Integrated Lesson Plan: Grade 5—Nutrition and Food Security

Science and Technology

Appendices
Appendix A: Science Research Package (not included)
Appendix B: Other Handouts (included)
Appendix C: Assessment and Evaluation Tools (included)

Objectives
By the end of this lesson plan, students will have:

• practiced social skills, including active listening in small and larger groups
• have used reading and writing skills to construct an informational booklet (or website) on nutrition
• learned about the three basic nutrients and their effects on the body,
• discovered the importance of daily activity
• collected primary and secondary data to create a double bar graph that compares their personal nutrient intake to ideal nutrient intake for children their age
• learned about food security and how this relates to malnutrition/hunger
• been involved in a debate about food security and sustainable development
Lesson Plan: Integrated Lesson Plan Grade 5  Theme: Nutrition and Food Security

<table>
<thead>
<tr>
<th>Curriculum Expectations</th>
<th>Science—Life Systems: demonstrate understanding of factors that contribute to good health.</th>
<th>Language—Oral Communication: listen in order to understand and respond appropriately in a variety of situations for a variety of purposes;</th>
<th>Language—Reading: recognize a variety of text forms, text features, and stylistic elements and demonstrate understanding of how they help communicate meaning;</th>
<th>Language: Writing: generate, gather, and organize ideas and information to write for an intended purpose and audience;</th>
<th>Math—Data Management and Probability: read, describe, and interpret primary data and secondary data presented in charts and graphs, including broken-line graphs</th>
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<tr>
<td>Specific Expectations</td>
<td><strong>Science: Life Systems</strong>&lt;br&gt;<strong>Basic Concept</strong> explain what happens to excess nutrients not immediately used by the body;</td>
<td><strong>Developing Skills of Inquiry and Design:</strong>&lt;br&gt;- compile data gathered through investigation in order to record and present results, using tally charts, tables, and labeled graphs produced by hand or with a computer&lt;br&gt;- use appropriate vocabulary, including correct science and technology terminology, in describing their investigations, explorations, and observations (e.g., use terms identify a balanced diet as one containing carbohydrates, proteins, fats, minerals, vitamins, fibre, and water, and design a diet that contains all of these);</td>
<td><strong>Relating Science and Technology to the World</strong>&lt;br&gt;- describe the types of nutrients in foods (e.g., carbohydrates, fats, proteins, vitamins, minerals) and their function in maintaining a healthy body (e.g., supporting growth);&lt;br&gt;- describe the relationship between eating habits, weight, height, and metabolism;&lt;br&gt;- explain the importance of daily physical activity;</td>
<td><strong>Language—Oral Communication</strong>&lt;br&gt;<strong>Listening to Understand 1.2</strong> demonstrate an understanding of appropriate listening behaviour by adapting active listening strategies to suit a range of situations, including work in groups&lt;br&gt;<strong>Speaking to Communicate 2.2</strong> demonstrate an understanding of appropriate speaking behaviour in a variety of situations, including paired sharing, dialogue, and small- and large group discussions&lt;br&gt;<strong>Reflecting on Oral Communication Skills and Strategies 3.1</strong> identify, in conversation with the teacher and peers, what strategies they found most helpful before, during, and after listening and speaking and what steps they can take to improve their oral communication skills</td>
<td><strong>Language—Reading:</strong>&lt;br&gt;<strong>Text Patterns 2.2</strong> identify a variety of organizational patterns in a range of texts and explain how they help readers understand the texts&lt;br&gt;<strong>Text Features 2.3</strong> identify a variety of text features and explain how they help readers understand texts</td>
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<td><strong>Language—Writing</strong>&lt;br&gt;<strong>Developing Ideas 1.2</strong> generate ideas about a potential topic and identify those most appropriate for the purpose&lt;br&gt;<strong>Review 1.6</strong> determine whether the ideas and information they have gathered are relevant, appropriate, and adequate for the purpose, and do more research if necessary</td>
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<td>Specific Expectations</td>
<td><strong>Math</strong>&lt;br&gt;<strong>Collection and Organization:</strong> collect and organize discrete or continuous primary data and secondary data and display the data in charts, tables, and graphs that have appropriate titles, labels and scales that suit the range and distribution of the data, using a variety of tools (e.g., graph paper, simple spreadsheets, dynamic statistical software);&lt;br&gt;<strong>Data Relationships:</strong>&lt;br&gt;- read, interpret, and draw conclusions from primary data and from secondary data presented in charts, tables, and graphs&lt;br&gt;- compare similarities and differences between two related sets of data, using a variety of strategies</td>
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<tr>
<td>Length</td>
<td>1.25 days</td>
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Lesson Plan: Integrated Lesson Plan Grade 5  Theme: Nutrition and Food Security

