



Clock Partners

Directions

Find four partners for discussion times in the workshop. Record their names on the lines by 12, 3, 6, and 9 o'clock.



Clock Partners

Garmston, R. J. & Wellman, B. (1999). *The adaptive school: A sourcebook for developing collaborative groups*. Norwood, MA: Christopher-Gordon Publishers, Inc.



Powerful Lessons

Learning Activity Checklist

Standards-Based Task	Engaging Task
<p>The task helps students:</p> <ul style="list-style-type: none"> • Gain/improve specific knowledge or skills in a content area (example, district or state standards). • Gain/improve 21st Century Skills (problem solving, communication, collaboration, information, and time and resource management). • Practice the methods/processes of a discipline (for example, the scientific method). • Understand how learning goals guide teaching and learning activities. • Perceive how learning activities are aligned with assessments. • Know the criteria and performance standards for teacher, peer, and self-evaluations of their products and performances. • Demonstrate understanding and apply their knowledge and skill in a variety of ways. 	<p>Students:</p> <ul style="list-style-type: none"> • Are involved in active learning (hands-on, building, making, moving, using “multiple intelligences,” etc.). • Find the topic fascinating, fun, or passion-arousing. • Are given choices (topic, approach, etc.). • Are challenged (but not overwhelmed). • Create a product/performance or gain competencies that have value to them outside of school. • Know their product/performance will be appreciated, used by, or useful to others outside the classroom. • Receive real-world feedback on the quality of their work from an audience or subject-matter expert. • Get to bring their experience outside the classroom to bear on their work. • Are accountable to one another.
Problem-Based Task	Technology Enhances Academic Achievement
<p>Students must exercise logical and creative thinking to:</p> <ul style="list-style-type: none"> • Form a reasoned judgment. • Solve a problem. • Make a decision or choice. • Plan a course of action. • Persuade or convince someone. • Defend a position. • Explain a concept. • Interpret a complex situation. • Resolve a perplexing or puzzling situation. • Troubleshoot and improve a system. • Meet someone’s genuine need. • Plan and stage an event. • Apply a course concept in a real-world situation. • Invent a problem-solving process. • Work within constraints (for example, restrictions on size, budget, time, resources, etc.). 	<p>Technology is used to:</p> <ul style="list-style-type: none"> • Give students access to quality information, primary documents, or points of view not available otherwise. • Allow students to investigate a concept in ways infeasible otherwise (for example, human/animal anatomy). • Differentiate learning for students with different needs. • Help students understand abstract concepts. • Enable students to participate in online scientific investigations. • Help students with the problem-solving process (e.g., using graphic organizers). • Foster student discovery of concept or construction of their own understanding of a concept. • Share ideas and communicate with remote groups. • Help students receive feedback on their work from a community outside the classroom. • Enable students to participate in the democratic process.



What's for Lunch

What's for Lunch?

A Middle School Health Lesson

Designed by Karen Meyer

Lesson Objectives

As a result of this lesson, the student will:

1. Know and be able to identify the nutrients provided by a variety of foods.
2. Describe how bodily function and physical performance are affected by food consumption.
3. Be able to use library resources to locate, evaluate, and collect information.

Introduction

Your teacher recently talked about being aware of the number of grams of fat, sodium, and calories in your diet and why it is important to know this information. You will calculate the nutritional value of what you eat at a fast food restaurant.

Student Assignment

1. Take out the Food Tracker worksheet.
2. Locate a library book that can answer the following questions:
 - According to the American Heart Association, what percent of your daily calories should come from fat?
 - How can cholesterol-free foods contribute to raising your cholesterol?
 - What type of health risks can be caused by eating foods high in cholesterol?
 - How much sodium should you eat a day?
3. Pick two different fast food restaurants from the list on the Food Tracker worksheet.
4. Use Internet resources to compare the number of calories and grams of fat in a shake from the two different restaurants:
 - Which restaurant serves the shake with the highest total fat?
 - Which restaurant serves the shake with the highest calories?
 - What could explain the variation in the calories and total fat in the different milkshakes?

