

Instructional Recipe

What Makes Chocolate the Perfect Treat?

5th Grade
Language Arts & Health

Step 1 – Ask

Objectives: Students will investigate the origins of chocolate and analyze how it has evolved through the years to the multiple forms available today. Finally students will discuss the nutritional value of chocolate.

Introduction: Chocolate chip cookies, chocolate ice cream, chocolate mints, chocolate cake, chocolate milk, hot cocoa, chocolate with almonds, chocolate with peanuts and caramel, chocolate with hazelnut, milk chocolate, white chocolate, dark chocolate... Hmm... No wonder there are so many chocoholics in the world! Chocolate is the perfect gift for all occasions, a treat, a snack, and a boost of energy. But where does this tasty food come from and how has it turned into so many fancy forms?



“Candy salesperson Magdalena D’ippolito, shows off an eight-pound box of assorted chocolates at the Carl Bissinger Candy Company, February 12”
Online Photograph. EBSCO Image Collection. 13 Oct. 2008
<<http://search.ebscohost.com/login.aspx?direct=true&db=imh&AN=imh122294&site=srck5-live>>

Ask:

- ★ Where does chocolate come from?
- ★ How have people cooked chocolate in the past and present?
- ★ Is chocolate healthy or harmful?

Vocabulary:

- ★ Cocoa bean
- ★ culinary

ENGLISH LANGUAGE ARTS TEKS:

23) Research/Research Plan.

(A) brainstorm, consult with others, decide upon a topic, and formulate open-ended questions to address the major research topic; and (B) generate a research plan for gathering relevant information about the major research question.

(24) Research/Gathering Sources.

Students are expected to: (A) follow the research plan to collect data from a range of print and electronic resources (e.g., reference texts, periodicals, web pages, online sources) and data from experts; (C) record data, utilizing available technology (e.g., word processors) in order to see the relationships between ideas, and convert graphic/visual data (e.g., charts, diagrams, timelines) into written notes; (D) identify the source of notes (e.g., author, title, page number) and record bibliographic information concerning those sources according to a standard format; and (E) differentiate between paraphrasing and plagiarism and identify the importance of citing valid and reliable sources.

(25) Research/Synthesizing Information.

(A) refine the major research question, if necessary, guided by the answers to a secondary set of questions; and (B) evaluate the relevance, validity, and reliability of sources for the research.

(26) Research/Organizing and Presenting Ideas.

Students are expected to synthesize the research into a written or an oral presentation that: (A) compiles important information from multiple sources; (B) develops a topic sentence, summarizes findings, and uses evidence to support conclusions; (C) presents the findings in a consistent format; and (D) uses quotations to support ideas and an appropriate form of documentation to acknowledge sources (e.g., bibliography, works cited).

HEALTH TEKS:

(3) Health information. The student knows how to utilize health information. The student is expected to:
(A) describe methods of accessing health information; and
(B) demonstrate ways to communicate health information such as posters, videos, and brochures.

Step 2 – Investigate

EBSCO & Britannica Resources:

- ★ chocolate." Compton's by Britannica. 2007. Encyclopædia Britannica Online School Edition. 16 Dec. 2007 <http://school.eb.com/comptons/article-9273650>.
- ★ [All About Chocolate](#). By: Kuhl, Jackson. dig, Jan2007, Vol. 9 Issue 1, p26-27
- ★ [A Short, Sweet History of Chocolate](#). By: Miller, Jerry. Appleseeds, Feb2006, Vol. 8 Issue 6, p4-7
- ★ [Craving Chocolate?](#) By: Biakowski, Carol. Scholastic Choices, Feb2000, Vol. 15 Issue 5, p24, 2p
- ★ Search for full-text magazines and books & encyclopedia articles on [chocolate AND health](#) in the EBSCO Kids Search interface.

Additional Websites:

Discover Hershey at <http://www.hersheys.com/discover>

Books:

- ★ [Charlie and the Chocolate Factory](#) by Roald Dahl and Quentin Blake
- ★ [The Chocolate Touch](#) by Patrick Skene Catling and Margot Apple
- ★ [Chocolate Fever](#) by Robert Kimmel Smith and Gioia

Technology Application TEKS:


- 4A** Apply appropriate electronic search strategies in the acquisition of information including keyword and Boolean search strategies
- 5A** Acquire information including text, audio, video, and graphics
- 7A** Use software programs with audio, video, and graphics to enhance learning experiences
- 7B** Use appropriate software to express ideas and solve problems including the use of word processing, graphics, databases, spreadsheets, simulations, and multimedia
- 7C** Use a variety of data types including text, graphics, digital audio, and video
- 10B** Use font attributes, color, white space, and graphics to ensure that products are appropriate for the communication media including multimedia screen displays, Internet documents, and printed materials
- 11A** Publish information in a variety of media including, but not limited to, printed copy, monitor display, Internet documents, and video

Step 3 – Create

Students will practice note-taking and bibliographic cards. They will identify the main idea and at least 3 supporting details from each of the resources they read.