| Prior Knowledge | • Students have been introduced to a variety non-fiction texts (brochures, etc) and have learned how to look for specific information in them.  
• Students have been introduced to double bar charts and line graphs.  
• Students have learned about the structure of a debate.  
• Students have learned the parts of a play.  

| Resources | Nutritional Reference Materials (Make/obtain 6 copies of each information source so each group of five has one)  
Dictionaries  
Grid Paper for bar graphs  
Large Chart Paper (enough for 5-7 groups)  
Markers  
CHF Video- NALOGU: Everyone Lends a Hand (Ghana)  
White Construction paper for Science Fact Sheets  
Various packaged food items with nutrition labels and health claims and fruit and vegetables  

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<tr>
<th>Intro Activity</th>
<th>Oral Communication</th>
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| Time: 30 minutes | 1. Tell students they will be working in groups later to discover information about nutrition, but first they need to know how to work in groups and be active listeners.  
2. Divide the class into groups of 3. Do the Teaching Listening Tribes Activity: page 251 Do the reflection questions in the activity as a class in the community circle. Suggested topics:  
• Should junk food be made illegal?  
• Why is the number of overweight people in Canada increasing?  
• Should people who are hungry be given food or taught how to farm/fish/get/make their own food?  
Re-form community circle and use the suggested reflection questions on the Tribes exercise sheet. |

| Modification for Exceptional Student: Gifted and Child with Reading Learning Disability | None needed |

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<tr>
<th>Time: 2.25-3 hours</th>
<th>Science</th>
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| 3. (15 min )Divide students into heterogeneous groups of 5. Groups will have all levels of ability represented. Tell students to look at the various items of pre-packaged and non-packaged food items brought in.  
• Write on the board and pose the questions below. Tell them will have to discuss these questions in their groups. Which foods are healthy? Why do you think these foods are healthy? What makes the other foods unhealthy? How did you determine which foods were healthy/unhealthy?  
• Give them 5-10 minutes to look at the food and 15 minutes to discuss.  
• In their groups students agree on three foods they think are the healthiest and elect one person to explain their reasoning to the class.  
• Group share their answers with explanations.  
4. (2-3 hours) Tell students that in their groups they will create an information booklet (on paper or the computer) on nutrition for kids their age. (Groups will operate using the Jig-Saw format, where each student in their group becomes an expert on their reading material).  
• Ask the class to tell you what an information booklet might look like. Write down their answers on the board or chart paper.  
• Provide an example of a information booklet on the overhead. (i.e. Canada's Guide to Healthy Eating and Physical Activity)  
• Discuss differences between class perceptions of booklet and the example: E.g. |
sections, information on it?

- Ask students what children their age might want to know and see (pictures, graphs) about nutrition so that they can make an interesting and good booklet for kids their age. Write these ideas in the form of a question on the board. Brainstorm and provide examples of graphics they might want to include: e.g. Pie chart of ideal nutrient ratio, etc.
- Make sure to star the questions students must answer in their fact sheet. See list of attached questions. Encourage students to include un-starred questions and/or add more sections if they find something interesting in the reading. (e.g. different kinds of carbohydrates, blood glucose levels, average dietary health of Canadians)
- Before group begins reading and working on the project, have members assign roles (for cooperative learning). Ask students in each group to choose people to play a role. See list of roles attached.

