

The logo is a stylized shape resembling a ketchup bottle label. It has a red outer border, a green inner border, and a gold-colored middle border. The top is arched, and the bottom is a straight line.

**HEINZ**

**HISTORY CENTER  
RESOURCE GUIDE**

**5TH GRADE**

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# Credits

## Team Members:

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As students in the Elementary and Early Childhood Education programs at the California University of Pennsylvania, we are required to complete the course Development and Organization of School Curriculum. A project required for the Development and Organization of School Curriculum course is to develop a resource guide for the Senator John Heinz History Center. Incorporated into this guide will be activities for fifth grade students that are aligned with the current Pennsylvania Department of Education Academic Standards.

Mrs. Susan Reynolds served as our mentor teacher as she teaches fifth grade at Jefferson Elementary School in the West Jefferson Hills School district. She gave us insight and ideas for educating students in the fifth grade. Ms. Debra Suba, served as the administrator contact for our group. Ms. Suba is the Director of Curriculum for the Brownsville Area School District.

## Rationale

This resource guide has been designed as a teaching aid at the fifth grade level. (However, modifications would make the enclosed information suitable for other levels.) Fifth grade curriculum was selected because we felt our collaboration would offer the greatest benefit to children in that age bracket. Additionally, according to research documented by Chip Wood in *Yardsticks*, a field trip of this nature is ideal for children in this age bracket. In fact, this age is perfect for group projects and class trips. It is our mission to provide a useful tool to other educators, which will ultimately inspire creativity and a foundation upon which to extend learning outside the classroom.

The role of class field trips is to take students beyond the confines of the classroom while simultaneously complementing any given unit or lesson. Sadly, field trips are associated with negative connotations. Too often, field trips turn into children running from exhibit to exhibit without taking in the wonders each exhibit has to offer. As a teacher with very little time to spend on preparation, this guide will assist you in making your visit to the Heinz History Center both fun and educational.

Pittsburgh--it's one of the country's better-kept secrets. This is a wonderful city in which to grow and prosper. Every child living in this region deserves to learn the history of his or her home. The information contained in this guide meets the standards set forth by the Commonwealth of Pennsylvania at the intermediate elementary level.

Feel free to browse the following pages and incorporate as much information as you deem appropriate to suit the needs of your class. We estimate this information can be infused into your lesson plans and/or units anywhere from two to six weeks prior to visiting the Heinz History Center. However, with a little imagination, there is no limit to what you

can do. Obviously, gifted students will complete tasks more quickly than those students with special needs. Therefore, you may need to modify certain activities. Finally, this resource guide serves not only as a class assignment; it will be donated to the Heinz History Center to be distributed to teachers upon request.

## Overview

Since April 28, 1996 The Senator John Heinz Regional History Center has been operated by the Historical Society of Western Pennsylvania, in Pittsburgh's historic Strip District. The center became a member of the Smithsonian Institute in the year 2000. Later in 2004 the center will open a new branch of the museum, which will contain more exhibits such as the Western Pennsylvania Sports Museum, as well as Smithsonian exhibits.

The History Center provides a great educational experience for teachers and students, with the exhibits and information provided by the center. The tour of the center can be helped by brochures, pamphlets, and worksheets located throughout the center. Another way to tour certain exhibits is through the help of a docent.

Throughout the History Center there are many different exhibits spanning over six stories. On the first floor of the center, the Isaly's Dairy: Klondikes, Chipped ham, and skyscraper cones, which displays the history of the family owned business, advertisements, and much more. Another exhibit located on the first floor is an exhibit called Kidsburg that has a 12 foot spiral slide for a little bit of fun. Located on the second floor is the center's permanent exhibit Points in Time: Building a Life in Western Pennsylvania from 1750 till today. This particular exhibit provides a history of the area displaying maps, pictures, and specatular models of homes that were lived in centuries ago, and much more. On the third floor of the center the Discovery Place exhibit gives kids a chance to learn through a hands on exhibit giving them a sense of local history. An ongoing exhibit also located on the third floor is the Pine Collection of Woodworking Planes, which displays the woodworking of

planes from 1803 – 1875. Currently on the third floor is the moving exhibit of Rediscovering Lewis and Clark: A Journey with the Rooney Family. This particular exhibit displays the travels of Lewis and Clark over 200 years ago, as well as the ventures of the recently traveled trail of the Rooney Family. On the fifth floor of the center there are two permanent exhibits. The first is the Glass: Shattering Notions, which displays the local glasses made in Pittsburgh throughout the years. The second exhibit is the Heinz 57; this exhibit offers a history of the company, family, advertising, and much more. Throughout the center there is a sense of transportation and industry that is brought to life on the first with the display of a trolley, and a Conestoga wagon. On the sixth floor of the center there is a Library and Archive, where resources and actual archives can be retrieved.

The History Center is a wonderful environment for teaching and learning. The center is an educational institute, which offers fieldtrips to classes of all ages. For teacher the center offers an open house, and provides free preview passes, as well as inservice programs, and curriculum packages. The History Center gives a great learning and educational experiences for all that are involved.

# Building Resource Guide Background

Background knowledge is vital for any thematic unit. Utilizing the following suggestions will help to stimulate students' interest and get them excited and involved in the lessons. Building background knowledge will help teachers activate students' prior knowledge and be able to build upon that knowledge.

Suggestions for background building activities:

- **Heinz History Center Brochures-** The teacher could pass out a Heinz History Center brochure to each of the students and then discuss the different exhibits available. The teacher could also discuss what he expects the students to focus on in each of the areas in the Heinz History Center.
- **Bulletin Boards-** Bulletin boards could be created around a thematic unit. For example, a teacher could make a bulletin board on advertising methods to utilize when the students are required to make up an advertising campaign. Bulletin boards serve not only as a source of information, but also as a way to excite students about upcoming lessons.
- **Experiments-** Experiments help to make activities meaningful to the student. By doing an experiment and finding out the results for themselves, students are more likely to understand what was taught and remember it.
- **Guest Speakers-** Guest speakers can bring to life what is being taught by providing an in depth look at what is being studied. Guest speakers are generally experts in their field and can provide the students with a better understanding of the subject being discussed.

