



Maryland State Department of Education
Service-Learning Unit
Nutrition and Fitness

Primary Subject: Health

Grade Level: 6th and/or 7th

Additional Subject Area Connections: Math, Science, Language Arts

Unit Title: Nutrition and Fitness

Type(s) of Service: Indirect &/or Direct

Unit Description: As students learn about the relationship between nutrition and health/fitness, they will select a homeless shelter, soup kitchen, etc., and develop a plan of action to meet the nutritional needs of the various age groups served by the selected organization.

Potential Service-Learning Action Experience:

- Students can perform a scientific study on the nutritional needs of a population. They will then organize and implement a plan of action (fundraiser, food drive, etc.) to specifically support the nutritional needs of the group (indirect).
- Deliver the food to the organization and/or help serve/distribute the food at the organization (direct).

VSC Indicators Met

Health:

6.0 Nutrition and Fitness - Students will demonstrate the ability to use nutrition and fitness knowledge, skills, and strategies to promote a healthy lifestyle.

(Grade 6)

1. Explain the role of nutrients.
A. Nutrition and Fitness
1. Identify and define functions of nutrients.
a. Identify and define the six major nutrient groups: Carbohydrate, Protein, Fat, Vitamins, Minerals, Water.
b. Identify food sources for each of the major nutrient groups.
c. List major nutrients found in each of the food groups.
d. Analyze the information on a nutrition facts label.

(Grade 7)

1. Explain the role of nutrients.
A. Nutrition and Fitness
1. Explain the role of nutrients.
a. Describe the function of the six major nutrients.
b. List and explain how nutrients affect the risk factors for the following four common chronic diseases: Cancer, Cardiovascular disease, Osteoporosis, Type II Diabetes.
4. Apply the Dietary Guidelines for Americans in meal planning.
a. Describe the basic principles of meal planning.
b. Explain how to create a healthy meal plan using the Food Guide Pyramid and Dietary Guidelines for Americans.

Additional Course VSC follows.

Alignment with Maryland's Best Practices of Service-Learning: *Nutrition and Fitness*

- 1. Meet a recognized community need**
Provide a homeless shelter, soup kitchen, or food pantry with food that targets their specific nutritional needs.
- 2. Achieve curricular objectives through service-learning**
See Voluntary State Curriculum standards listed in lesson.
- 3. Reflect throughout the service-learning experience**
Options include preparing a budget with the money amassed from the fundraiser to purchase food needed to meet the nutritional needs of the group.
Complete a photo essay on the project.
- 4. Develop student responsibility (Students have opportunities to make decisions about the service-learning project.)**
Students will decide on the homeless shelter, develop the action plan, and implement the project.
- 5. Establish community partnerships**
Students will contact a local homeless shelter to partner with during the project. A grocery store should be contacted for purchasing foods at a possible discount. Local businesses may also be contacted for donations.
- 6. Plan ahead for service-learning**
Students need to obtain information about the nutritional needs of different age groups. They must be involved in formulating a relevant objective, and then devise an organized plan to implement the project.
- 7. Equip students with knowledge and skills needed for service**
Students will need to learn about proper nutrition and health/fitness and why they are important to the human body. This will help them understand why it is important to provide the community organization with specific nutritious foods. Students should also understand the scientific process when engaging the initial investigation. Provide students with ad flyers from a local grocery store and then have them try to plan a nutritionally acceptable meal(s) based on the allotment of food stamps for one family of four.



Additional VSC Indicators Met

Math:

Standard 7.0 Processes of Mathematics:
Students demonstrate the processes of mathematics by making connections and applying reasoning to solve problems and to communicate their findings.

Topic

A. Problem Solving

Indicator

1. Apply a variety of concepts, processes, and skills to solve problems.

Objectives

Identify the question in the problem.

Decide if enough information is present to solve the problem.

Make a plan to solve a problem.

Apply a strategy, i.e., draw a picture, guess and check, finding a pattern, writing an equation.

Select a strategy, i.e., draw a picture, guess and check, finding a pattern, writing an equation.

Identify alternative ways to solve a problem.

Show that a problem might have multiple solutions or no solution.

Extend the solution of a problem to a new problem situation.

Science:

Standard 1.0 Skills and Processes

Students will demonstrate the thinking and acting inherent in the practice of science.