5. Give groups research packs of information on nutrition that contains a variety of information on nutrition (see attached package). Note: The package only has 3 sources, 2 additional sources will be a Webquest (suggested sites included in the research package) and the textbook. Tell them each student in the group needs to select one text from the package and present their findings to the group. They will be an expert on this text and will need to summarize the information for their group.
   - Students then agree what should be written down under the categories on their fact sheet, decide what visuals to include, and decide what extra info they might want to include.
   - **Note**: Teacher floats around to each group to assist students with reading when needed. Teacher writes anecdotal comments.

6. Students hand in project.

7. Community circle: Class reflection/conclusion on the science activity to consolidate learning
   - Brainstorm to create a word wall of important terms they came across about nutrition (nutrition, protein, carbohydrate, prevalence, rate, malnutrition, obesity, activity levels, nutrient). Give each student a hand out with definitions on it for future reference. (See attached)
   - Ask students what they found out about each essential question and write these on the board. Have students take notes from the board in order to ensure they have correct comprehensive information in their science notebooks.

8. Class then stays in community circle to reflect on the group work process.
   - The teacher leads the discussion particularly focusing on:
     - what skills each role required;
     - how these roles helped/hindered the group work process
     - how they overcame the challenges associated with each role; and,
     - what other possible roles could be used instead of or in addition to the roles prescribed them.

Math

9. Students will work individually for the following activity. Tell students they...
**Lesson Plan:** Integrated Lesson Plan Grade 5  
**Theme:** Nutrition and Food Security

<table>
<thead>
<tr>
<th>Time: 1 hour</th>
<th>will now look at their own dietary habits.</th>
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<tbody>
<tr>
<td>Intelligences Used:</td>
<td>• Give handouts of two sheets students have already seen from the information package. Handouts are entitled: The Importance of Nutrients, and Canada’s Food Guide suggested servings page. These pages that contains a chart of common food items in the carbohydrate, protein and fat categories as well as what a single serving of each nutrient is: (e.g. _ cup of rice/pasta or a fist size = single serving of carbs, 1 tablespoon of butter = single serving of fats, etc. size of a deck of cards or 50-100 grams of meat, poultry fish = one protein serving)</td>
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<tr>
<td>Intrapersonal</td>
<td>• NOTE: it’s important to give alternative practical measuring devices to help students visualize and determine serving size: eg. a fist size = single serving of carbs, a deck of carbs = single meat, fish poultry serving,</td>
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<tr>
<td>Spatial</td>
<td>• Handout Template of chart with columns: Food, Quantity of Food, Carbohydrate, Protein, Fat (See Attached) to prompt memory ask students to think about what they ate for breakfast, lunch, dinner and snacks yesterday as well as the quantities they had (a cup of milk, 2 pieces of toast, a tablespoon of peanut butter, etc) and convert these servings to carbohydrate, proteins, fats</td>
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<tr>
<td>Linguistic</td>
<td>• On handout show students that foods can be in more than one nutrient category: e.g. milk. Ask students what nutrients they think are in these. Show them how to write this information down in the chart e.g. 2% milk 1 cup 1 carbohydrate, 1 protein</td>
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<tr>
<td>Logical-Mathematical</td>
<td>• Students should tally up the total number of carbohydrates, fat and protein blocks they ate.</td>
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<tr>
<td><strong>Note:</strong> Teacher should float around and help students identify foods that fit into one of the nutrient categories (or a combo of both), especially to help categorize different ethnic foods.</td>
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10. After students complete their person recordings, hand out identical chart to one above, but have students plan an ideal Canadian Food Guide Diet and convert to nutrients (see attached)  
• Once this is done, students should add up the total number of carbohydrates, protein and fat blocks that the guide suggests.

11. Using grid paper and the tally results for their personal food diet and the Canada guide, students will make a comparative bar graph that compares the number of servings they ate of each nutrient to the Guide’s ideal. Students will assess their findings and write down what is good about their diet and what needs work. Students will then propose an action plan to fix their diet.