- **Technology Activities-** Teachers can utilize the internet to provide background knowledge for their students. There are many interactive opportunities for the students to utilize on the internet for learning. The students can also utilize the internet for research.
- **Literature-** Primary sources such as the diary of a young girl on the Oregon Trail can give the students insight into an historical period through the eyes of someone their own age. The use of primary sources can make studying an historical period more interesting and easier to understand for students.
- **Video-** Video can help the auditory and visual learners gain a better understanding of information presented. Reenactment of historical events on video can make an historical event come to life and create more meaning for the student.

# Activities

## *Points in Time*

### **Preliminary Activity:**

- Test your investigative skills  
[www.lifeinwesternpa.org/Testyourskillsform.pdf](http://www.lifeinwesternpa.org/Testyourskillsform.pdf)  
Have the students visit the above website (sponsored by the Heinz History Center) in order to see how much they know about the history of Pittsburgh. The pages could be printed and used as a handout if need be. It would not be necessary to collect the students' answers. This activity can simply prepare the students as to what can be expected during their trip to the Heinz History Center.
  
- They helped put Pittsburgh on the map  
[www.geocities.com/Heartland/4547/pindex.html](http://www.geocities.com/Heartland/4547/pindex.html)  
Have the students select one of the following celebrities who are either Pittsburgh natives or personalities who touched Pittsburgh in some way.  
Fred Rogers, Andrew Mellon, Rachel Carson, Henry Clay Frick, Henry J. Heinz, Andrew Carnegie, George Westinghouse, Nellie Bly, Andy Warhol, August Wilson, Martha Graham, Henry Mancini, Gene Kelly, Dan Marino, Suzie McConnell Serio, Honus Wagner, Johnny Unitas, Steven Foster, Michael Keaton, Jonas Salk
  
- Each student will research his or her celebrity by using the above website or other resources and prepare either or both of the following:
  - a one-page biography
  - a paper written as if the student interviewed his or her chosen personality (questions do not have to be elaborate)

### **Activity at the History Center:**

- Test your investigative skills  
Print the questions at [www.lifeinwesternpa.org/Testyourskillsform.pdf](http://www.lifeinwesternpa.org/Testyourskillsform.pdf) or take partially answered questions if this was done as a preliminary activity. Have the students complete his or her answers.
  
- Compare and contrast.  
The students will make brief notes comparing and contrasting topics such as the kitchen as the heart of the home, modern conveniences, structures, accessories, location or a topic chosen by the student with regard to housing, life and/or employment by making observations of a 1790 log house, a 1910 steelworker's home and a 1950s suburban house.

### Extension Activity:

- Test your investigative skills  
Return to [www.lifeinwesternpa.org/Testyourskillsform.pdf](http://www.lifeinwesternpa.org/Testyourskillsform.pdf) to see if the questions are more easily answered. If this activity was done before and during the visit to the Heinz History center, have the student choose one question. Have him or her write a paragraph or two more elaborately answering the question. Responses can be shared in the form of brief presentations to the rest of the class.
- My place in Pittsburgh  
Ask each student to interview him or her selves by answering questions about his or her role in Pittsburgh as if they lived here during the 18th century (or some other time period). This activity could be done in pairs.
- Extra, Extra...Read all about it!  
[www.pbs.org/blackpress/news\\_bios/courier.html](http://www.pbs.org/blackpress/news_bios/courier.html)  
*The Pittsburgh Courier* was the first national newspaper and can be researched at the above address. Have the students write an article about anything they saw at the Heinz History Center and arrange the articles to form the latest edition of *The Pittsburgh Courier*.
- Who am I?  
Have the students assume an identity during any period covered at the Heinz Center. Students will write a brief essay describing his or her life, which will be shared with the class. Have the remainder of the class determine characteristics based upon clues in the essay.

### Materials:

- computers with internet access
- handout for making comparisons or taking notes at the History Center
- paper/pencils

### Assessment:

- The teacher should create a rubric to be used for expectations and grading purposes.

**Standards:**

- 1. Reading, Writing, Speaking and Listening
  - 1.1.5 Learning to Read Independently
  - 1.2.5 Reading Critically in All Content Areas
  - 1.4.5 Types of Writing
  - 1.5.5 Quality of Writing
  - 1.6.5 Speaking and Listening
  - 1.8.5 Research
  
- 8. History
  - 8.1.6 Historical Analysis and Skills Development
  - 8.2.6 Pennsylvania History



## ***Rediscovering Lewis and Clark: A Journey with the Rooney Family***

### **Preliminary Activity:**

- The students will have a class discussion about the history of Meriwether Lewis and William Clark.
- After the discussion the students will be placed into groups of five people. They will come up with a story of what adventures they think would happen if they were the first group traveling to the Pacific Ocean. The students must have three paragraphs with five sentences each. The student must state the different events they think they will encounter. Each group will read the story to the class.

### **Activity at the History Center:**

- The students will record three different people that Lewis and Clark encountered while on their journey.
- The students will name one interesting fact about each person. They will record the information on a worksheet given to them.

### **Extension Activity:**

- The students will create a map of Lewis and Clark's journey to the west coast. They will identify on the map: four major stop, one river they crossed, and one of the mountain ranges they crossed, and three people they encountered on their trip. Students will be expressed to be creative, draw mountains, rivers, Conestoga Wagons and a trail, etc.

### **Materials:**

- Pencils
- Papers
- Worksheet
- Crayons/Markers
- Plain White Paper (for map)
- A rubric for students writing assignment (handed out before preliminary activity).

