

LITTLE BIG HISTORY

Little Big History (LBH): A problem-based investigation

The “Little Big History” activity is designed to help students develop multidisciplinary research and writing skills. The LBH assignment provides students with the opportunity to conduct their own big history investigation covering a wide range of time and utilizing multiple approaches to knowledge (or disciplines).

The finished product of the LBH assignment should (1) document change over time, (2) use evidence related to at least three big history project “major thresholds of increasing complexity,” including at least one each from before and after the appearance of humans, and (3) use at least three different approaches to knowledge.

To complete this sustained research project, we encourage teachers to help students engage in a historical investigation that asks focused questions, gathers relevant information from multiple print and digital sources to support analysis, reflection, and research, assesses the credibility and accuracy of each source, draws evidence from texts, and then enables the writing of an informative/explanatory text to convey what they have learned about their topic. Finally, we suggest that students present their work in another format (e.g., video, dramatic play, presentation, museum exhibit, children’s book) to an audience outside of their classroom. The LBH assessment can begin at any time, but should be completed and collected near the end of the course.

We suggest using the Common Core Literacy standards in informative/explanatory text for 9th and 10th grade students to assess the students’ final papers. Therefore, students should be able to:

- Introduce a topic that interests them and that is appropriate for this particular task
- Organize big history ideas, concepts, and information to make important connections and distinctions
- Use appropriate formatting, graphics, and evidence to aid comprehension
- Develop the topic with well-chosen, relevant and sufficient facts, extended definitions, concrete details, or other appropriate information and examples
- Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationship among ideas and concepts
- Use domain-specific, precise vocabulary to manage the complexity of the topic and convey a style appropriate to the discipline of history
- Establish and maintain a formal style and objective tone, while using the norms and conventions of the appropriate historical and scientific discipline
- Provide a concluding statement or section that follows form and supports the information or explanation presented, including articulating the significance or implications of the topic

A separate document for students includes detailed instructions and worksheets. Adapt this assignment and modify the student materials according to your classroom’s needs but all LBH investigations should meet the three criteria listed above.

Little big history essay rubric¹ (suggested)

<i>Indicators</i>	4	3	2	1
<i>Introduction</i>	The introduction captivates the reader's attention and provides the necessary context for the thesis statement.	The introduction attempts to captivate the reader's attention and provide the necessary context for the thesis statement, but does so poorly.	The introduction provides context for the thesis statement, but makes no attempt to captivate the reader.	There is an introduction but it does not provide any context for the reader before jumping into the thesis statement.
<i>Thesis Statement</i>	The thesis statement is clear and comprehensive, previewing the argument or explanation that is to follow.	The thesis statement is comprehensive and previews the explanation or argument that follows, but could be written more clearly/concisely.	The thesis statement attempts to preview the explanation or argument that is to follow but does so poorly or incompletely.	The thesis statement is difficult to locate and/or fails to prepare the reader for what is to follow.
<i>Development of Argument/Explanation: Topic Sentences</i>	The body of the paper is organized into paragraphs led by clear topic sentences that build upon and support the thesis statement. Taken together, the thesis statement and topic sentences create a unified and well-developed whole.	The body of the paper is organized into paragraphs led by clear topic sentences that attempt to build upon and support the thesis statement. However, there is some disconnect between thesis statement and topic sentences.	The body of the paper is organized into paragraphs with topic sentences but is disconnected from the thesis statement. Entirely new topics are introduced or topics indicated in the introduction are never developed.	The body of the paper lacks the topical organization necessary to develop the thesis statement.
<i>Development of Argument/Explanation: Supporting Details</i>	The paper develops the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	The paper attempts to develop the topic, but is missing some of significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	The paper has one or two topics with insufficient information OR the paper is not selective enough in its use of detail. It is rambling, providing information that is unnecessary and does nothing to develop the topic.	The paper is missing too much information to develop the argument.