12. Students should hand in their 2 conversion charts and their double bar graph comparison chart for marking.  
Students will be marked on:  
• Correctly identifying foods as carbohydrates, proteins, and/or fats  
• Including the quantity they ate/the Canada food guide suggests Making the correct conversions between quantity of food and nutrients blocks  
• Representing the above data accurately in a double bar graph.  
• Using the conventions of bar graph (labels, numbers, title)

**Global Education**

13. **Intro activity:** on an overhead show students a double bar chart comparing the ideal nutrient ratio for children and nutrient levels of children from a developing country.

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**Modification for Student with Reading Learning Disability**

Step 10: Pair struggling reader with another student and have them work together, while still producing individual work.

**Modification for Student with Giftedness**

Step 10: Student finds out the percentage of his/her diet that comes from carbs, protein, and fats and creates a pie graph.
### Lesson Plan: Integrated Lesson Plan Grade 5  Theme: Nutrition and Food Security

| Time: 1.5 hours | **Intelligences Used:**
<table>
<thead>
<tr>
<th></th>
<th>Intrapersonal, Interpersonal, Linguistic</th>
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- Teacher will compile this information using the Canada Food Guide as well as the following sources: Green Facts [http://www.greenfacts.org/en/diet-nutrition/index.html#3](http://www.greenfacts.org/en/diet-nutrition/index.html#3), WHO and WFP (world food program).

14. Get students back into their research groups. Do Group Brainstorming (Tribes, 259) on the question: **Why do you think some people are malnourished and go hungry?**
   - Students write down responses on large chart paper. Then students share their responses with the class. Teacher introduces the concept of FOOD INSECURITY as a source of malnutrition and hunger.

15. Students watch CHF video **NALOGU: Everyone Lends a Hand** (Ghana).
   - This video introduces the concept of SUSTAINABLE DEVELOPMENT. In the video students will see how families work with CHF and our local partners to improve their livelihoods and end their cycle of poverty.

16. Students write a VIEWER RESPONSE to the video.
   - How did you feel and think when you watched this video? Explain.
   - What were some of the causes of food insecurity in this village?
   - What was the CHF doing to help the families? What's this kind of help called?

17. In their groups of five, students will be given a text outlining a food security situation. They will read it and discuss the issue with their group (to ensure they understand the situation). This text will form the basis of a debate.

18. Before beginning the debate activity, students will be told and given rules and instructions on a handout about the debate (see attached) and be provided with an assessment rubric (see attached) the teacher will use to evaluate the debate.
   - The teacher reads and reviews the rubric with the class for to make sure students understand. Understanding

19. Students plan and debate a food security issue:
   - See attached activity plan from CHF entitled: Whose Decision is it Anyway?

20. After debate the audience identifies the main points of each side and decides which side wins based on the checklist on the rule sheet.

### Concluding Activity

| Time: 20 min | **Intelligences Used:**
|              | Kinesthetic, Interpersonal, Intrapersonal, Musical |

As a class students do modified version of Milling to Music (Tribes, 267):
- Students walk around the class while music is playing and when the music stops, the teacher calls out a question regarding nutrition and food security. Students must talk about and listen to the person or people closest to them.

Reflection: Have students sit back in a community circle and:
- Discuss what the most interesting thing they learned about nutrition AND what they liked about this activity.
- Ask students what skills they needed to do the activity. (listening, speaking clearly)
- Encourage students to give appreciation statements to others (for working well in a group, helping them, etc) using an “I really liked it when…”

### Assessment

**Teaching Listening** activity: The teacher should assess students on their listening and paraphrasing abilities, using a checklist.
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Theme: Nutrition and Food Security

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<td><strong>Science Reading and Fact Sheet Creation:</strong> Teacher writes short anecdotal comments about how students are participating.</td>
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| **Fact Sheet Marking:** Students should hand in their fact sheets for marking. Areas evaluated include:  
  - Accurate answers to all of the questions outlined on the board (and in the teacher’s notes)  
  - Creativity of presentation  
  - Original ideas |
| **Math Bar Graphs:**  
  - Check for the following information on the list:  
    - Quantities of food provided,  
    - Food listed under the appropriate category,  
    - Graphic representation of ideal amount of nutrients included and accurate,  
    - Graphic representation of student’s diet included and accurate.  
  - Comparison of the ideal diet and students’ diet was made  
  - Assessment of diet was made  
  - Suggestions for improvement in diet (if applicable) |
| **Global Education:**  
  a) Viewer Response: Teacher should not mark this, but read and respond to what students wrote.  
  b) Debate: Rubric Sections:  
    - All points on sheets presented (students will be given a copy of the points each side needs to address)  
    - Participation: everybody participated and gave both arguments and rebuttals  
    - Dramatic Flare/Creativity |

