

WHY HISTORY? and Looking at Lead's Legacy

Classroom Based Assessment (CBA)
Middle School Bridging Document



**Integrated Environmental Health Middle School Project
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IEHMSP
INTEGRATED ENVIRONMENTAL HEALTH
MIDDLE SCHOOL PROJECT

For the Washington State middle school level **Why History? Classroom Based Assessment (CBA)**, students are asked to develop a position on how the knowledge of history helps them understand a current issue by analyzing related historical events.

By exploring free resources from the **Integrated Environmental Health Middle School Project (IEHMSP)** students unravel the legacy of lead use through history and develop an understanding of its impact on today's human health.

To get started, first make sure to visit our CBA website at <http://www.iehmosp.com/online/sscbsa/sscbsa.php> for an explanation of how our materials can help you teach the Why History? CBA. Then you can download the free curriculum **Environmental Health Fact File: LEAD** from our website at http://www.iehmosp.com/online/teachers/teacher_intro.php. The information below will help you and your students understand how our curriculum meets the requirements of the CBA.

For Teachers: Step-by-Step Alignment

CBA criteria	Using the <i>EH Fact File: LEAD</i> , your students can meet the requirements of the Why History? CBA.
Present a position on how history helps us understand the present by exploring how historical events relate to a current issue. (History 1.2.2a)	The Student Introduction: Environmental Health and Lead provides students with the background knowledge and vocabulary they need about environmental health and lead poisoning before proceeding with further research about the issue. The Student Introduction is located on pages 15-24 of the <i>EH Fact File: LEAD</i> and can be downloaded from the IEHMSP website at http://www.iehmosp.com/online/teachers/teacher_intro.php . A PowerPoint presentation is also available to download for introducing environmental health concepts to your students.
Use evidence to support, identify, analyze, and explain causal factors contributing to the historical and current use of lead. (History 1.2.2b)	<p>The <i>EH Fact File: LEAD</i> provides a variety of lesson plans that will prepare your students for investigating both the past and current use of lead around the world. The curriculum can be downloaded for free from the IEHMSP web site at http://www.iehmosp.com/online/teachers/teacher_intro.php. Page numbers are provided for each lesson plan.</p> <ul style="list-style-type: none"> • A Time Travel Vacation to the Roman Empire: Investigate the many ways that ancient Romans came in contact with lead. (p. 25-36). • Beethoven's Hair: Follow a lock of Beethoven's hair as it travels through time to provide a link to lead poisoning. (p. 71-84). • Eighteen Pence a Day: Discover the working conditions of London's white lead mills in the mid-1800s through the writings of Jack London and Charles Dickens. (p. 85-97). • The Geography of Childhood Lead Exposure: Analyze the geography of childhood lead exposure across Washington State. (p. 37-44). • Toxic Candies and Dangerous Cures: Uncover the dangers of folk remedies and candies from around the world that commonly contain high levels of lead. (p. 45-58). • Four Lead Awareness Activities: Investigate the dangers of lead in household paint, dust, soil and drinking water. (p. 59-70). • Childhood Blood Lead Levels: Interpret data on the links between childhood lead poisoning, race, and income level. (p. 115-126).
Accurately cites and explains pieces of evidence. (Social Studies Skills 1.1.2d)	Each lesson plan is supported by a variety of primary and secondary sources that are listed in the Lead Resources for the Librarian section of the curriculum (p. 139-146). In addition, you will find environmental health resources and web site links listed on the IEHMSP web site available at http://www.iehmosp.com/online/teachers/librarian.php .

For Students: Checklist of CBA Components

CBA Components:	The <i>Environmental Health Fact File: LEAD</i> can help meet the requirements of the Why History? CBA.
Essential Question	<ul style="list-style-type: none"> In order to comprehend the concepts and vocabulary used in the various materials, you should first read the document “Student Introduction: Environmental Health & LEAD.” For an introduction to the ways that lead is currently used around the world, look for current newspaper articles and scientific studies about this topic. The IEHMSP has several resources to help you locate articles and studies (<i>See the IEHMSP web site at http://depts.washington.edu/iehmosp/</i>). As you examine the studies and articles, you can group the issues into different categories (environmental, social, political, economic, etc.). Develop an essential question about lead use and human health that uses historical events to understand this issue. By taking the time to develop an essential question, you will be better able to answer the “So What?” question when reporting your findings.
Key Concepts and Vocabulary	<ul style="list-style-type: none"> Review key vocabulary and concepts from the document “Student Introduction: Environmental Health & LEAD.” Answer the Check Your Understanding Questions.
Inquiry	<ul style="list-style-type: none"> Identify historical events that relate to the current issue of lead poisoning. Locate relevant primary and secondary sources from a variety of viewpoints that address the essential question. Analyze and examine the sources using the Analyzing Sources page in the CBA Student Checklist. Prepare an annotated bibliography.
Synthesis and Organization	<ul style="list-style-type: none"> Organize the information from research notes using the graphic organizer from the CBA to show the connection between the current issue and the historical events.
Position	<p>Develop a position on how the knowledge of history helps you understand the current issue by:</p> <ul style="list-style-type: none"> Analyzing the current issue and related historical events. Explaining how each historical event relates to your understanding of that issue. Supporting your analysis and explanations with evidence from cited research material. Including an annotated bibliography.
Presentation	<ul style="list-style-type: none"> Present your position and findings in an authentic setting.