<p><i>Connections to Big History narrative and Themes</i></p>	<p>The paper provides compelling claims and evidence from across at least three thresholds, including at least one within human history and one outside of human history. It makes strong and compelling connections to themes of scale, collective learning, thresholds of increasing complexity, and/or Goldilocks Conditions.</p>	<p>The paper provides compelling claims and evidence from across at least three thresholds, including at least one within human history and one outside of human history. However, the connections to big history themes could be stronger.</p>	<p>The paper goes across fewer than three thresholds, OR there is no attempt to make connections to big history themes.</p>
<p><i>Conclusion</i></p>	<p>The student restates or amplifies the point(s) made previously and brings closure to the paper.</p>	<p>The student somewhat restates and may or may not amplify the point(s) made previously. It brings some closure to the paper.</p>	<p>The student makes no attempt to restate or amplify the point(s) made previously. The conclusion does not bring closure to the narrative.</p>
<p><i>Construction of Knowledge</i></p>	<p>The student's work demonstrates strong complex thinking involving analysis of cause and effect, detailed and evidence-based speculations, well-supported and logical arguments, etc.</p>	<p>The student's work demonstrates some strong complex thinking involving analysis of cause and effect, evidence-based speculations, well-supported and logical arguments, etc.</p>	<p>The student's work only demonstrates recall of basic information. Students may have only answered simple comprehension questions, remembered facts, recalled definitions, etc.</p>
<p><i>Literacy Practices</i></p>	<p>The narrative demonstrates a high-level of skill and proficiency in grammar, usage, mechanics, and vocabulary. The narrative is highly coherent, with unified paragraphs, appropriate transitions, and a fluid overall structure.</p>	<p>The narrative demonstrates a moderate-level of writing skills and proficiency in grammar, usage, mechanics, and vocabulary appropriate to the grade level. Student may have produced texts that are somewhat well structured and organized.</p>	<p>The narrative demonstrates very little ability in writing skills and proficiency in grammar, usage, and mechanics. Their work includes a vocabulary far below their grade level. Student may have produced texts that are poorly structured and organized.</p>
<p><i>Citations and Bibliography</i></p>	<p>Using a consistent format (MLA, APA, Chicago), the paper has thorough in-text citations. There is a complete and alphabetically ordered bibliography.</p>	<p>The paper has in-text citations and a bibliography, but the formatting is inconsistent.</p>	<p>The paper has only a bibliography OR only in-text citations.</p>

¹ The BHP used previously implemented rubrics for classroom artifacts from other research studies. See: Matsumura, L.C.; Slater, S.C.; Junker, B.; Peterson, M.; Boston, M.; Steele, M.; Steele, L.; Resnick, L., "Measuring Reading Comprehension and Mathematics Instruction in Urban Middle Schools: A Pilot Study of the Instructional Quality Assessment" (Los Angeles: Center for the Study of Evaluation, 2006); Newmann, F.M.; Lopez, G.; Bryk, A.S., "The Quality of Intellectual Work in Chicago Schools: A Baseline Report" (Chicago: The Chicago Annenberg Research Project, 1998); Stecher, B.M.; Wood, A.C.; Gilbert, M.L.; Borko H.; Kuffner, K.L.; Arnold, S.C.; Dorman, E.H., "Using Classroom Artifacts to Measure Instructional Practices in Middle School Mathematics: A Two-State Field Test" (Los Angeles: National Center for Research on Evaluation, Standards, and Student Testing, 2005).

Little big history exhibit rubric (suggested)

Indicators	4	3	2	1
<p><i>The exhibit captures the big history and topic narratives</i></p>	<p>The exhibit captures all the key points in the narrative along with claims & evidence, the big history themes of collective learning & increasing complexity, connections to various disciplines, their lives, & the big history thresholds, and projections of the future.</p>	<p>The exhibit captures most of the key points in the narrative along with claims & evidence, the big history themes of collective learning and increasing complexity, connections to various disciplines & their lives, along with projections of the future.</p>	<p>The exhibit captures few of the key points in the narrative. It does little to integrate claims & evidence, the big history themes of collective learning and increasing complexity, connections to various disciplines & their lives, along with projections of the future.</p>	<p>The exhibit captures none of the key points in the narrative or the claims & evidence, the big history themes of collective learning and increasing complexity, connections to various disciplines & their lives, along with projections of the future.</p>
<p><i>The exhibit considers the audience</i></p>	<p>The exhibit utilizes an appropriate format that synthesizes the information from their narrative in a way that makes it easily accessible to the target audience. Their exhibit demonstrates their attention to their audience's interests, reading level, and background knowledge.</p>	<p>The exhibit utilizes a somewhat appropriate format that synthesizes the information from their narrative in a way that makes it accessible to some of the target audience. Their exhibit may demonstrate their attention to their audience's interests, reading level, and background knowledge.</p>	<p>The exhibit utilizes a format that does not synthesize the information from their narrative in a way that makes it accessible to the target audience. Their exhibit does not demonstrate their attention to their audience's interests, reading level, or background knowledge.</p>	<p>The exhibit utilizes an inappropriate format that does not synthesize the information from their narrative in a way that makes it accessible to the target audience. Their exhibit does not demonstrate any attention to their audience's interests, reading level, or background knowledge.</p>
<p><i>Material is presented in a creative and engaging way</i></p>	<p>The exhibit presents the materials in a creative and engaging way that captivates the audience.</p>	<p>The exhibit presents the materials in a creative and engaging way.</p>	<p>The exhibit attempts to present the materials in a creative and engaging way, but does so poorly.</p>	<p>The exhibit makes no attempt to present the materials in a creative and engaging way. The format of the exhibit is uninteresting and does not captivate.</p>
<p><i>Delivery of the presentation is effective</i></p>	<p>The student's presentation clearly presents the information in their exhibit in a meaningful way to the audience.</p>	<p>The student's presentation somewhat presents the information in their exhibit in a meaningful way to the audience.</p>	<p>The student's presentation is somewhat disorganized and may not be clear. The information presented has little or no structure and lacks meaning.</p>	<p>The student's presentation is disorganized and not clear. The information presented is not structured in a meaningful way.</p>