Resources

Health textbook

Library books

Food Tracker worksheet

Internet

Assessment

A = Covers topic in-depth with details and examples

B = Includes essential knowledge about the topic

C = Includes essential information about the topic but there are 1–2 errors

D = Content is minimal OR there are several errors



Food Tracker Worksheet

Name:

Period:

Date:

1. Your favorite fast food restaurant is _____
2. Your favorite meal there is _____
3. Go to the library and find a book that can answer the following questions:
 - According to the American Heart Association, what percent of your daily calories should come from fat?
 - How can cholesterol-free foods contribute to raising your cholesterol?
 - What type of health risks can be caused by eating foods high in cholesterol?
 - How much sodium should you eat a day?
5. Go to the Fast Food Nutrition Fact Explorer at <http://www.fatcalories.com/> and find the menu for your favorite fast food restaurant.
6. Open the Power Search menu and search all the restaurants for a shake.
7. Click the Search button to start the search.
8. Review the results and compare the number of calories and grams of fat in a shake from different restaurants.
9. Which restaurant serves the shake with the highest total fat?
10. Which restaurant serves the shake with the highest calories?
11. What could explain the variation in the calories and total fat in different milkshakes?
12. Find your favorite fast food restaurant from the home page of the Fast Food Nutrition Fact Explorer.



13. Complete the following table listing your favorite meal with its nutritional information.

Fast Food Restaurant Name:		
Your favorite meal:		Recommended daily intake:
	Calories	2,000–2,700 calories
	Fat	No more than 50–80 g
	Cholesterol	No more than 300 mg
	Sodium	No more than 1,100–3,300 mg

Part 1

1. Look through the menus of at least two more restaurants you eat at regularly. Complete the table with information about those meals.

Fast Food Restaurant Name:		
Your favorite meal:		Recommended daily intake:
	Calories	2,000–2,700 calories
	Fat	No more than 50–80 g
	Cholesterol	No more than 300 mg
	Sodium	No more than 1,100–3,300 mg

Fast Food Restaurant Name:		
Your favorite meal:		Recommended daily intake:
	Calories	2,000–2,700 calories
	Fat	No more than 50–80 g
	Cholesterol	No more than 300 mg
	Sodium	No more than 1,100–3,300 mg

2. Find an alternative meal that is healthier than your favorite meal from one of the restaurants. Complete the table with the information about the meal.

Fast Food Restaurant Name:		
Your favorite meal:		Recommended daily intake:
	Calories	2,000–2,700 calories
	Fat	No more than 50–80 g
	Cholesterol	No more than 300 mg
	Sodium	No more than 1,100–3,300 mg

3. Share your findings with your partner.

4. Keep this information in the glove box of your car and use it the next time you eat at a fast food restaurant!



What's for Lunch? Revised Lesson

Instructor(s): Karen Meyer
Lesson Title: What's for Lunch?
Grade Level(s): 5–8
Content Area(s): Health, Science, Literacy, Information Technology

Learning Context:
What is the context in which this lesson occurs in your curriculum? What are the overarching goals for the lesson?

Students are working through a science unit on food and nutrition. The aim of this lesson is for students to increase awareness of the composition of fast food, apply knowledge about nutrition to decision-making about fast food meals, and learn to use a powerful online tool for analyzing fast food nutrition.

Student Task Description
What real or simulated problem situation will students address? What useful product(s), event(s), or service(s) will students produce? What audience might benefit from the students' work?

You are in a hurry to get to practice and decide to catch a bite to eat on your way. Your teacher recently talked about being aware of the number of grams of fat, sodium, and calories in your diet and why it is important to know this information. And your coach has been talking about how nutrition can make a difference in how well your team plays.

How healthy is your favorite fast food meal? What can you learn that could help you and your teammates choose fast food that is tasty and healthy?

Resources
What materials and other resources are needed for this lesson?

<p>Curriculum: Health textbook Hand calculators</p>	<p>Technology: Computer workstations Microsoft Word Internet access</p>	<p>Information Sources: <i>Fast Food Facts</i> <i>Fast Food Nutrition Fact Explorer</i></p>	<p>Other:</p>
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Lesson Procedure

What are the steps students must follow to complete the lesson? What directions must teachers follow?

Student Steps	Teacher Directions	Technology to be Used (What and How)
<ol style="list-style-type: none"> 1. Use the Food Tracker Form to write down the name of your favorite fast food restaurant and meal. 2. Go to Fast Food Facts. 3. Use the information to answer these questions on your Food Tracker Form: <ul style="list-style-type: none"> • According to the American Heart Association, what percent of your daily calories should come from fat? • How can cholesterol-free foods contribute to raising your cholesterol? • What type of health risks can be caused by eating foods high in cholesterol? • How much sodium should you eat a day? 	<p>Help students go to the website as needed.</p> <p>Display Fast Food Facts on a computer or projection screen and demonstrate how students can find the information to answer the questions.</p>	<p>Internet for accessing information</p>
<ol style="list-style-type: none"> 4. Go to Fast Food Nutrition Fact Explorer and explore the menus of your favorite fast food restaurant. 	<p>Display Fast Food Nutrition Fact Explorer and demonstrate how to use the website.</p>	<p>Internet for accessing information</p>
<ol style="list-style-type: none"> 5. Open <i>Power Search</i> and search all the restaurants for a shake. Select “Sort by Total Fat” and click on <i>Search</i>. 	<p>Help students use the search tool as needed.</p>	<p>Internet for organizing information</p>
<ol style="list-style-type: none"> 6. Review the results and compare the number of calories and grams of fat in a shake from different restaurants. <ul style="list-style-type: none"> • Which restaurant serves the shake with the highest total fat? • Which restaurant serves the shake with the highest calories? • What could explain the variation in the calories and total fat in the different milkshakes? 		