**Assessments:**

- The students will be given class participation grade determined by the teacher.
- Writing assignment will be scored by teacher made rubric and give to students prior to assignment.
- The student will be graded on worksheet given by teacher for the field trip.
- The students will be graded on map by following the criteria and may also be given bonus points for going beyond the criteria.

**Standards:**

- Reading, Writing, Speaking, and Listening
  - 1.4.5 Types of writing
  - 1.5.5 Quality of writing
  - 1.6.5 Speaking and Listening
- Environment and Ecology
  - 4.8.7 Humans and Environment
- Geography
  - 7.1.6 Basic Geography Literacy
  - 7.3.6 Human Characteristics of Places and Regions
- History
  - 8.1.6 Historical Analysis and Skills Development
  - 8.3.6 United States History
- Arts and Humanities
  - 9.2.5 Historical and Cultural Contexts



## *Transportation*

### **Preliminary Activity:**

- There will be a class discussion on types of transportation. We will go into detail about the history of the Conestoga Wagon. The students will pretend that they are leaving tomorrow on a Conestoga Wagon and can only bring two items with them. Students will have ten minutes to work with a partner to discuss what two items they will bring. Then they will go around the class letting each student state what they would take and why. They need one reason for each item they bring.

### **Activity at the History Center:**

- The students will be given a worksheet before arriving to the center. The students will have to guess on questions about the Conestoga Wagon. While at the center students will need to find the correct answers by visually looking at the wagon and asking.

### **Extension Activity:**

- Each student will be given a piece of poster board. The students will then find or draw a picture of a Conestoga Wagon and their favorite transportation of today. They will then place both pictures or drawing on poster board.
- Students will then write three comparisons of the two types of transportation and three differences of the two types of transportation. The students can find pictures from a magazine or can make a drawing of both.

### **Materials:**

- Worksheet
- Pencil
- Poster board
- Magazines (available in room).
- Crayons/Markers
- Composition paper

**Assessments:**

- The students will be graded on class participation to the teacher's discretion.
- Completion of worksheet while at the center.
- The student will be graded on the poster by completing the criteria of two pictures/drawing, three comparisons, and three differences of the Conestoga Wagon and one of today's transportations.

**Standards:**

- Reading, Writing, Listening, and Speaking
  - 1.4.5 Types of Writing
  - 1.5.5 Quality of Writing
  - 1.6.5 Speaking and Listening
- Science and Technology
  - 3.1.7 Unifying Themes
  - 3.2.7 Inquiry and Design
- History
  - 8.1.6 Historical Analysis and Skills Development
  - 8.2.6 Pennsylvania History
  - 8.3.6 United States History
- Arts and Humanities
  - 9.2.5 Historical and Cultural Contexts
  - 9.3.5 Critical Response



## *Shattering Notions*

### **Preliminary Activity:**

- Discuss the art of glassmaking with a speaker from a local glass company. Identify the principals of glass making including raw materials required for making glass, the different types of glass, how glass is made, and why the glass industry grew in the area surrounding Pittsburgh PA.

### **Activity at the History Center:**

- The students will go on a scavenger hunt for information in the Shattering Notions Exhibit. The students will have a list of questions to respond to as they view the exhibit.
  - They will count the number of traffic signals and signs in the exhibit.
  - They will estimate the number of bottles used in the green bottle display.
  - They will view the polarization display.
  - They will match the colored glass to the corresponding chemical compound used to create the color.
  - They will complete the Glass IQ Quiz.
  - They will select one piece of glass from the exhibit and in a short essay describe why it is their favorite.

### **Extension Activity:**

- The students will identify the many uses of glass (decorative, functional, lenses, and fiber optics) that were shown in the exhibit. They will hypothesize why glass is used in these particular applications. The students will make their own simulated glass traffic signs or art glass designs.

### **Materials:**

- |                              |                    |
|------------------------------|--------------------|
| ▪ Local glassmaker           | ▪ Corn syrup       |
| ▪ Glassmaking video, VCR, TV | ▪ Food coloring    |
| ▪ Samples of glass types     | ▪ Heavy Paper      |
| ▪ Scavenger hunt worksheet   | ▪ Pencil           |
| ▪ Glue                       | ▪ Art Glass Rubric |
| ▪ Science Journal            |                    |

**Assessments:**

- Have the students' document in their science journal five different examples of glass they encounter. They should discuss for each example what type of glass was used, why glass was used, and discuss if they believe it was the best material for the application.
- Students will be scored on their individual scavenger hunt worksheets.
- The students will be given an art grade based on the art glass project as outlined in the art glass rubric.

**Standards:**

- Reading, Writing, Speaking and Listening
  - 1.4.5 Types of Writing
  - 1.6.5 Speaking and Listening
- Mathematics
  - 2.2.5 Computation and Estimation
  - 2.3.5 Measurement and Estimation
- Science and Technology
  - 3.2.7 Inquiry and Design
  - 3.4.7 Physical Science, Chemistry and Physics
- Economics
  - 6.4.6 Economic Interdependence
- History
  - 8.2.6 Pennsylvania History
- Arts and Humanities
  - 9.1.5 Production of Visual Art
  - 9.2.5 Historical and Cultural Contexts



## *Heinz 57*

### **Preliminary Activity:**

- The students will plant and grow cucumbers.
- The students will be broken up into groups of 4-5 students and required to do an internet search for pickle recipes that require no cooking or canning.

### **Activity at the History Center:**

- The students will find the list of the Heinz 57 products and write down all the different types of pickles that Heinz produces.
- The students will watch the Heinz advertising video.
- The students will look at all the different Heinz Advertising.