LITTLE BIG HISTORY

In this assignment, we are asking you to use a big history approach to examine a single object and create a “Little Big History.” What is a “Little Big History”?

We define Little Big Histories as meeting these three criteria:

- Like all histories, it captures change over time.
- Unlike many histories, your chronological account must refer to at least one time period, event, or piece of evidence dating from before the evolution of humans.
- Since big history uses many approaches to knowledge, such as geology, cosmology, biology, and chemistry, your little big history should include at least two approaches to knowledge.

You will work on a team to investigate an object or a commodity (anything that is bought and sold), a process or technical innovation, a social construct or institution, or an activity — just about anything that interests you and that you can research. We will guide you through a series of steps to help you produce a written paper and a presentation of your little big history, such as a three-dimensional or web-based exhibition.

Your investigation has a number of important steps. You will start by working as a group, and then work on your own to write a narrative, and then refocus on the group effort to create a LBH exhibit. Here is a list of the steps that you will follow; your teacher will determine the exact order and timing for completion of each assignment:

With your group:

01. Select an object to study
02. Frame big history research questions about the object
03. Learn about your object by locating, reading, and annotating sources
04. Make connections among the sources and across various big history thresholds
05. Create a presentation or exhibit

On your own:

01. Write a first draft of your little big history paper
02. Gather feedback from teachers and peers
03. Revise and complete your paper
04. Reflect on the value of your group's LBH project

Each of these steps is a task for conducting and presenting your historical research. The following are details about each task along the way to creating your little big history.

With your group:

01. Select an object to study

Work with members of your group to choose your object or subject. Try to agree on something that interests all of you and/or something that you use or encounter in your everyday lives. Here are some examples:

- Water bottle
- Bicycle
- Rice
- Thumb
- Whistling
- Banana
- Salt
- Gold

02. Frame big history research questions about the object

Create a research statement that includes some of the questions you will investigate regarding your object of study:

.....
We are interested in the history of _____. We are curious about and would like to learn:

- how long have people been using _____?
- where and how did it originate?
- how has it or its use changed over time?
- how have different people used it?
- what were the major changes in its form and use?
- how does this object of study fit within the concept of thresholds of increasing complexity?

.....
03. Learn about your object by locating, reading, and annotating sources

Work with your team to identify books, articles, and websites you will use to answer the above questions. Make certain to consider the sources you have already used in the course. How might they help you tell your little big history? Then look for new sources outside the big history curriculum. Identify sources from various approaches to knowledge (disciplines) that have contributed to the big history course and that pertain to your object of study. For example, if you were doing a little big history of salt, you might consider the chemistry of salt, the geography of salt, and/or the history of salt.

After reading and taking notes on your sources, consider how each source helps you answer your questions and assists you in your investigation. Then, write an annotated bibliography to turn in to your teacher.

Big History Project, Contact Bob Bain (bbain@umich.edu)

Use the table below to identify the sources you will use to answer your Little Big History research questions and annotate your sources by filling in the spaces with appropriate information.

Main discipline (chemistry, geology, archaeology, history, astronomy, etc.):	
Full citation in _____ format (Your teacher will tell your preferred format).	
Claim testers (What makes this a reliable source of information):	
Annotation (What is the main argument, claim? How does this support your research questions?)	
Threshold (At what threshold will this source be most useful?)	Page numbers to note (What page numbers provide particularly useful information?)