Student Steps	Teacher Directions	Technology To Be Used (What and How)
<p>7. Find your favorite fast food restaurant from the home page of the Fast Food Nutrition Fact Explorer.</p> <p>8. Complete the table on the Food Tracker Form listing your favorite meal with its nutritional information.</p> <p>9. Use the Fast Food Nutrition Fact Explorer to fill out the information on the Food Tracker Form, Part B.</p> <p>10. Be prepared to share your findings with a partner and participate in a class discussion.</p>		<p>Internet for accessing information</p> <p>Microsoft Word for word processing</p> <p>Internet for accessing information, Microsoft Word for recording data</p>

Assessment Plan

What academic standards will be addressed in students' products and performances?

What information will be used to provide feedback during the lesson? How will student progress be measured toward the selected standards?

Health Benchmark 1.4

Identify the nutrients provided by a variety of foods.

See the attached rubric.

Science Benchmark 3. 1

Know and apply science concepts and skills to develop solutions to human problems in societal contexts.

See the attached rubric.

Communication Benchmark 2.1.1

Use language that adapts to the needs of the situation and setting.

Students will use their standard communication skills checklist for self- and peer-assessment of the sharing of their Food Tracker worksheet.

What 21st Century Skills (collaboration, technology, and/or management of time and materials) must students learn and practice in order to succeed?

What information will be used to provide feedback during the lesson? How will student progress be measured toward the selected standards?

Use technology to locate, evaluate, and collect information from a variety of resources.

See the attached rubric.



What's for Lunch? Rubric

Standard	Level 4	Level 3	Level 2	Level 1
Identify the nutrients provided by a variety of foods.	All topics are addressed and all questions are correctly answered.	All topics are addressed and most questions are correctly answered.	All topics are addressed and some questions are correctly answered.	One or more topics were not addressed.
Know and apply science concepts and skills to develop solutions to human problems in societal contexts.	Answers to all questions demonstrate application of nutrition information to arrive at logical solutions.	Answers to most questions demonstrate application of nutrition information to arrive at logical solutions.	Answers to some questions demonstrate application of nutrition information to arrive at logical solutions.	Answers to questions demonstrate little or no application of nutrition information to arrive at logical solutions.
Use technology to locate, evaluate, and collect information from a variety of resources.	Successfully uses suggested Internet links to find information and navigates within these sites easily without assistance.	Usually able to use suggested Internet links to find information and navigates within these sites easily without assistance.	Occasionally able to use suggested Internet links to find information and navigates within these sites easily without assistance.	Needs assistance or supervision to use suggested Internet links and/or to navigate within these sites.



Food Tracker Form

Directions

You are in a hurry to get to practice and decide to catch a bite to eat on your way. Your teacher recently talked about being aware of the number of grams of fat, sodium, and calories in your diet and why it is important to know this information. And your coach has been talking about how nutrition can make a difference in how well your team plays.

How healthy is your favorite fast food meal? What can you learn that could help you and your teammates choose fast food that is tasty and healthy?

Your work will be graded according to the following criteria:

Standard	Level 4	Level 3	Level 2	Level 1
Identify the nutrients provided by a variety of foods.	All topics are addressed and all questions are correctly answered.	All topics are addressed and most questions are correctly answered.	All topics are addressed and some questions are correctly answered.	One or more topics were not addressed.
Know and apply science concepts and skills to develop solutions to human problems in societal contexts.	Answers to all questions demonstrate application of nutrition information to arrive at logical solutions.	Answers to most questions demonstrate application of nutrition information to arrive at logical solutions.	Answers to some questions demonstrate application of nutrition information to arrive at logical solutions.	Answers to questions demonstrate little or no application of nutrition information to arrive at logical solutions.
Use technology to locate, evaluate, and collect information from a variety of resources.	Successfully uses suggested Internet links to find information and navigates within these sites easily without assistance.	Usually able to use suggested Internet links to find information and navigates within these sites easily without assistance.	Occasionally able to use suggested Internet links to find information and navigates within these sites easily without assistance.	Needs assistance or supervision to use suggested Internet links and/or to navigate within these sites.