### **Extension Activity:**

- The student groups will make pickles from their cucumbers that they grew using the no cook pickle recipe that their group found on the internet. The students will be given only a 1/4 cup measuring cup, a 1/3 measuring cup, and a 1/8 teaspoon measuring spoon to measure out their ingredients and must figure out the proper conversions.
- The students will write out on paper how many 1/8 teaspoon of each ingredient that they needed to equal total needed for each ingredient and the students will do the same for 1/3 or 1/4 measuring cups conversions.
- The students will each come up with a campaign slogan and write an advertisement for their particular kind of pickle.

### **Materials:**

- Access to computers for internet research
- Cucumber seeds, soil, planting containers, and grow lights
- Paper, pencils, and clipboards for students to use during the tour
- Paper, pencils and markers to create advertisements
- Measuring cups, and measuring spoons
- Garlic, dill salt, sugar, vinegar, and pepper to make pickles
- Containers for the pickles
- Access to a refrigerator to store pickles
- A rubric given to all students for the grading of the student's advertisement

**Assessments:**

- The students will be given a class participation grade.
- The student's advertisement will be graded based on the rubric given.
- The students will receive a grade for their measurement conversions.

**Standards:**

- Reading, Writing, Speaking and Listening
  - 1.1.5 Learning to read Independently
  - 1.2.5 Reading Critically in all Content Area
  - 1.4.5 Types of Writing
  - 1.5.5 Quality of Writing
  - 1.6.5 Research
- Mathematics
  - 2.1.5 Numbers, Number Systems and Number Relationships
  - 2.2.5 Computation and Estimation
  - 2.3.5 Measurement and Estimation
  - 2.5.5 Mathematical Problem Solving and Communication
- Science and Technology
  - 3.2.7 Inquiry and Design
  - 3.5.7 Earth Science
- Environment and Ecology
  - 4.4.7 Agriculture and Society
- Family and Consumer Sciences
  - 11.3.6 Food Science and Nutrition



## *Isaly's Dairy: Klondikes, Chipped Ham, & Skyscraper Cones*

### **Preliminary Activity:**

- The students will complete a 2 page informational review worksheet on the Isaly Dairy.
- The students will obtain their answers by reading through informative press releases 1,2,3,4 found on the following website: <http://bbutko.tripod.com/isaly.media.html>
- The students will complete the activity in groups of two.

### **Activity at the History Center:**

- The students will find the Isaly Dairy display.
- The students will find the products that we looked at and discussed on our information sheet during our preliminary activity.
- The students will see many of the advertisements we saw on the Internet.
- The students will choose their favorite advertisement for a specific product.
- The students will then make their own advertisement for their favorite product or upgrade the existing advertisement by following the rubric provided for them.

### **Extension Activity:**

Students can complete one or both of the following activities:

- The students will do a small oral presentation on their product advertisement following a rubric. The students will explain why they chose a specific product and discuss how that product is important or not important in their everyday lives. The students will also discuss their advertisement and how they feel it will better see the product. The students will also discuss how they feel about running a business and what they feel is important to running a business.
- The students will make ice cream in groups of 2-4. You can use your own website or cookbook to get your recipe. If you are not sure where to find a recipe you can use the following website: <http://www.teachnet.com/lesson/science/icecream051999.html> . This site provides lessons for many different topics as well as subjects. This activity will incorporate a variety of subjects (math, reading, health, history, consumer science, and English, just to name a few). Once the ice cream making lesson is finished you can then have the children write a short prompt/essay on how all subjects in school are related to one another and why it is important to do well in all of your classes. The students would follow a rubric.

**Materials:**

- Informational review worksheet
- Access to computer in the school classroom or library as needed
- Press release articles 1,2,3,4 on the Brian Butko website
- Rubric to follow when making advertisement
- Materials to make advertisement (construction paper, colored pencils, photos, etc.)
- Making ice cream directions and the materials/ingredients
- Rubric for writing prompt

**Assessments:**

- The students will be given a quiz grade for completing their Informational Review Worksheet as determined by the teacher.
- Advertisement and oral presentation will be scored based on the rubric designed by the teacher and given to the students and discussed prior to the completion of the assignment.
- The writing prompt will be scored based on the rubric designed by the teacher and given to the students and discussed prior to the completion of the assignment.
- The teacher may also give points based on the children's ability to work constructively in groups.

## Standards:

- Reading, Writing, Speaking and Listening:
  - 1.1.5 Learning to Read Independently
  - 1.2.5 Reading Critically in All Content Areas
  - 1.4.5 Types of Writing
  - 1.5.5 Quality of Writing
  - 1.6.5 Speaking and Listening
  - 1.8.5 Research
  
- Mathematics:
  - 2.2.5 Computations and Estimations
  - 2.3.5 Measurements and Estimations
  - 2.5.5 Mathematical Problem Solving and Communication
  
- Science and Technology:
  - 3.2.7 Inquiry and Design
  - 3.4.7 Physical Science, Chemistry, and Physics
  
- Economics:
  - 6.1.6 Economics Systems
  - 6.2.6 Markets and Functions of Governments
  
- History:
  - 8.1.6 Historical Analysis and Skills Development
  - 8.2.6 Pennsylvania History
  - 8.3.6 United States History
  
- Art and Humanities:
  - 9.1.5 Production, Performance, and Exhibition of Visual Arts
  - 9.4.5 Aesthetic Responses
  
- Health, Safety and Physical Education
  - 10.1.6 Concepts of Health
  - 10.2.6 Healthful Living
  
- Family and Consumer Sciences
  - 11.3.6 Food and Nutrition

These are just some ideas of the standards that could be addressed during lessons on just the Isaly Dairy. You would have to adjust them according to what content you chose to expand on and the type of lesson you choose to teach.



## *Woodworking*

### **Preliminary Activity:**

Guest Speaker

Invite a woodshop teacher, or other person knowledgeable about woodworking, to visit the class to discuss the role of woodworking in modern times.

