

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_



## Saguaro National Park Activity: Modeling Desert Food Web

Question: How can we show the interactions between species in a desert ecosystem?

### Materials:

- Food web cards
- Scissors
- Glue or glue stick
- 11x17 paper (construction paper works the best)
- Colored pencils, crayons, or markers

### Procedure:

1. Using the colored pencils, draw a sketch of the species on each card and identify its trophic level (this may require a small amount of research). Cut out the cards when finished.
2. Arrange your cards to show three different food chains, showing what each species eats. You may use the same species in multiple food chains. Record your food chains in the food chain chart.
3. Arrange your cards on your construction paper into a food web that shows connections between the three food chains you already put together. Draw arrows showing energy passing from one species to another. Remember multiple arrows can go to and from a given species based on what they eat and what eats them. When you are confident you have represented all the relationships between organisms, glue your cards down to the construction paper.

Terms:

- Producer: \_\_\_\_\_
- Primary consumer: \_\_\_\_\_
- Secondary consumer: \_\_\_\_\_
- Tertiary consumer: \_\_\_\_\_

Data:

	<u>Food chain #1</u>	<u>Food chain #2</u>	<u>Food chain #3</u>
Tertiary Consumer			
Secondary Consumer			
Primary Consumer			
Producer			

Analysis: Discuss the question with a partner and write your response together. Then share your answer with the class.

1. What trophic level is the most important in your ecosystem? Explain your reasoning.

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2. What would happen in your food web if the populations of one of your secondary consumers doubled?

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3. Invasive species are often extremely disruptive to food webs due to lack of predation. If an invasive primary consumer were to enter your food web, what would be the ecological consequences?

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Gamma Grass	Coyote
Trophic Level:	Trophic Level:
Desert Tarantula	Kangaroo Rat
Trophic Level:	Trophic Level:
Gila Monster	Long-nosed Bat
Trophic Level:	Trophic Level:
Rattlesnake	Saguaro Cactus
Trophic Level:	Trophic Level:
Creosote Bush	Grasshopper
Trophic Level:	Trophic Level:
Prickly Pear Cactus	Desert Tortoise
Trophic Level:	Trophic Level: