

**Discipline:** Environment and Ecology  
**Standard Category:** Ecosystems and their Interactions  
**Lesson Focus:** Food chains and food webs

**Suggested Level:**  
Middle

PA Standard(s):	Related TESOL Standard(s):
4.6.7A: Explain the flows of energy and matter from organism to organism within an ecosystem.	Goal 2: To use English to achieve academically in all content areas. Standard 2: Students will use English to obtain, process, construct and provide subject matter information in spoken and written form.

**Lesson Focus:**  
Food chains and food webs

**Teaching Strategies:**  
Whole group instruction

**Key Objectives in Accordance with TESOL Level:**

Pre-Conversational/ Beginning	Intermediate	Advanced
Students will be able to: <ul style="list-style-type: none"> <li>Demonstrate understanding of lesson vocabulary by organizing plant/animals cards into a viable food chain in partner groups.</li> </ul>	Students will be able to: <ul style="list-style-type: none"> <li>Demonstrate understanding of lesson vocabulary by designing linking food chains to create a viable food web.</li> </ul>	Students will be able to: <ul style="list-style-type: none"> <li>Demonstrate understanding of lesson vocabulary by constructing chains and webs, and doing an application-writing task, "What would happen in a food web if one animal was in abundance or completing missing."</li> </ul>

Cooperative learning groups

Use of graphics

Independent work

Brainstorming

Modeling

**Assessment Strategies:**  
Food chain links closed activity

Design food chains and create a food web

Construct a web with written explanation

**Materials:**

1. Create vocabulary labels of all terms to know
2. 6 fly swatters
3. Large picture of an insect

**Procedures:**

1. Introduce "Circle of Life" – Lion King reference. *Animals eat other animals to sustain life.*
2. Origin of all life's food chains is a producer (**Plant**). A food chain is a representation of an "Eating History." *Show pictures of many producers (plants)*

3. Teach the term **Consumer**; break down into **Prey, Predator, Herbivore, Carnivore, and Omnivore**. Tell students a prey is usually the smaller of the two.
4. Brainstorm some predator/prey groups (on the side list **Scavengers**)
5. *Model examples of food chains* – link them to make webs
6. Play Splat game to review vocabulary terms  
Directions for Splat:
  - a. Place terms to know on the board encircling a large picture of an insect
  - b. Read aloud definition or clues for the vocabulary words one at a time
  - c. Students take turns locating the terms on the board by swatting the correct term with the fly swatter
7. Share related resources depicting examples of predator and prey.

**Assessment:**

**Beginning**

Complete food chain links

**Intermediate**

Design at least three food chains to create a food web

**Advanced**

Construct a web, and complete writing project work independently

**Notes: Terms to Know:**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Producer</li> <li>• Consumer</li> <li>• Herbivore</li> <li>• Carnivore</li> <li>• Omnivore</li> <li>• Decomposer</li> <li>• Predator</li> <li>• Prey</li> <li>• Scavenger</li> <li>• Food Chain</li> <li>• Food Web</li> <li>• Transfer of Energy</li> </ul> | <p>Equate:</p> <ul style="list-style-type: none"> <li>Producer - plants</li> <li>Prey - food</li> <li>Predators - hunters</li> <li>Food Chain – eating history</li> <li>Transfer of energy – circle of life</li> </ul> |
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**Helpful websites for Food Chains and Food Webs:**

<http://www.si.edu/sites/educate/tropain/foodchai.htm>

<http://www.usoe.k12.ut.us/curr/science/core/8thgrd/student/Biology/Foodweb.htm>

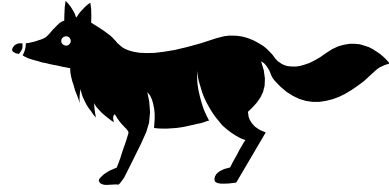
<http://www.eagle.ca/~matink/themes/Biomes/foodweb.html>

# Food Chain

## Directions:

1. Color and cut the links of the food chain
2. Connect the links together by looping through each other and paste at the ends.
3. Be sure to follow the order of producer consumers, prey and predator.

**Fox**



**Robin**



**Ladybug**



**Green producer**

