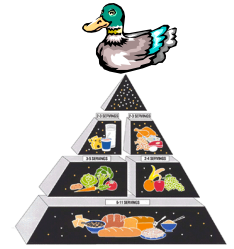


Grade Level(s): One and Two

Lesson Title: A Duck's Place on the Food Pyramid

Focus: (Concept or skills to be emphasized)

Dietary requirements, planning, critical thinking, reading comprehension, classifying, cooperative learning



Objectives: See end of lesson for objectives and standards achieved.

### Background Information:

In the story of *Peter and the Wolf*, the wolf eats the duck, which illustrates the dietary requirements of wolves. The dietary requirements of carnivores, such as wolves, are met by eating other animals. As omnivores (living things that eat plants and animals to meet their dietary requirements), people must eat a balanced diet, consisting of plants and animals (people who choose to be vegetarians are the exception - a link to the USDA vegetarian food guide is listed in the resources section). Herbivores feed on plants to meet their dietary needs. Plants produce their own food by using the energy of light from the sun to create their own food by the process of photosynthesis. This lesson will help students understand about eating a balanced diet to grow and remain healthy, and discuss the requirements of all living things.

### Activities (Procedures):

1. Read the story of *Peter and the Wolf*, as found in the Teacher's Section under The Verizon Literacy Resource Section with your class. Ask students to identify the characters in the story. Make a list of the characters on a chalkboard, flip chart, overhead, or on a computer.
2. Tell students that you are going to talk about what some of the characters and things in the story require to live, grow, and stay healthy. Explain that all living things need food, water, and air, and that some things, such as plants, also need light to live. SC.1.4.2
  - a. Ask students to think about what the wolf ate in the story. As a whole group, brainstorm the types of foods that real wolves eat and record student ideas on a chart. Explain that wolves and other carnivores eat animals, and that meat is generally all they need to eat in order to grow and stay healthy. Ask students which, if any, other characters in the story eat *only* meat.
  - b. Tell students there are living things which eat only plants and parts of plants, including vegetables, fruits, and grains. Ask students to think about living things or characters

in the story that are herbivores (plant eaters). Make a list of these, and then record some of the things they might eat.

- c. Explain to students that some living things eat other animals (meat), and plants or parts of plants (such as fruits, vegetables, and grains). Mention that these types of living things are called omnivores. Ask students to identify characters and things in the story that would probably eat plants and animals and record these on a list. Explain that people are omnivores and that most people need to eat plants and meat to stay healthy and grow. Tell students that some people eat primarily plants. They are called vegetarians. Make a list of the types of things other characters in the story might eat.
  - d. Ask students if they can think of anything in the story that would not need to eat anything else in order to live and grow (e.g., the tree). Restate that all living things need air, food and water to live, and that some living things also need light. Explain that plants are able to make their own food by using the energy of the sun.
3. Discuss with students the importance of eating a balanced diet consisting of the five major food groups, and that they should try to stay away from eating too many fats and sweets.
- a. Tell students that eating foods from each of the food groups and keeping physically active will help them stay healthy. HE.1.4.3 Inform them that if people eat too much of a particular food group, especially fats and sweets, they may develop health problems (such as diabetes and obesity). HE.1.1.1 Explain that eating too few foods of a certain food group may also lead to health problems (e.g., improper bone and teeth development by not eating foods with enough calcium). Tell students that the best way to stay healthy is to eat foods from each of the major food groups shown on the Food Guide Pyramid (See attachment at end of the lesson).
  - b. Provide each student with a copy of the Food Guide Pyramid (Note: the Food Guide Pyramid is due to be updated by the USDA early in 2005). Explain that the pyramid tells people what types of food they should eat and how much they should eat each day. HE.2.2.1 Ask students to color the foods in the Food Guide Pyramid. Arrange students into groups of 2-3. Assign the roles of reporter, recorder, and sketcher. SC.1.6.1, SC.2.6.1, SS.1.2.1 Ask students to think of foods they eat and classify them into each of the five food groups and fats and sweets. Have them write or draw a picture of their findings on the Food Guide Pyramid Classification Worksheet. Return to a full class discussion and ask each group to report the types of foods they eat and how they classified them. Compile this information onto a large full class chart. Talk about the chart and ask students to discuss why they classified each item as they did. Conclude the discussion by restating the importance of eating a balanced diet, exercising, and minimizing the amounts of fats and sweets in each of their meals.
  - c. Give each student a blank copy of the Food Guide Pyramid Classification Worksheet. Explain that, working with their family for homework, they are to plan a healthy supper consisting of each of the food groups. Students may draw pictures of their meal plan,

write their meal plan, or cut and paste pictures of their meal plan foods from magazines. Tell students that they must tell their family what they learned about eating a balanced diet and exercising. HE.1.7.2 Explain that they can include a maximum of one selection from the fats and sweets group. HE.1.6.3, HE.2.6.3 Send copies of the Food Guide Pyramid home with students to help them and their families make the appropriate selections. Allow students 1-2 days to complete the plan, discuss them as a class, and then post them on a bulletin board or other display within the classroom.

### **Assessment/Evaluation\*:**

1. Student participation and cooperation during small and whole group discussions and activities.
2. Student created meal plans consisting of each of the food groups.
3. Student generated list of characters in *Peter and the Wolf* and what each one might eat to stay healthy.
4. Student generated list of types of food wolves eat.
5. Student generated comparison chart of carnivores, omnivores, and herbivores in story and what they eat.
6. Individual student colored Food Guide Pyramids.
7. Completed class classification charts of foods students eat.