Topic

A. Constructing Knowledge

Indicator

1. Design, analyze, or carry out simple investigations and formulate appropriate conclusions based on data obtained or provided.

h. Use mathematics to interpret and communicate data.

Additional VSC Indicators Met

Language Arts – Writing:

Standard 4.0 Writing: Students will compose in a variety of modes by developing content, employing specific forms, and selecting language appropriate for a particular audience and purpose.

A. Writing

1. Compose texts using the prewriting and drafting strategies of effective writers and speakers.

a. Use a variety of self-selected prewriting strategies to generate, select, narrow, and develop ideas.

Evaluate topics for personal relevance, scope, and feasibility.

Begin a coherent plan for developing ideas.

Explore and evaluate relevant sources of information.

b. Select, organize, and develop ideas appropriate to topic, audience, and purpose.

Organize information logically.

Use effective organizational structures.

Select or eliminate information as appropriate.

Verify the effectiveness of paragraph development by modifying topic, support, and concluding sentences as necessary.

Procedures with Resources: *Nutrition and Fitness*

These procedures represent an example of a service-learning lesson on this specific topic, but can be changed to meet individual classroom interests or varying community needs. You are encouraged to adapt this unit to fit your unique classroom and community and to solicit student input in planning and decision making.

1. Introduce the service-learning project by discussing service-learning and citizenship with students and engaging in activities to explore those themes. A resource to support this topic can be found at www.servicelearning.org/resources/bring_learning/.
2. Research the nutritional requirements for all of the various age groups.
 - <http://www.health.gov/dietaryguidelines/>
 - www.mypyramid.gov
 - http://fnic.nal.usda.gov/nal_display/index.php?info_center=4&tax_level=3&tax_subject=256&topiec_id=1348&level3_id=5732&level4_id=0&level5_id
 - <http://www.fao.org/docrep/007/y5686e/y5686e00.htm>
3. Brainstorm or continue research to create a list of local homeless shelter, soup kitchen, or outreach program.
 - www.artistshelpingchildren.org/shelters.html#maryland
 - www.nationalhomeless.org/resources/local/alternateindex.html
 - www.dhr.state.md.us/county.htm
4. Choose one shelter per class. (Classes can then compete for a “prize”.)
5. The class must then select a student speaker for contact purposes.
6. Contact the shelter by phone. Dialogue should include:
 - Stating the name, school, and a synopsis of the project.
 - Asking the representative if the organization would like to participate in the project.

- Having the representative:
 - Identify major age groups served by the organization.
 - Identify the foods being served on a daily basis.
 - Identify any nutritional shortages.
7. Have each class develop an objective targeted at the particular focus for each organization.
 8. Develop a plan of action. (Examples: Fundraiser, food drive)
 9. Complete project Worksheet:
www.goodcharacter.com/SERVICE/primer-9.html
 10. Successful Examples in Maryland:
 - Guideline for service-learning action plans,
www.goodcharacter.com/SERVICE/primer-3.html
 - Website with the true story involving an 8 year-old Maryland girl who had a vision and ultimately accomplished her goal,
www.happyhelpersforthehomelss.org/index.html
 - An article about the work that Bea Gaddy and her family have done in Baltimore, www.citypaper.com/news/story.asp?id=3382
 - Website for the Bea Gaddy Family Center, www.bea-gaddy-family-center.org/index.shtml
 11. The plan for each class must include procedures to obtain the necessary food items for each shelter and a way for the students to deliver the food and participate in serving one meal (not necessarily the food raised).
 12. Implement the action plan.
 13. Reflect and evaluate the effectiveness of the project by completing the *Rubric for Assessing the Use of the Maryland's Seven Best Practices of Service-Learning* which can be found at www.mdservice-learning.org.

Additional Interdisciplinary Connections



Reading & Language Arts
– Action plan writing embedded in the writing curriculum.

Math – Developing a budget to purchase the necessary foods. Food stamps activity.

Science -- Use scientific investigation to determine the needs of the various age groups in the designated shelter.

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Division of Student, Family, and School Support
Youth Development Branch
200 West Baltimore Street
Baltimore, Maryland 21201
410-767-0358

www.mdservice-learning.org
www.marylandpublicschools.org