04. Make connections among the sources and across various big history thresholds

This project requires that your Little Big History include relevant information from at least three of the eight big history major thresholds of increasing complexity. You must include one threshold from before human history and one threshold from within human history. In the spaces below, write the name of each threshold you'll include along with the key concepts you studied around each threshold. Then, write a research question to guide inquiry into your object of study at each threshold you plan to include.

THRESHOLD	→	Research questions
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Fill in a "connection card" for each of the thresholds your Little Big History narrative will address. Refer to the course's eight Threshold Cards and your own research material to make connections between your object and at least three thresholds.

THRESHOLD #:
INGREDIENTS + GOLDILOCKS CONDITIONS = INCREASING COMPLEXITY Record the threshold details that are most relevant to your topic:
Research question(s):
Relevant source(s):
Key events in your Little Big History:

On your own:

01. Write a first draft of your little big history paper

Build your Little Big History and create a draft of your narrative or explanation.

Your narrative should include all of the following elements:

- A coherent, evidence-based narrative of how your object of study “got here.”
- How your object of study connects to at least three big history thresholds, from both within human history and before human history.
- Reference three big history thresholds of increasing complexity
- Evidence from at least three different disciplines that contribute to the little big history of your object of study.
- The identification of at least two instances in the story where you think logic, intuition, or authority has “stood in” for evidence, or where scientists have used their best guess in place of evidence.
- A description of the significance of the object of study to your lives and to big history.

02. Gather feedback from teachers and peers

Collect comments from your teacher and classmates about your written narrative.

Look for ways that you may be able to improve your work.

03. Revise and complete your paper

After receiving feedback on your first draft of your narrative, complete the necessary revisions.

With your group:

05. Create a presentation or exhibit

Present what you learned by researching and writing your narrative by producing an exhibit that highlights the most significant features of the object of study’s Little Big History in a captivating format.

Now that you have drafted your Little Big History narrative, you can begin to think of how you might create an exhibit of your narrative for an audience. An exhibit of this nature should **highlight the most significant features of your written narrative in a captivating visual and written format**. You and your group members may decide that this exhibit will be a three-dimensional exhibit, along the lines of those you see in a museum, or an electronic exhibit, like a website that includes photographs, maps, and perhaps some interactive elements.

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Before you begin working on your exhibit, you should prepare a proposal that you can share with your big history teacher. The proposal should include:

A description of the exhibit format

What do you want the finished product to be? Will this be a three-dimensional exhibit? Or, will it be an electronic format? What do you imagine it will look like? What are some elements you wish to include? Will it be interactive? Will it include video and/or audio? Describe your proposed exhibit format below.

An explanation of how you will consider different members of your audience for the exhibit (e.g., students, parents, administrators, etc.)

Who will be your audience for this exhibit? Will it be only your classmates? Or have you and your teacher decided to invite other members of your school community and/or your parents? What do you need to consider about your audience? What kind of background information will you need to provide for them? What will hook and maintain your audience's attention? Please explain below.

A draft, storyboard, or sketch of your exhibit plan

On a separate sheet, sketch out what you envision your exhibit to be. Make sure you clearly indicate how different sections will highlight important parts of your narrative.

On your own:

Reflect on the value of your group's LBH project

Now that you've completed all of your individual and group work, take the time to write a fairly detailed description of the work you did for the Little Big History project. Reflect upon the value of the project and explain what you liked and disliked about it.

LITTLE BIG HISTORY FAQ'S

How do I choose a topic?

Choosing a topic may seem like one of the most daunting parts of the little big history project — but it's also the most fun! This is your opportunity to pick something you're interested in, learn about it, and share what you've learned with your classmates. Think about your favorite products, possessions, or activities. If you like playing baseball, you could consider focusing on a baseball as your topic. If you enjoy cooking, you could think about choosing a particular spice to research. I would recommend choosing an item that is tangible rather than ideas. For example, coffee will be easier to trace back through the thresholds than an idea like war, which could take you in too many directions.

Where should I begin my research?

You can begin by using the big history thresholds to guide your research. Determine which thresholds you are going to focus on for your narrative and then write a short list of research questions for each. This may just seem like extra work but, trust me, you will be thankful that you have done this! These research questions will help you focus in on your topic and figure out what sorts of sources and information you should be seeking.

In writing your research questions, you should specifically examine the connection between your topic and that threshold. Think about the conditions required for your topic to exist, the ways that it has progressed and developed over time, its role on human history, etc. Your questions don't have to be only history-focused — in fact, they shouldn't be. Be sure to bring in some of the other disciplines that big history touches upon: chemistry, geology, physics, etc.