What's for Lunch? Lesson Revision Analysis

Directions

Work in small groups to compare the original and revised What's For Lunch? lessons. Decide how the following lesson improvement questions were (or were not) addressed in making the revisions to the lesson.

Lesson Improvement Question	Features in original lesson	Improvements in the revised lesson
1. What is an authentic, engaging problem that students might address in doing this lesson?		
2. What are the academic and 21st Century Skills standards that students will work on?		
3. What are the student steps and teacher directions needed to work through the problem situation posed by the lesson?		
4. What are some ways that technology can enhance teaching and learning throughout the lesson?		
5. How will student success be measured against the selected standards?		



Lesson Improvement Process Rubric

<i>While engaging in collaborative lesson improvement, to what degree have you:</i>	Consistently	Mostly	Somewhat
Improved lessons by including attributes from the Learning Activity Checklist? (L.A.C.)	The L.A.C. has been addressed during every step of the lesson improvement process. All four areas of the L.A.C. are well-addressed in the lesson.	The L.A.C. has been addressed during most steps of the lesson improvement process and/or one area of the L.A.C. is not well-addressed in the lesson.	The L.A.C. has been addressed during some steps of the lesson improvement process and/or two or more areas are not well-addressed in the lesson.
Used the steps of the lesson improvement process to guide lesson improvement?	Every step of the lesson improvement process and the guidelines for each step have been thoroughly followed.	Every step of the lesson improvement process has been followed and guidelines have mostly been followed.	One or more steps of the lesson improvement process have not been followed.
Used communication skills during collaboration?	The communication skills of active listening, paraphrasing, and asking clarifying and probing questions are all in regular use.	All the communication skills are used most of the time and/or one of the communication skills is in infrequent use while the others are all in regular use.	All the communication skills are used some of the time and/or two or more of the communication skills are in infrequent use while the others are all in regular use.



Sample Lesson

The Lesson Improvement Process: Sample Lessons to Improve

You will collaborate with a partner to improve a lesson that simulates work coaches will do when learning the Lesson Improvement Process. To save time, everyone will work on improving ONE of the history lessons listed below. In completing the lesson improvement process, you will learn more about the curriculum challenges faced by collaborating teams and will get the opportunity to refine your coaching and collaboration skills. For the sake of this training, the finished product should be one that students could complete in **no more than 5 class sessions**. You may design this lesson to be either a pre-unit activity, part of a larger unit, or a culminating activity.

Curriculum Standards addressed by these lessons:

Social Studies Standard 1: The student examines and understands major ideas, eras, themes, developments, turning points, chronology, and cause-effect relationships in the world and their local region.

1.1 Understand and analyze historical time and chronology.

1.2 Understand events, trends, individuals, and movements shaping world and regional history.

Social Studies Standard 2: The student understands the origin and impact of ideas and technological developments on history.

2.1 Compare and contrast ideas in different places, time periods, and cultures, and examine the interrelationships between ideas, change, and conflict.

Lesson Sample 1: Top 10 Global Events

Choose a decade in world history to highlight. Create a timeline that lists 10 key events that happened during the decade. Create an outline that explains why these 10 events played a significant role in world history.

You will use resources in the library, your textbook, and any other outside sources you can find. As you research, take notes for your essay and record the details you will need for your bibliography.

Lesson Sample 2: World Leaders

Your teacher will give you a world leader to research. Prepare a 4-5 page profile of your leader highlighting his or her life and contributions to world history. Include a bibliography. You will use resources in the library and any other outside sources you can find. As you research, take notes for your essay and record the details you will need for your bibliography.

Category	4	3	2	1
Research/ Understanding	Covers topic in-depth with details and examples from resources used. Subject matter is excellent.	Includes essential knowledge about the topic from resources used. Subject knowledge appears to be good.	Includes essential information about the topic from resources used but there are 1-2 factual errors.	Content is minimal OR there are several factual errors.
Organization	Content is well organized using headings or bulleted lists to group related material	Uses headings or bulleted lists to organize, but the overall organization of topics appears flawed.	Content is logically organized for the most part.	There was no clear or logical organizational structure, just lots of facts.



Reflecting On My Learning

Directions

Use this learning log to reflect on today's session in three key areas: coaching, technology integration, and lesson design. Try to answer these questions in your reflection:

What did I learn?

How might I use this information?

How does this connect to past experiences?

Date:

Collaboration Skills: (skills, strategies, or information applied to encourage collaborative inquiry into and improvement of professional practice)	
DLC Tool or Resource Integration: (skills, strategies, or information applied to find ways that technology can add value to teaching and learning)	
Powerful Teaching & Learning: (skills, strategies, or information applied to development and improvement of curriculum and instruction)	