### **Lesson Plan: Desert Dwellers Food Web**

#### **Grade Level: 6th Grade**

#### **Subject: Science - Ecosystems**

#### **Objective:**

Students will understand and construct a model showing the cycling of matter and flow of energy in desert ecosystems by creating a desert dweller info card and linking it to other organisms in a food web.

#### **Standards:**

* **6.L2U1.14**: Students will construct a model that shows the cycling of matter and flow of energy in ecosystems.

#### **Materials:**

* Whiteboards and markers
* Internet access (for research)
* Access to Google Classroom
* Desert Dwellers list (provided in the activity)
* National Geographic and Google research links
* Drawing materials (colored pencils, markers, paper)
* Access to "Lizards for Lunch: A Roadrunner’s Tale" by Conrad Storad

#### **Lesson Duration:**

* **Day 1: Introduction and Research (60 minutes)**
* **Day 2: Food Web Construction and Presentation Preparation (60 minutes)**
* **Day 3: Presentations and Discussion (60 minutes)**

### **Day 1: Introduction and Research**

1. **Introduction to Food Webs (10 minutes):**
	* Start with a brief discussion on the importance of food webs and food pyramids.
	* Pose the question: "Why is it important to know about food webs?" and have students brainstorm on whiteboards.
	* Discuss their ideas and relate them to energy flow and ecosystem balance.
2. **Reading and Engagement (10 minutes):**
	* Read the story "Lizards for Lunch: A Roadrunner’s Tale" to introduce the concept of predators, prey, and energy flow in a desert ecosystem.
3. **Desert Dweller Assignment (10 minutes):**
	* Present the list of desert dwellers provided in the activity.
	* Students choose their top three desert dwellers they want to research. Assign each student a unique desert dweller to avoid duplicates.
4. **Research (30 minutes):**
	* Students begin researching their assigned desert dweller using resources provided in Google Classroom, starting with National Geographic and moving to Google as needed.
	* Encourage students to find information on their desert dweller’s predators, prey, adaptations, unique traits, location, and shelter.

### **Day 2: Desert Dweller Construction**

1. **Review of Research (10 minutes):**
	* Have students share key findings from their research with a partner to ensure they have sufficient information.
2. **Desert Dweller Creation (40 minutes):**
	* Students will draw a picture of their desert dweller and create a food web that includes their dweller’s predators and prey.
	* The food web should clearly indicate energy roles such as producers, consumers, decomposers, and scavengers.
	* Students should include information about their desert dweller’s adaptations and unique traits in the web.
3. **Preparation for Presentation (10 minutes):**
	* Students prepare a brief presentation of their food web, explaining the energy roles and the connections between the organisms.

### **Day 3: Presentations and Discussion**

1. **Presentations (40 minutes):**
	* Each student presents their food web to the class, explaining the roles of their desert dweller and the connections in the ecosystem.
2. **Class Activity (15 minutes):**
	* Students will create a food web by linking their organisms with yarn.
	* Students will start at a producer or decomposer and they will pass the other end of the yarn to the next organism that will eat their desert dweller.
3. **Closing Activity (5 minutes):**
	* Have students reflect on the type of energy role their desert dweller has and share one interesting fact they learned during their food web creation..

#### **Assessment:**

* Students will be assessed on their food web based on a rubric available in the provided Google Spreadsheet link. Criteria include accuracy of information, clarity of the food web, and presentation quality.