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<th>Follow Up-Next Day or End of Week</th>
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<td>Play jeopardy game to review nutrition vocabulary, nutrients impact on the body, reasons for hunger and malnourishment</td>
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<tr>
<th>Other possible follow up activities</th>
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<tr>
<td>Field trip to a farm and/or cheese/dairy factory</td>
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<tr>
<td>Math Problems: more work on nutrition labels, particularly counting calories and determine calories from fat, carbs and proteins. <a href="http://www.edhelper.com/ReadingComprehension_29_20.html">Link</a></td>
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<tr>
<td>Create a nutritionally balanced snack for the class</td>
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<tr>
<td>Conduct physical experiment that demonstrates the existence and/or amount of nutrient in a type of food, and/or how the nutrient is related to the body. <a href="http://chemistry.org/portal/a/c/s/1/wondernetdisplay.html?DOC=wondernet%5Cactivities%5Cfood%5Cfood.html">Link</a></td>
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**Teacher Notes**

**Science Activity Step No. 5**

**List of essential questions include:**

- What are the basic food groups according to Canada’s food guide?  
- What are the basic nutrient (vitamins and minerals included) groups?  
- How do the food groups relate to the nutrient groups?  
- What does each nutrient do for the body?
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- What are the consequences for the body and mind if there is too much of one nutrient, and/or too little?
- How much of a food group should you eat?
- How do diet and physical activity relate?
- How can you tell if a food, particularly packaged foods, is healthy?
- What are the sections of a nutrition label and what do they mean?
- Design and include a sample balanced diet for children your age which includes water recommendations, and physical activity suggestions.

Web Quest Sites
http://www.kidshealth.org/kid/nutrition/index.html#All_About_Food
http://www.dole5aday.com/Kids/K_Index.jsp
http://www1.wfubmc.edu/Nutrition/Count+Your+Calories/Hows+Your+Diet.htm

Science Activity Step 6: Roles for Group Research

a) Time Keeper: leads discussion on how much time to allocate to reading. Discussion and writing and then makes sure people stick to these times.
b) Discussion and Participation Director (makes sure all required questions are discussed; help people take turns speaking to ensure everyone participates).
c) Materials/Art Manager: suggests and discusses with others what visuals to include in the fact-sheet, and does the artwork in the form he/she likes (cut and paste, draws)
d) Word Wizard: helps students define difficult words, proof reads and ensures appropriate science terms are being used. Ensures everybody understands these terms.
e) Connecter: gets everyone to think about how their readings connect to their lives so group members can think of the audience they are writing for and decide on the relevancy of additional sections.
Helpful Nutrition Vocabulary List

Calcium – The mineral in your body that makes your bones and keeps them hard and strong. In fact, most of the calcium in your body is stored in your bones and teeth.

Calorie – A measure of the energy you get from the food you eat. Foods have carbohydrates, proteins and fats. Carbohydrates have 4 calories per gram. Proteins have 4 calories per gram. Fat has 9 calories per gram.

Carbohydrate – A major source of energy in the diet. There are two kinds of carbohydrates: simple carbohydrates and complex carbohydrates. Simple carbohydrates are sugars and complex carbohydrates include both starches and fibre.

Fibre: helps move food and wastes through your system. It is a carbohydrate.

Cholesterol – A fat-like substance that is made by the body and is found naturally in animal foods such as meat, fish, poultry, eggs and dairy products. Foods high in cholesterol include liver and organ meats, egg yolks and dairy fats. Depending on the type of cholesterol, it can be good or bad for the body.

Diet: all the things you regularly eat & drink

Digestion: process by which the body breaks down food

Digestive System: series of organs that work together to break down food
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Fats: a nutrient, a source of energy for the body as well as insulation.