### **Activity at the History Center:**

Observation

The students should view the woodworking tools and furniture pieces at the History Center to determine how they were used based upon the information provided by the guest speaker.

### **Extension Activity:**

Build a model airplane

Ask the PTA to purchase small balsa wood airplane kits for each student (or some other kit available at most craft stores). Have the students build the kit thinking about how the task would be completed on a much larger scale with the tools they viewed at the History Center. Follow the activity with a class discussion, and have the students create a Venn diagram comparing and contrasting the use of tools then and now.

### **Materials:**

- handout for making comparisons or taking notes at the History Center
- paper/pencils
- model kits
- guest speaker

### **Assessment:**

The teacher will assign class participation points based on participation in the discussion.

**Standards:**

- Reading, Writing, Speaking and Listening
  - 1.6.5 Speaking and Listening
  - 1.8.5 Research
  
- Mathematics
  - 2.8.5 Mathematical Reasoning and Connections
  
- Science and Technology
  - 3.6.7 Technology Education
  - 3.7.7 Technological Devices
  
- History
  - 8.1.6 Historical Analysis and Skills Development
  - 8.2.6 Pennsylvania History
  
- Arts and Humanities
  - 9.1.5 Production, Performance & Exhibition of Dance, Music, Theater and Visual Arts
  - 9.2.5 Historical and Cultural Contexts



## *Library & Archives Research*

### **Preliminary Activity:**

The students will learn how to electronically search through the Heinz History Center Library & Archives using 'The Historic Pittsburgh Project' website located at <http://digital.library.pitt.edu/pittsburgh/>. They will explore the Finding Aids, Census Schedules, Photographs, and the Chronology. These tools along with the internet will then be used for a research project as outlined:

- Students working in cooperative learning group's will be given a topic to research relating to Pittsburgh's History. Topics will cover industry, significant people, workforce, and transportation.
- Students will conduct research into the archives via the 'Finding Aids' and other sources. They will identify material and exhibits they wish to review when visiting the center. They will request 3-6 items from the archives for viewing at the history center.
- The students will do additional on-line and library based research to gather additional information on their topic.

### **Activity at the History Center:**

- The students will examine the contents of their groups requested archives.
- The students will document and record the exhibit and archival contents of interest related to their selected topic.
- The students will examine the 'Hopkins Plat Maps' to locate one or more locations from their research.

### **Extension Activity:**

- The students will prepare a written report on their topic based on the information they obtained from visiting the Heinz History Center and from additional research.
- Each group will present a short oral presentation with supporting materials such as photographs, diaries, maps or other materials found in the archives or through additional research on their topic.

### **Materials:**

- Computers with internet access.
- Computer with word processing.
- Printer.
- School library.
- Rubric outlining the research guidelines.
- Rubric outlining the written report specifications.
- Rubric outlining the oral presentation specifications.

**Assessments:**

- The students will be given a grade in science/technology based on their research activities as outlined in the rubric covering research guidelines.
- The students will be given a language arts and a social studies grade based on written report as outlined in the rubric covering the written report specifications.
- The students will be given a language arts grade based on the oral presentation as outlined in the rubric covering the oral presentation specifications.

**Standards:**

- Reading, Writing, Speaking and Listening
  - 1.4.5 Types of Writing
  - 1.5.5 Quality of Writing
  - 1.6.5 Speaking and Listening
  - 1.8.5 Research
- Science and Technology
  - 3.2.7 Inquiry and Design
  - 3.6.7 Technology Education
  - 3.7.7 Technological Devices
- Economics
  - 6.4.6 Economic Interdependence
  - 6.5.6 Work and Earnings
- Geography
  - 7.1.6 Basic Geographic Literacy
  - 7.2.6 The Physical Characteristics of Places and Regions
  - 7.3.6 The Human Characteristics of Places and Regions
- History
  - 8.1.6 Historical Research
  - 8.2.6 Pennsylvania History

## Culminating Activity - Pieces of Pittsburgh

As an activity to share their experience with the school population, the students will be divided into groups. Each student group will be responsible for creating a collage based upon a particular exhibit viewed at the Heinz History Center. The boards upon which the students will arrange the collage will be pre-cut by the teacher into large puzzle shapes which will fit together upon completion. (This activity could also be done individually with smaller puzzle pieces for each student.) The finished product entitled, "Pieces of Pittsburgh" will share the history of Pittsburgh while simultaneously showing how each of the pieces fit to form the history of Pittsburgh.

The collage should be displayed in a central place where it can be appreciated by everyone in the school.

### Materials:

- paper
- pencils/pens
- markers
- crayons
- glue
- scissors
- computers with internet access
- library access
- other reference materials

### Assessment:

The students will be assessed by:

- Creating a large puzzle piece reflecting images and other pertinent information regarding his or her specific exhibit.

### Standards:

- Reading, Writing, Speaking and Listening
  - 1.2.5 Reading Critically in all Content Areas
  - 1.4.5 Types of Writing
  - 1.8.5 Research
- History
  - 8.1.6 Historical Analysis and Skills Development
- Arts and Humanities
  - 9.1.5 Production of Visual Art
  - 9.2.5 Historical and Cultural Contexts

# Lesson Plan

## *Isaly's Dairy: Making Ice Cream*

**Grade Level:** 5<sup>th</sup> Grade Science

**Length:** 45 minutes

### **Objectives:**

- The students will work in groups of 3-5 to create their homemade ice cream.
- The students will follow the recipe/direction provided to them.
- The students will manipulate numbers/measurements to prepare the recipe for everyone in their group.
- The students will discuss amongst their groups, math, science, and any other content they feel plays a part in this lesson.
- The students will understand the scientific method and the importance of following directions.
- The students will understand that the scientific method is not ONLY used in science but in their everyday lives to solve problems.
- The students will individually submit a written prompt on how they incorporated other content matter into their lesson as well as discuss the scientific method and how it is used in their everyday lives and not just in science for a grade at the end of the week.
- The students will be given a rubric to follow for their prompt before they begin it.

