

Topic: Food Chains

Date: 11/7/08

NSES: Teaching Standard B

Content Standard B Life Science K-4

Grade level: 3rd

SOL: 3.5 The student will investigate and understand relationships among organisms in aquatic and terrestrial food chains. Key concepts include: a) producer, consumer, and decomposer, b) herbivore, carnivore, omnivore, and c) predator and prey

Subject: Herbivore, Carnivore, and Omnivore

Daily Question: Where does our food come from?

Procedures for Learning Experience	Guiding Questions	Materials Needed	Evaluation (Assessment)	Approximate Time Needed
<p>Engagement: Each group (2 students) will receive a plastic bag that contains the materials (cutouts and pictures). Ask students if they can make a pizza using the provided cutouts. Instruct the students to explore the different topping available to place on their pizza. Ask students to explore the provided pictures. Ask how these are related to the pizza.</p>	<ul style="list-style-type: none">-From which animal does each food come from?-What food does that animal eat?- If there were no plants, which food would be left to make pizza?- Do all foods come from plants?	<p>12 circular manila folder cut outs(pizza crust), 12 circular red construction paper cut outs (pizza sauce), 36 small red circular construction paper cutouts (pepperoni), yellow construction paper shreds (cheese), green construction paper shreds (green peppers), 12 pictures of the following: cow, grass, sun, soil, milk, pig, grain, tomato</p>	<p>Formative Evaluation- observing for participation</p>	<p>10 min.</p>
<p>Exploration: Each group (2 students) will be given a plastic bag containing one sun card and a complete food chain on cards with holes punched in them. They will also be given the appropriate number of yarn pieces need to join the cards together to make a mobile. The cards will show a picture of the animal or plant and give the name. The animal cards will contain examples of some things that animals might eat. Students will</p>	<ul style="list-style-type: none">- Can you arrange the cards in your bag to make a complete food chain?-What do all food chains start with?-What should be at the top of the food chain? At the bottom?	<p>11 sun cards, 50 pieces of yarn, food chain cards (divided into plastic bags for each group-each group will receive one complete food chain), crayons, pencils, 22 copies of handout 1</p>	<p>Formative evaluation- observe student participation Summative evaluation- assess complete food chain for correctness</p>	<p>25 min.</p>

<p>lay out the food chain with yarn pieces in between. The teacher will assist in tying the chain together. When finished the students will complete handout 1.</p>				
<p>Explanation: Make a table on the board with headings of the animals that are used in more than one food chain during exploration (for example, a fish). Discuss what each animal ate in the different food chains. List these different foods. After completing the table, explain the terms herbivore, carnivore, or omnivore by using the table as an example. (For example, the teacher will say “A snake is a carnivore. Using the table, what do you think carnivore means?”). Each student will be asked to write down the meanings of these words on the back of handout 1.</p>	<ul style="list-style-type: none"> -Why is it important for animals to eat many things? - How are the animals listed on the table different? - What does herbivore, carnivore, and omnivore mean? 	<p>Board, chalk , handout 1</p>	<p>Formative evaluation- observe student participation Summative evaluation- definitions written on the back of handout 1</p>	<p>10 min.</p>
<p>Extension: A food web will be showed to the class using the document camera. Students will explore the food web.</p>	<ul style="list-style-type: none"> - What are three different food chains in the food web? -What would happen if the mouse was taken out of the food chain? The fox? - Why are food webs more accurate than food chains in showing what animals eat? 	<p>Food web, document camera</p>	<p>Formative evaluation- observe students participation</p>	<p>15 min.</p>

Sources:

Bosak, S. V. (1991). *Science Is...* Ontario: Scholastic Canada LTD.

Moyer, R. (2002). *Science*. New York : Macmillan McGraw-Hill.

WebLabs. (2005). Retrieved November 4, 2008 from http://www.weblabs.org.uk/wlplone/Members/jakobth/my_reports/Report.2004-06-24.0110/foodweb.gif.