- **Unsaturated Fat** - a fat that is liquid at room temperature. Vegetable oils are unsaturated fats. Unsaturated fats include polyunsaturated fats and monounsaturated fats. They include most nuts, olives, avocados and fatty fish (salmon).

  **Polyunsaturated Fat** - A highly unsaturated fat this is liquid at room temperature. Fats that are in foods are combinations of monounsaturated, polyunsaturated and saturated fatty acids. Polyunsaturated fats are found in greatest amounts in corn, soybean and safflower oils, and many types of nuts.

- **Saturated Fat** - A fat that is solid at room temperature. Saturated fat is found in high-fat dairy products (cheese, whole milk, cream, butter and regular ice cream), fatty fresh and processed meats, the skin and fat of chicken and turkey, lard, palm oil and coconut oil. Eating a diet high in saturated fat raises blood cholesterol and risk of heart disease.

**Food Groups**: a way of grouping/classifying foods that humans consume in their everyday lives, based on the nutritional properties of these types of foods. For example, the Canadian Food Guide includes the following groups: 1) Milk Products. 2) Meat and Alternatives 3) grain Products 4) Vegetables and Fruit

**Glucose**: sugar formed when the body breaks down carbohydrates

**Health**: the condition of being well in body, mind, or spirit; especially not having any disease

**Health Claim**: a statement that tells you how an item can affect your health

**Malnutrition**: poor health because one’s diet doesn’t have enough nutrients. Can be cause by lack of food or poor quality foods
Milligram – a unit of measure used on nutrition labels to show the amount of calcium and other minerals in foods. A milligram is a little itty-bit of a gram (there are 1,000 milligrams in a gram).

Minerals – Tiny amounts of these substances in your body help you grow and be healthy. You get minerals from food, just like you get vitamins. Minerals you may recognize are calcium, sodium, potassium, iron and zinc. Minerals are substances that strengthen the muscles, bones, & teeth.

Nutrient – Things in food (like vitamins, minerals, protein, fat and carbohydrates), that help your body function and grow.

**Nutrient Content Claim:** tells you about one nutrient in a food, usually sodium, sugar, and/or fat

Nutrition: process of taking food and using it for growth & good health

Nutrition Facts Table/Label: gives you information on the calories and 13 nutrients for the portion and/or serving size on pre-packaged food.

Ounce – A unit of weight. There are 16 ounces in one pound. Ounces can be used to measure liquids (like 8 fluid ounces in a cup), or can be used to measure solid things (a slice of cheese is a little less than one ounce).

Percent Daily Value (%DV) – The “%DV” on the Nutrition Facts food labels is a number that tells you if there’s a lot or a little of a nutrient in a serving of food. 5%DV or less of a nutrient in a serving is low; 20%DV or more is high.

Portion: A helping of a dish/meal. Portions and servings are different. For example, “one cheese sandwich” is a portion (probably made up of 2 servings of bread and 1 serving of cheese).

Protein – One of the three nutrients that provides calories to the body. Protein is an essential nutrient that helps build many parts of the body, including muscle, bone, skin and blood. It is essential for life, and is supplied by various foods (as meat, milk, eggs, nuts, and beans)
Serving: An amount of one kind of food in a portion. E.g. A cheese sandwich may have 2 servings of bread. Serving sizes can be shown in different ways for different foods - such as “slices” of cheese or “ounces” of juice. A serving size is shown on a Nutrition Facts Label. Serving sizes can be shown in different ways for different foods - such as “slices” of cheese or “ounces” of juice.

Vitamins: Substances that are necessary in very small amounts to the nutrition of most living things. They are important to the control of growth and development and are present naturally in many foods or in some cases are produced within the body

Information Sources:

Quia: [http://www.quia.com/jq/55775list.html](http://www.quia.com/jq/55775list.html)

All accessed on: October 1st, 2006
Math Activity Number 10.