### **Materials:**

Recipe is enough for one student. Each group will adjust according to the number of students in their group.

- ½ Cup Milk
- ½ teaspoon Vanilla
- 1 Tablespoon Sugar
- 4 Cups Crushed Ice
- 4 Tablespoons Salt
- 2 quart Ziploc Bag
- 1 gallon Ziploc Bag
- Hand towels or gloves
- Bowls
- Spoons

**Procedure:**

- Mix the milk, vanilla and sugar together into one of the 1 quart size bags.
- Seal tightly, allowing as little air to remain in the bag as possible. (Too much air left inside the bag may force the bag open during shaking).
- Place this bag into the other quart size bag, again leaving as little air as possible. (Double bagging will prevent ice and salt from getting into your ice cream).
- Place the double-bagged quart bags into the gallon Ziploc bag.
- Put the crushed ice into the gallon Ziploc bag and then sprinkle salt onto the ice.
- Seal the gallon bag, again leaving as little air as possible.
- Wrap the gallon bag in towels or put gloves on, and shake and massage the bag for 5-8 minutes, making sure the ice surrounds the ice cream mixture.
- Remember that is 5-8 minutes per person. Make sure you calculate the math per person in your group as you did for the recipe.
- The ice cream should then be ready to eat. ENJOY ☺

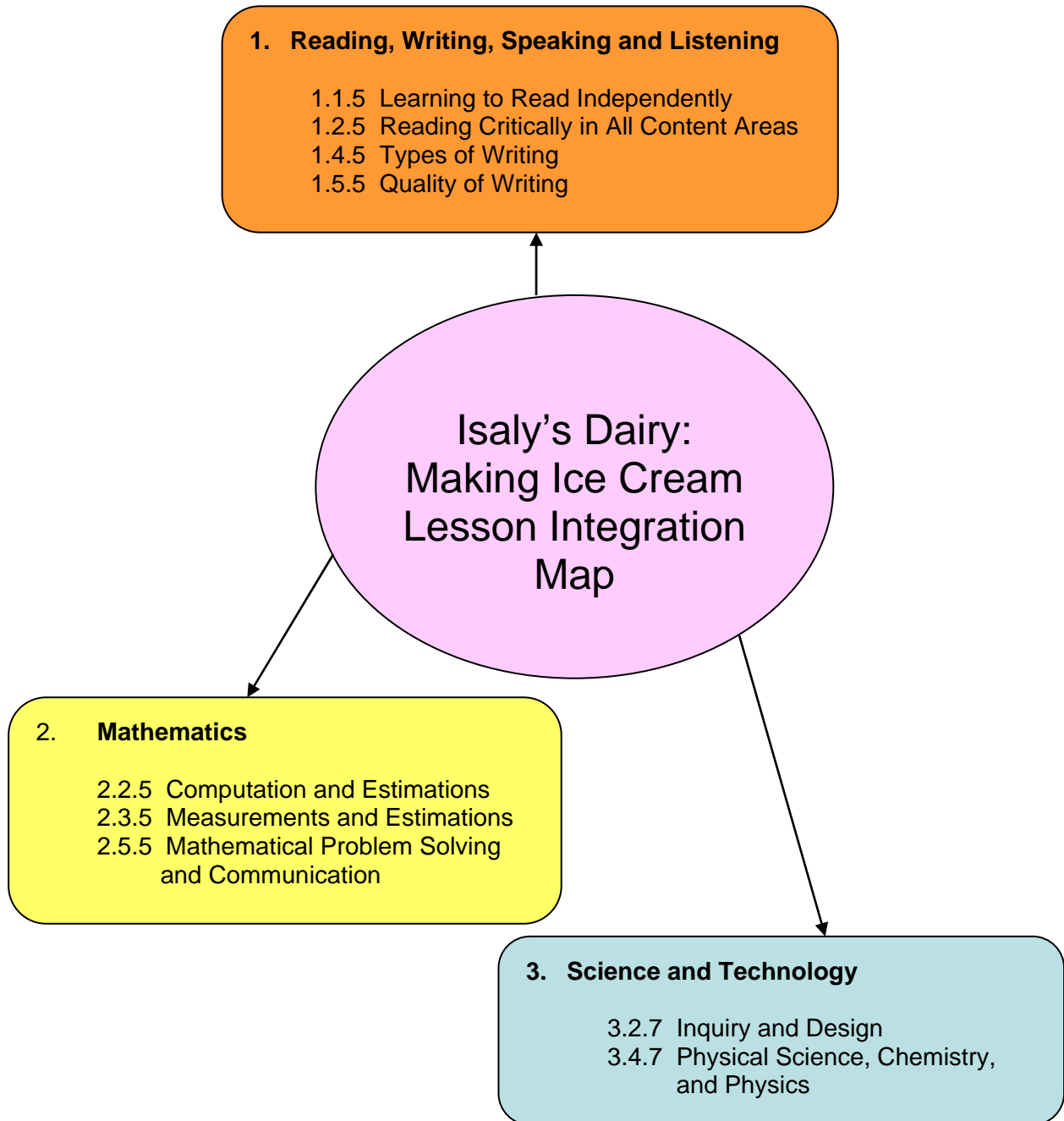
**Assessment:**

- The students will be assessed based upon a rubric that will be provided for them when the writing assignment is assigned.
- They will be graded upon their understanding of the importance of knowing how to relate content to other content as well as their understanding of the science behind following direction-scientific method.
- The students will also discuss how the scientific method is used in their everyday lives to problem solve.