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Suggested Research Topics about Lead

As you guide your students toward researching historical and current uses of lead, you may want to focus research along the lines of one of the following topics. After investigating the topic, students can then go on to develop their essential question.

- What historical events help us understand how lead is currently used in Washington State (or the U.S. or the world)?
- What historical events help us understand current occupational exposures to lead (how lead is used at work in certain jobs)?
- What historical events help us understand environmental justice issues regarding lead poisoning, such as how people of different income levels or races are affected by exposure to lead?
- What historical events help us understand current policies regulating the use of lead?
- What historical events help us understand how children are currently being affected by lead poisoning?
- What historical events help us understand how different cultural groups are affected by exposure to lead?



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Curriculum Resources

EH Fact File: LEAD

The ***Environmental Health Fact File: LEAD*** is an exciting new curriculum designed to integrate environmental health across the middle school curriculum. The **EH Fact File** provides subject area specific lesson plans to teachers of social studies, science, language arts, math, and health and fitness. Resource materials are also included to help school librarians who are facilitating student research projects. To download the free curriculum, visit the IEHMSP website at

http://www.iehmSP.com/online/teachers/teacher_intro.php.

EH Headlines weekly news dispatches

A weekly electronic news service of environmental health stories in the news. To sign up for this weekly service, go to

<http://mailman1.u.washington.edu/mailman/listinfo/ehvoicesemail> or email Kristen Bergsman at crowtalk@u.washington.edu.

EH Headlines Database

A list of current environmental health news stories, organized by topic, including "lead."

http://www.iehmSP.com/online/resources/EHheadlines_updated.php

EH News Sources and Links

A list of local and national news sources.

http://www.iehmSP.com/online/resources/news_sources_links.php

IEHMSP website resource links

A list of environmental health related websites, organized by topic, including "lead."

http://www.iehmSP.com/online/resources/EH_websites_topic.php

Resources for the Librarian: LEAD

A list of lead resources for teachers and students.

<http://www.iehmSP.com/online/teachers/librarian.php>



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Internet Resources for Researching Lead

GENERAL LEAD RESOURCES

Washington State Department of Health Fact Sheet on Lead Poisoning

<http://www.doh.wa.gov/topics/lead.htm>

National Center for Environmental Health Lead Fact Sheet

Includes a kid's page with a lead crossword puzzle and word search.

<http://www.cdc.gov/nceh/lead/about/about.htm>

The Alliance to End Childhood Lead Poisoning

Includes posters, brochures and fact sheets, as well as a community tool kit.

<http://www.aeclp.org/>

Environmental Protection Agency Lead Website

Includes "Lead in the News" section, fact sheets and more.

<http://www.epa.gov/lead/>

The National Lead Information Center

<http://www.epa.gov/lead/nlic.htm>

U.S. Consumer Products Safety Commission

Includes information on products with lead content.

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

U.S. Department of Housing and Urban Development

Office of Healthy Homes and Lead Hazard Control

<http://www.hud.gov/offices/lead/index.cfm>

U.S. HUD's Community Outreach and Education Materials

<http://www.hud.gov/offices/lead/outreach/communityoutreach.cfm>

Coalition to End Childhood Lead Poisoning

Includes a lead history timeline and other interesting resources.

<http://www.lead-safe.org/index.htm>

The Secret Life of Lead

An hour long audio feature about the lifelong impacts of lead poisoning on children.

<http://www.loe.org/series/lead2003/>

Environmental Health Watch

Includes many resources on lead, including a Lead/Asthma Project that shows the links between these two environmental health topics.

<http://www.ehw.org/>

National Institute of Environmental Health Sciences (NIEHS) Kid's Pages

A whole section on lead, with many website links and activities.

<http://www.niehs.nih.gov/kids/lead.htm>

Lead Poisoning Prevention Curriculum Project

The Kansas Department of Health and Environment offers lead poisoning curriculum (Preschool - 8th grade) resources on their website.

http://www.unleadedks.com/lead_curriculum.html

Seattle & King County Public Health Department Lead Information

<http://www.metrokc.gov/health/tsp/arseniclead.htm>

EPA's Fact Sheet on Lead

http://www.epa.gov/safewater/contaminants/dw_contamfs/lead.html

EPA's Lead in Paint, Dust and Soil Website

<http://www.epa.gov/opptintr/lead/index.html>

Living on Earth Radio Show: The Silent Epidemic

<http://www.loe.org/series/lead.htm>

Living on Earth Radio Show: The Secret Life of Lead

<http://www.loe.org/series/lead2003/>

A Small Dose of Toxicology: Lead Information

http://www.asmalldoseof.org/news/lead_schools.php

LEAD THROUGHOUT HISTORY

Lead in the Roman Empire

"A Time Travel Vacation to the Roman Empire" lesson plan from *EH Fact File: LEAD*, pg. 25-36.