_____________________'s Diet Yesterday

<table>
<thead>
<tr>
<th>Food</th>
<th>Quantity</th>
<th>Carbohydrate</th>
<th>Protein</th>
<th>Fat</th>
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<tr>
<td>Chicken</td>
<td>1 drumstick</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Lentils</td>
<td>1 Cup</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>Carbohydrates</td>
<td>Protein</td>
<td>Fat</td>
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Lesson Plan: Integrated Lesson Plan Grade 5  
Theme: Nutrition and Food Security
Math Activity Number 11

______________’s Example of Ideal Canadian Food Guide Diet for Children 10-12

Remember! The Guide has specific dairy requirements for children between 10 and 16!!!

<table>
<thead>
<tr>
<th>Nutrients</th>
<th>Food</th>
<th>Quantity</th>
<th>Carbohydrate</th>
<th>Protein</th>
<th>Fat</th>
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Lesson Plan: Integrated Lesson Plan Grade 5  Theme: Nutrition and Food Security

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<td>Total</td>
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<td>Carbohydrates</td>
<td>Protein</td>
<td>Fat</td>
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16
## CLASSROOM DEBATE RUBRIC (Step 19)

Group: ____________  Debate # ________

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Levels of Performance</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
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<tr>
<td>1. <strong>Organization and Clarity:</strong></td>
<td>Unclear in most parts</td>
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<td>viewpoints and responses are outlined both clearly and orderly.</td>
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<td>2. <strong>Use of Arguments:</strong></td>
<td>Few or no relevant reasons given</td>
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<td>reasons are given to support viewpoint.</td>
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<tr>
<td>3. <strong>Use of Examples and Facts:</strong></td>
<td>Few or no relevant supporting examples/facts</td>
</tr>
<tr>
<td>examples and facts are given to support reasons.</td>
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<td>4. <strong>Use of Rebuttal:</strong></td>
<td>No effective counter-arguments made</td>
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<td>arguments made by the other teams are responded to and dealt with effectively.</td>
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<td>5. <strong>Presentation Style:</strong></td>
<td>Few style features were used; not convincingly</td>
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<td>tone of voice, use of gestures, and level of enthusiasm are convincing to audience.</td>
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<td>6. <strong>Participation</strong></td>
<td>Only one or two members contributed to the debate</td>
</tr>
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</table>
Lesson Plan: Integrated Lesson Plan Grade 5  Theme: Nutrition and Food Security

Staging Rationale

I chose to stage my lesson starting with oral communication. I really wanted students to experience active listening before getting involved in group work in order to minimize or even prevent potential conflicts within groups. The next stage of the lesson was science. I chose to do a hands-on observation activity first in order to engage students in the inquiry process, get them thinking about the kinds of knowledge they might want/need about nutrition in the class and in life, and have them motivated to read textual information on the subject. I also thought that this observation activity would allow me to assess students’ prior knowledge on the subject and then build upon it. Finally, I felt that an observation activity could give students an opportunity to practice active listening and oral communication skills with the people who were in their groups, before they conducted the main research on the topic.

My next stage was not as clearly demarcated as the first two. For this stage, I re-introduced language arts in the form of reading and writing. Writing an information booklet or web page allowed students to display and apply what they learned about nutrition in a creative manner. I really liked the seamless integration between science and language arts because students could see how language is used in many different subject areas, and perhaps more importantly how they often experience nutrition information in “real life”.

After the science/language component, I had the students engage in a math lesson. The math lesson just naturally flowed from the science stage because the math strand being worked on was data management. The students had already been exposed to a variety of science data. Instead of learning new data to create bar charts in the math lesson, students could use what they had already learned in the science component. I also placed the math stage right after the science stage so students could also begin to see the direct link between math and science themselves.

As one of my last stages, I introduced a social justice component to the lesson. I felt that students should have an opportunity to look at nutrition from a non-scientific viewpoint. In this way, I felt students could understand some of the broader issues linked to nutrition and malnutrition, such as poverty and lack of food security. The debate involved in this stage also allowed students to practice their oral communication and listening skills.

I wrapped up my lesson with an activity I learned from a Tribes seminar I attended this past September. This activity asked students to revisit and recall their learning about nutrition and social justice in a fun, interactive (interpersonal) and interpersonal way. In this way, I hoped students could solidify their knowledge, giving them a better chance of retaining their science and social justice learning.