Students will list events in sequential order as modeled by the following example.

1300-400 BC	The ancient Olmec domesticated cocoa.
300-900 AD	Maya drank liquid cocoa with honey and chili peppers.
Late 1600s	Chocolate houses appear in Europe.
1903	Milton Hershey created the world's largest chocolate factory in Pennsylvania.

 **Technology Link** – Many applications can be used to sequence events, such as Timeliner, Excel, or Word.

Step 4 – Discuss Step 4 – Discuss

Students will choose one or both of the following culminating projects:

1. Create a timeline of the history of chocolate. Present this timeline to your audience and indicate some major events in history that occurred during those years. The historical events will provide a frame of reference for your audience.
2. As a school nurse you have been asked to explain the benefits and harmful effects of chocolate to elementary students. Create a flyer or brochure appropriate for young learners.

🔗 Technology Link –

1. Students may use Timeliner or a spreadsheet to create their timeline.
2. Students may use desktop publishing software (i.e., Word, Publisher or Pages) to present their findings and recommendations.



Step 5 – Reflect

Allow students to present their projects to the rest of the class. Use the following suggested rubric to assess the students' work. Make sure that the students are familiar with the rubric *before* they begin creating their project. They should refer to the rubric repeatedly to monitor their progress in creating their project.

🔗 Technology Link: You can also create your own rubric with your students at <http://rubistar.4teachers.org/index.php>.

RUBRIC Timeline

CATEGORY	4	3	2	1
Content/Facts	Facts were accurate for all events reported on the timeline.	Facts were accurate for almost all events reported on the timeline.	Facts were accurate for most of the events reported on the timeline.	Facts were often inaccurate for events reported on the timeline.
Time Use	Classroom time was used to work on the project. Conversations were not disruptive and focused on the work.	Classroom time was used to work on the project the majority of the time. Conversations were not disruptive and focused on the work.	Classroom time was used to work on the project the majority of the time, but conversations often were disruptive or did not focus on the work.	Student did not use classroom time to work on the project and/or was highly disruptive.
Resources	The timeline contained at least 15 events.	The timeline contained at least 10 events.	The timeline contained at least 5 events.	The timeline contained fewer than 5 events.
Attractiveness	The overall appearance of the timeline is pleasing and easy to read. Graphics are balanced and compliment the facts.	The overall appearance of the timeline is somewhat pleasing and easy to read. Graphics compliment almost every fact.	The timeline is relatively readable. Some graphics are unclear or missing.	The timeline is difficult to read. Graphics are not pleasing and/or there are many missing.

RUBRIC Flyer or Brochure

CATEGORY	4	3	2	1
Knowledge Gained	All students in group could easily and correctly state at least 9-10 facts about Texas included in the brochure without looking at the brochure.	All students in the group could easily and correctly state at least 7-8 facts about Texas included in the brochure without looking at the brochure.	Most students in the group could easily and correctly state 5-6 facts about Texas included in the brochure without looking at the brochure.	Several students in the group could NOT correctly state at least 5 facts about Texas included in the brochure without looking at the brochure.
Content - Accuracy	100-90% of the facts in the brochure are accurate.	89-80% of the facts in the brochure are accurate.	79-70% of the facts in the brochure are accurate.	Fewer than 70% of the facts in the brochure are accurate
Attractiveness & Organization	The brochure has exceptionally attractive formatting and well-organized information.	The brochure has attractive formatting and well-organized information.	The brochure has well-organized information.	The brochure's formatting and organization of material are confusing to the reader.
Writing - Organization	Each section in the brochure has a clear beginning, middle, and end.	Almost all sections of the brochure have a clear beginning, middle and end.	Most sections of the brochure have a clear beginning, middle and end.	Less than half of the sections of the brochure have a clear beginning, middle and end.
Graphics/Pictures	Contrasting colors and at least 8 graphics about Texas were used to enhance the brochure. The graphics correspond with the information in the brochure.	Contrasting colors and at 6-7 graphics about Texas were used to enhance the brochure. The graphics correspond with the information in the brochure.	Contrasting colors and 4-5 graphics about Texas were used to enhance the brochure. Most of the graphics correspond with the information in the brochure.	Little or no color or fewer than 3 graphics about Texas were included. The graphics do not clearly correspond with the information in the brochure.