**Standards:**

- Reading, Writing, Speaking and Listening:
  - 1.1.5 Learning to Read Independently
  - 1.2.5 Reading Critically in All Content Areas
  - 1.4.5 Types of Writing
  - 1.5.5 Quality of Writing
- Mathematics:
  - 2.2.5 Computations and Estimations
  - 2.3.5 Measurements and Estimations
  - 2.5.5 Mathematical Problem Solving and Communication
- Science and Technology:
  - 3.2.7 Inquiry and Design
  - 3.4.7 Physical Science, Chemistry, and Physics

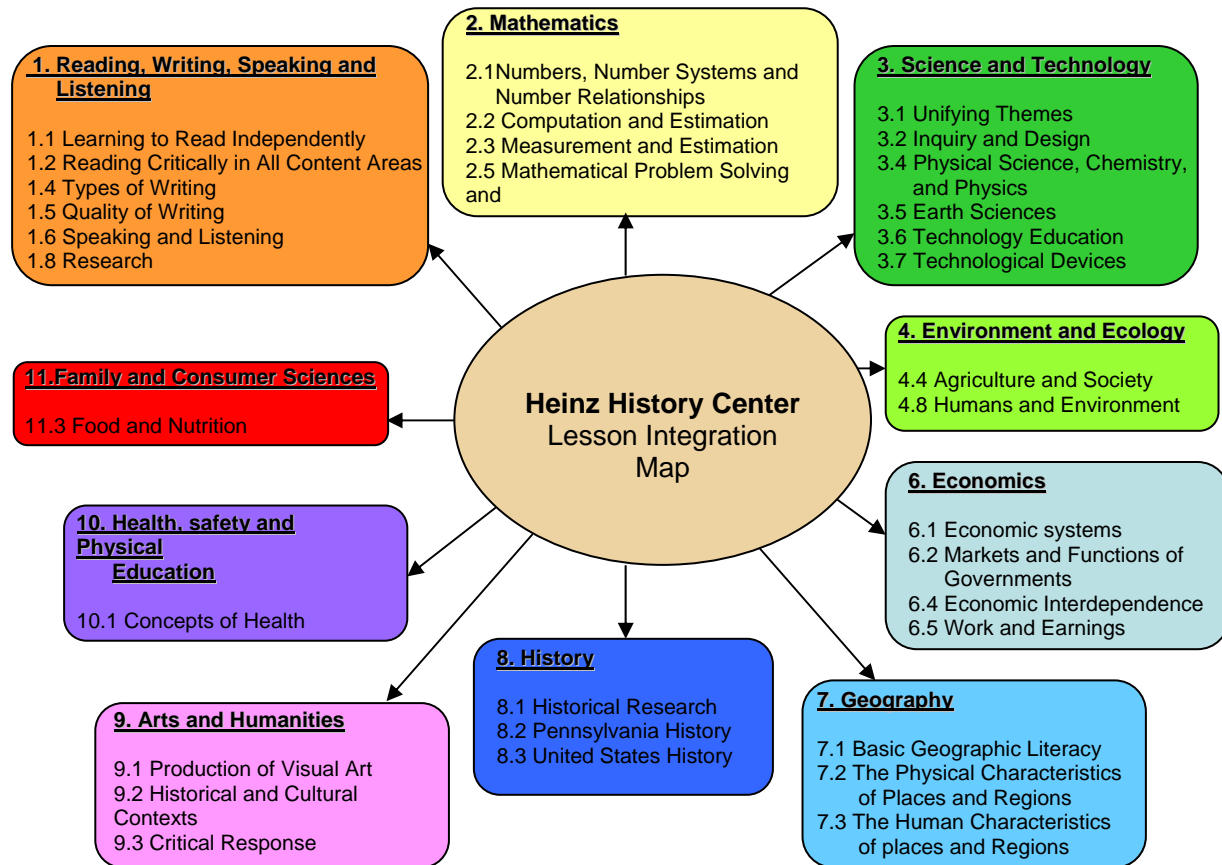
## *Lesson Integration Web*



# Curriculum Integration Web

## Heinz History Center

### 5<sup>th</sup> Grade



# Bibliography

## *Teacher Bibliography*

### Internet Resources:

[www.pghhistory.org](http://www.pghhistory.org) - The Senator John Heinz Pittsburgh Regional History Center website.

[www.eduref.org](http://www.eduref.org) - Contains instructional material.

[www.hoovers.com](http://www.hoovers.com) - Contains information about the Heinz Company.

[www.lessonplanspage.com](http://www.lessonplanspage.com) - Contains various lesson plans.

[www.nara.gov](http://www.nara.gov) - U.S. National Archives and Records Administration for obtaining old photos.

[www.fordham.edu/halsall/](http://www.fordham.edu/halsall/) - The Internet History Sourcebooks are collections of public domain and copy-permitted historical texts presented cleanly for educational use. Contains historical primary sources.

[www.teachnet.com/lesson/science/icecream051999.html](http://www.teachnet.com/lesson/science/icecream051999.html) - The Teachers Network site is a resource for educational professionals.

[www.lifeinwesternpa.org/Testyourskillsform.pdf](http://www.lifeinwesternpa.org/Testyourskillsform.pdf) - Contain a quiz on Pittsburgh history sponsored by Heinz History Center.

[www.geocities.com/Heartland/4547/pindex.html](http://www.geocities.com/Heartland/4547/pindex.html) - This site contains biographies of famous people from Pennsylvania.

[www.pbs.org/blackpress.news\\_bios/courier.html](http://www.pbs.org/blackpress.news_bios/courier.html) - Contains history of *The Pittsburgh Courier*.

<http://bbutko.tripod.com/isaly.media.html> - Contains historical press releases concerning Isaly's Dairy.

<http://digital.library.pitt.edu/pittsburgh/> - The Historical Pittsburgh Project website contains electronic catalogs and files supporting the Heinz History Center's Library and Archives.

[www.cmog.org](http://www.cmog.org) - The Corning Museum of Glass contains lessons and information on glassmaking and can serve as a resource for teachers.

