA Golden Trout/Amphibian: Red-legged frog/Reptile: Desert Tortoise/Marine Reptile: Leatherback Sea Turtle/Bird: CA Valley Quail/Mammal: CA Grizzly Bear/Marine Mammal: Grey Whale/Grass: Purple Needlegrass/Lichen: Lace Lichen/Fossil: Saber toothed cat