Here's an example of a good set of Threshold 4 research questions for the topic we have chosen to focus on, coffee.

Threshold 4 (Earth & the Solar System):

- Where does coffee grow best?
 - How has the formation of the Earth shaped where coffee is grown?
 - How does the Earth's rotation around the Sun affect the growing of coffee?
-

What kinds of resources will be helpful to me?

Now that you have your research questions, it'll be easy to begin your research! Use keywords from each research question to find useful sources. Searching for "coffee growing methods" instead of just "coffee" will yield lots of relevant information.

While you may be tempted to simply type something into Google and use the first few sites that pop up, be sure to think critically about the accuracy of a source before you use it. You can use the claim testers from earlier this year to determine whether a source is legitimate. Think about who is publishing this source — do you trust their *authority*? If it is a well-known scientist or historian, they likely have a great deal of expertise on this issue. Consider whether you trust the *evidence* an author is basing their claim upon. If the evidence is outdated or potentially not from a reliable source, then their claim may be incorrect. And finally, use *logic* to determine whether or not this information is likely to be accurate. A site produced by a government, university, or well-known news source is likely to have undergone rigorous fact-checking before being posted and is more likely to be correct than a page put together by a lone individual.

How do I organize my research?

It may make sense, at least initially, to organize the information by threshold so that it corresponds to one of your specific research questions. However, as you gain a better understanding of your topic you may want to reorganize your research. Make sure that you're not just writing a report about your topic but that you are actually crafting an argument. Depending on your thesis statement, it may make sense to reorganize your research chronologically, by discipline, or by some other method.

One easy way to keep your research organized is by creating an annotated bibliography. Your teacher may not require you to do this, but we recommend doing it even if it's not required. Essentially, for each source that you find you should write down a few notes summarizing the information contained in the source, why you believe it is legitimate, and how you can use this information in your narrative. Make a note of any images, diagrams, quotes, or statistics that could be useful. While it may take you a few extra moments to jot these things down, it will save you a lot of time in the long run because you will be able to easily flip through your research to find a source that you need when writing your narrative.

Here's an example of how you might annotate a source pertaining to our Little Big History project about coffee:

"Ten Steps to Coffee." *National Coffee Association*. N.p., n.d. Web. 02 Dec. 2012.
<<http://www.ncausa.org/14a/pages/index.cfm?pageid=69>>.

"This source provides an overview of how coffee goes from the plant to the cup. It discusses the methods of production and processing that are used all across the globe by the coffee industry."

"I believe this information is accurate because it was published by the National Coffee Association, an official national trade organization, and it must have undergone a review and fact-checking process to ensure its accuracy.

"The information in the source can help me answer my research questions for Threshold 7 as it discusses the agricultural methods used in growing and processing the coffee plants. Additionally, there are a number of interesting pictures that can be used as visuals for my narrative to help show how this process occurs."

How do I make sure that I am telling a Little Big History story?

One of the biggest traps to fall into is writing your narrative from a world history perspective instead of writing a little big history story. Be sure that you think about the way your topic connects to big history themes like increasing complexity, scale, and collective learning. Also, make sure that you give adequate consideration to the early thresholds you choose. Don't just focus on the history of your topic after humans emerge. It may be difficult to immediately see the connection between an early threshold like the formation of the stars and your topic, say coffee, but think about the Goldilocks Conditions required for coffee to grow and be produced. What elements is coffee made up of? What environmental conditions are necessary for it to grow?

How can I write a coherent narrative?

To turn all of your research into a coherent story, you must decide how you want your Little Big History to flow. Think about whether you want to organize your little big history chronologically, by threshold, by discipline, or by some other method. You could begin with the first threshold or begin with a prediction for the future of your topic and go backward — it's all up to you! It may seem daunting at first but as soon as you have chosen your argument, it should be easy to organize your research into categories that support your thesis statement. Make sure to have clear topic sentences and strong transitions between paragraphs, and have fun writing!

How do I create an effective presentation to share my Little Big History?

Be creative and have fun! You've done all of your research, completed your narrative, and now are ready to share your topic with your classmates. There are a number of ways to present your little big history project so choose a medium that you are comfortable with and think would fit well with your topic. Make sure to make your presentation interesting and engaging by including visuals, interactive activities, and anything else you can think of. Here are some examples of presentation formats: PowerPoints, Prezis, videos, dramatic plays, posterboards, and dioramas.