<http://www.clpgh.org/exhibit/> - Bridging the Urban Landscape, a website created by the Carnegie Library of Pittsburgh. This site contains hundreds of historical photographs and images of Pittsburgh's bridges and neighborhoods.

[www.freedomcenter.org](http://www.freedomcenter.org) - The National Underground Railroad Freedom Center's website. This site offers lessons and historical insight into the fight for freedom.

## Resource Books:

- Butko, B. (2001). *Klondikes, Chipped Ham, & Skyscraper Cones: The Story of Isaly's*. Mechanicsburg, PA: Stackpole Books.
- Madarasz, A. (1998). *Glass: Shattering Notions*. Pittsburgh, PA: The Society.
- Roberts, P. (1996). *Points In Time: Building a Life in Western Pennsylvania*. Pittsburgh, PA: Historical Society of Western Pennsylvania.
- Sandler, M. (1995). *Immigrants*. NY: HarperColling Publishers.
- Smith, A. (1990). *Pittsburgh Then and Now*. Pittsburgh: University of Pittsburgh Press.
- Wood, C. (2003). *Yardsticks*. Greenfield, MA: Northeast Foundation for Children.

## *Student Bibliography*

### **Internet Resources:**

- [www.pghhistory.org](http://www.pghhistory.org) - The Senator John Heinz Pittsburgh Regional History Center website.
- [www.neighborsinthestrip.com](http://www.neighborsinthestrip.com) - Informational website on the strip district in Pittsburgh.
- [www.loc.gov](http://www.loc.gov) - Library of Congress website for historical research and information.
- [www.hoovers.com](http://www.hoovers.com) - Contains information about the Heinz Company.
- [www.nara.gov](http://www.nara.gov) - U.S. National Archives and Records Administration for obtaining old photos.
- [www.fordham.edu/halsall/](http://www.fordham.edu/halsall/) - The Internet History Sourcebooks are collections of public domain and copy-permitted historical texts presented cleanly for educational use. Contains historical primary sources.
- [www.lifeinwesternpa.org/Testyourskillsform.pdf](http://www.lifeinwesternpa.org/Testyourskillsform.pdf) - Contains a quiz on Pittsburgh history sponsored by Heinz History Center.
- [www.geocities.com/Heartland/4547/pindex.html](http://www.geocities.com/Heartland/4547/pindex.html) - This site contains biographies of famous people from Pennsylvania.
- [www.pbs.org/blackpress.news\\_bios/courier.html](http://www.pbs.org/blackpress.news_bios/courier.html) - Contains history of *The Pittsburgh Courier*.
- <http://bbutko.tripod.com/isaly.media.html> - Contains historical press releases concerning Isaly's Dairy.
- <http://digital.library.pitt.edu/pittsburgh/> - The Historical Pittsburgh Project website contains electronic catalogs and files supporting the Heinz History Center's Library and Archives.
- <http://www.clpgh.org/exhibit/> - Bridging the Urban Landscape, a website created by the Carnegie Library of Pittsburgh. This site contains hundreds of historical photographs and images of Pittsburgh's bridges and neighborhoods.
- [www.freedomcenter.org](http://www.freedomcenter.org) - The National Underground Railroad Freedom Center's website. This site offers lessons and historical insight into the fight for freedom.

### **Resource Books:**

- Fenton, E. (1999). *Duffy's Rocks*. Pittsburgh, PA: University of Pittsburgh Press.
- Finlayson, A. (2000). *Greenhorn on the Frontier*. Pittsburgh, PA: Golden Triangle Books/Pittsburgh Press.
- Price, O. (1999). *Three Golden Rivers*. Pittsburgh PA: University of Pittsburgh Press.
- Reilly, R. T. (2000). *Rebels in the Shadows*. Pittsburgh PA: Golden Triangle Books/University of Pittsburgh Press.
- Smith, A. (1990). *Pittsburgh Then and Now*. Pittsburgh: University of Pittsburgh Press.

# Appendices

## *Lewis and Clark Worksheet*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Name three different people Lewis and Clark encountered in their journey. Also record one interesting fact about each person.

**Person #1** \_\_\_\_\_

**Interesting Fact**

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**Person #2** \_\_\_\_\_

**Interesting Fact**

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**Person #3** \_\_\_\_\_

**Interesting Fact**

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## *Worksheet for Transportation: The Conestoga Wagon*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Answer the following questions to the best of your ability. You may ask questions of your teacher or tour guide. You may also get your answers through visual observation.

1. How many people can fit in the Conestoga Wagon?

\_\_\_\_\_

2. How many horses were usually used to pull the Conestoga Wagon?

\_\_\_\_\_

3. How many wheels are on the Conestoga wagon?

\_\_\_\_\_

4. What was the Conestoga Wagon used for? (circle the correct answer)

A. For people to ride in.

B. To carry food and supplies.

C. To make it easier for people to move to another place.

D. All of the above.

5. How long and wide is the Conestoga Wagon? (Estimate the Answer)

Length = \_\_\_\_\_

Width = \_\_\_\_\_

## *Rubric for Lewis and Clark Writing Assignment*

- **20 POINTS:**
  - Students have three paragraphs. Each paragraph is indented and all sentences complete. Each paragraph contains five sentences. The story has a title and all students names are on the back page of the story.
  
- **15 POINTS:**
  - Students have three paragraphs. Each paragraph is indented. Each paragraph contains at least four sentences and the story has a title and the student name is found in the writing assignment.
  
- **10 POINTS:**
  - Students have three paragraphs. Each paragraph contains at least three sentences and the story has a title.
  
- **5 POINTS:**
  - Students have at least two paragraphs. Each paragraph has three sentences or more. The story contains a title.
  
- **0 POINTS:**
  - Students have less than two paragraphs. There are less than three sentences per paragraph.