### **Supplemental Materials and Equipment Needed:**

Copies of the Food Guide Pyramid

Food Guide Pyramid for Young Children: A Daily Guide for 2 to 6 Year Olds (Black and white master):

<http://www.usda.gov/cnpp/KidsPyra/KIDPYRbw.pdf>

Food Guide Pyramid (Black and white master):

<http://www.usda.gov/cnpp/Pubs/Pyramid/FGPflyer-ENGLISH-line.pdf>

Food Guide Pyramid Classification Worksheet

Crayons

Magazines (optional)

Scissors (optional)

Glue (optional)

### **Resources:**

Dietary guidelines:

<http://www.health.gov/dietaryguidelines/dga2000/document/build.htm#pyramid>

Food Guide Pyramid for Young Children: A Daily Guide for 2 to 6 Year Olds:

<http://www.usda.gov/cnpp/KidsPyra/KIDPYRbw.pdf>

Food Guide Pyramid:

<http://www.usda.gov/cnpp/Pubs/Pyramid/FGPflyer-ENGLISH-line.pdf>

## Vegetarian Food Guide:

<http://www.vrg.org/nutrition/adapyramid.htm>

## Health information:

<http://www.healthfinder.gov/>

<http://www.nutritionexplorations.org/kids/nutrition-main.asp>

## References:

Raven, Peter H. & Johnson, George B. (2002). *Biology* (6<sup>th</sup> ed.). McGraw Hill. Boston, MA  
United States Department of Agriculture. Retrieved July 19, 2004, from  
<http://www.usda.gov/cnpp/pyramid.html>.

### National Standards Achieved:

#### *Science*

##### Content Standard C

The characteristics of organisms:

- Organisms have basic needs. For example, animals need air, water, and food; plants require air, water, nutrients, and light. Organisms can survive only in environments in which their needs can be met. The world has many different environments, and distinct environments support the life of different types of organisms.

##### Content standard F

Personal health:

- Nutrition is essential to health. Students should understand how the body uses food and how various foods contribute to health. Recommendations for good nutrition include eating a variety of foods, eating less sugar, and eating less fat.

#### *Social Studies*

##### V. Individuals, Groups, and Institutions

- a. identify roles as learned behavior patterns in group situations such as student, family member, peer play group member, or club member.

### WV Content Standard Objectives:

#### *First-Grade*

- HE.1.1.1 explain the effects on the body of healthful and less healthful foods.
- HE.1.4.3 explain the importance of regular exercise (play) in a world of increasing technology.
- HE.1.6.3 use decision-making skills to select a healthful meal.
- HE.1.7.2 convey accurate health information and ideas.
- SC.1.4.2 identify that most living things need water, food, light and air.
- SC.1.6.1 listen to and be tolerant of different viewpoints while working in collaborative groups.
- SS.1.2.1 identify and practice various group roles (e.g., group leader, recorder, reporter, collector) in the classroom.

#### *Second-Grade*

- HE.2.2.1 identify sources of health information (e.g., pamphlets, internet, magazine, television, newspaper).
- HE.2.6.3 work with a family member to plan a family meal.
- SC.2.6.1 listen to and be tolerant of different viewpoints while working in collaborative groups.

**Kentucky Program of Studies:**

HE-P-21

Students will identify basic food groups.

HE-P-22

Students will identify foods in basic food groups.

HE-P-23

Students will classify foods according to identified food groups.

HE-P-24

Students will describe and select healthy snack foods.

HE-P-25

Students will describe food guide pyramid and understand its significance.

HE-P-26

Students will determine the impact of diet on growth and development.

S-P-LS-1

Students will understand that organisms have basic needs (e.g., air, water, nutrients, light) and can only survive when these needs are met.

**Ohio Academic Content Standards:**

*First-Grade*

Y2003.CSC.S02.GKG-02.BA.L02.I01

Characteristics and Structure of Life /

01. Explain that animals, including people, need air, water, food, living space and shelter; plants need air, water, nutrients (e.g., minerals), living space and light to survive.

Y2003.CSC.S02.GKG-02.BA.L01.I04

Characteristics and Structure of Life /

04. Explain that animals, including people, need air, water, food, living space and shelter; plants need air, water, nutrients (e.g., minerals), living space and light to survive.

Y2003.CSC.S05.GKG-02.BC.L01.I04

Doing Scientific Inquiry /

04. Work in a small group to complete an investigation and then share findings with others.

Y2003.CSC.S05.GKG-02.BC.L01.I08

Doing Scientific Inquiry /

08. Use oral, written and pictorial representation to communicate work.

*Second-Grade*

Y2003.CSC.S02.GKG-02.BA.L02.I01

Characteristics and Structure of Life /

01. Explain that animals, including people, need air, water, food, living space and shelter; plants need air, water, nutrients (e.g., minerals), living space and light to survive.

Y2003.CSC.S02.GKG-02.BA.L02.I05

Diversity and Interdependence of Life /

05. Explain that food is a basic need of plants and animals (e.g., plants need sunlight to make food and to grow, animals eat plants and/or other animals for food, food chain) and is important because it is a source of energy (e.g., energy used to play, ride bicycles, read, etc.).

Y2003.CSC.S06.GKG-02.BC.L02.I04

Science and Society /

04. Demonstrate that in science it is helpful to work with a team and share findings with others.

\*All Assessments are to be at the expected state assessment standard; in West Virginia this is mastery level; in Ohio this is benchmark level; and, in Kentucky, this is academic expectations level.