White Lead Mills of 19th Century London

"Eighteen Pence a Day" lesson plan from *EH Fact File: LEAD*, pg. 85-97.

Lead Poisoning and Beethoven

"Beethoven's Hair" lesson plan from *EH Fact File: LEAD*, pg. 71-87.

Benjamin Franklin Letter on Lead Poisoning

A letter written by Ben Franklin that shows his understanding of the sources and effects of lead poisoning.

http://www.leadsafe.org/international_issues/franklins_letter.html

LEAD IN INDUSTRY & HOBBIES

Lead in the Roman Empire

"A Time Travel Vacation to the Roman Empire" lesson plan from *EH Fact File: LEAD*, pg. 25-36.

White Lead Mills of 19th Century London

“Eighteen Pence a Day” lesson plan from *EH Fact File: LEAD*, pg. 85-97.

Beethoven and Lead Poisoning

“Beethoven’s Hair” lesson plan from *EH Fact File: LEAD*, pg. 71-87.

Art Safety: Preventing Lead Poisoning from Art Materials

http://www.findarticles.com/p/articles/mi_m0815/is_n154_v17/ai_12001072

Benjamin Franklin’s Glass Armonica

http://www.pbs.org/benfranklin/l3_inquiring_glass.html

Francisco Goya (painter)

<http://goya.unizar.es/InfoGoya/Life/Caracter.html>

Buried in Ice: The Doomed Artic Expedition of Sir John Franklin

http://www.chemistry.org/portal/a/c/s/1/acdisplay.html?DOC=vc2\2my\my2_ice.html

LEAD IN IMPORTED CANDIES AND FOLK REMEDIES

Toxic Candies and Dangerous Cures

“Toxic Candies & Dangerous Cures” lesson plan in *EH Fact File: LEAD*, pg. 45-58.

Special Investigation: Toxic Treats

Six-part Orange County Register investigation of imported Mexican candy.

<http://www.ocregister.com/investigations/2004/lead/index.shtml>

Centers for Disease Control and Prevention website

Article: “Childhood Lead Poisoning Associated with Tamarind Candy and Folk Remedies, California 1999-2000.”

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5131a3.htm>

Washington State Department of Health News Release

“State Department Warns About Dangers of Mexican Folk Remedies”

http://www.doh.wa.gov/Publicat/2000_News/00-59.html

Oregon Health Services News Release

“Oregon Health Services Warns About Dangerous Mexican Candies”

<http://www.ohd.hr.state.or.us/news/2001/0509eoe.htm>

Lead in Home Remedies Poster

Washington State Department of Health

<http://www.doh.wa.gov/Topics/HomeRemedies.pdf>

CHILDHOOD LEAD POISONING

The Geography of Childhood Lead Exposure

Lesson plan in *EH Fact File: LEAD*, pg. 37-44.

Childhood Blood Lead Levels

Lesson plan in *EH Fact File: LEAD*, pg. 115- 126.

Washington State Childhood Blood Lead Screening Recommendations

Washington State Department of Health report, November 2000

<http://find-it.wa.gov/default.htm>

Washington State DOH's Childhood Lead Poisoning Prevention Program

<http://www.doh.wa.gov/EHSPHL/Epidemiology/NICE/Lead/default.htm>

Environmental Protection Agency Environmental Justice Homepage

Try their Environmental Justice EnviroMapper.

<http://www.epa.gov/compliance/environmentaljustice/>

Community Coalition for Environmental Justice (CCEJ)

<http://www.ccej.org/>

Northwest Environmental Justice Alliance

<http://www.nejanw.org/>

University of Michigan's Environmental Justice Information Page

<http://www-personal.umich.edu/~jrajzer/nre/index.html>

Washington State Department of Health report,

"Washington State Childhood Blood Lead Screening Recommendations, November 2000."

<http://find-it.wa.gov/default.htm>

Washington State DOH's Childhood Lead Poisoning Prevention Program.

<http://www.doh.wa.gov/EHSPHL/Epidemiology/NICE/Lead/default.htm>

America's Children and the Environment, 2003

Published by EPA. Consult the "Body Burdens" section for information on blood levels in children.

<http://www.epa.gov/environhealth/children/>

Alliance to End Childhood Lead Poisoning

<http://www.aeclp.org/>

Coalition to End Childhood Lead Poisoning

<http://www.leadsafe.org/index.htm>

National Safety Council's Lead Poisoning and Nutrition Information

<http://www.nsc.org/issues/lead/leadnutrition.htm>

LEAD POLICIES AND REGULATIONS

Lead in Candies and Folk Remedies

"Toxic Candies & Dangerous Cures" lesson plan in *EH Fact File: LEAD*, pg. 45-58.

Lead Shot and Hunting Regulations

"Trumpeter Swan Math" lesson plan in *EH Fact File: LEAD*, pg. 99-114.

Lead in Gasoline

Global Lead Network

<http://www.globalleadnet.org/>

Princeton's Leaded Gasoline Phase-Out

<http://www.princeton.edu/~vmthomas/pbgas.html>

