

The Caveman Catastrophe



About the Show

When the kids warp back to the Stone Age, they manage to decipher some cave-paintings and find *The Book* in the camp of the Neanderthals. But when they trade Jodie's binoculars to get it back, something goes wacky and the kids are suddenly a lot hairier than usual.

Introduction

This lesson provides an overview of the development of humans and offers students an opportunity to learn about prehistory.

Historical Background

Neanderthals and Cro-Magnons were two types of early humans who co-existed for over 40,000 years. While the less-sophisticated Neanderthals died out about 30,000 years ago, the Cro-Magnons continued to grow and change and eventually became modern humans.

Neanderthals were named after the Neander Valley in Germany, where their remains were first found in 1857. They had prominent bony eyebrow ridges as well as protruding teeth and prominent noses. Their speech was probably limited, although they were not as stupid as their stereotype suggests. They made a variety of tools, wore animal hides, and used fire to cook some of their food and protect themselves against wild animals. They learned how to survive in Stone Age conditions and may have been the first hominids to care for their sick and bury their dead.

Cro-Magnon people lived in huts or caves during the Ice Age. Named after the rock shelter in Dordogne, France, where their skeletons were found, Cro-Magnons were taller and thinner than Neanderthals, with smaller faces, noses, and teeth. They made

Curriculum Connections

- archeology
- Cro-Magnons
- Neanderthals
- prehistory

Subject Areas

- language arts
- science
- social studies



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Historical Background *continued*

more complex tools and weapons and even painted pictures on cave walls. Evidence indicates that they probably had better language skills and more dexterity with their fingers. They may have woven their clothes and wore adornments such as necklaces.

Want students to get even more excited about history?



Check out the Neanderthals adventure for kids at www.timewarp trio.com/adventures/neanderthal/

Put It Back, Jack! and other interactive games to play.

Plentifax 487—the ultimate time traveler's guide—gives facts about the way the first humans lived and more!

Cool Books that kids will love.

Activity 1



Time for a Timeline

Creating a timeline of prehistory will help students grasp the scope of human history.

Instructions

1. As a class, examine various timelines. Discuss the features of a timeline (e.g., beginning and ending dates, important events, how the timeline is designed).
2. Explain to students that they will be creating a timeline of prehistory.
3. Assemble students into teams. Assign each team an era in prehistory to research (e.g., Palaeolithic, Mesolithic, Neolithic). Each team should note at least five important facts about their era.
4. Create a physical timeline by taping pieces of large chart paper together. If possible, have the timeline run the length of the classroom or set it up in a hallway. Mark off evenly spaced intervals that represent increments of time (increments of 1,000 years might work well). Discuss with the class where to begin the timeline and where to end it.
5. Ask each team to go up to the timeline and mark the era they are studying. Have a volunteer write their important facts above the mark.
6. Have each team stand next to the era they labeled along the timeline. Discuss the distribution of the students along the timeline. What eras are close together? Which are farthest apart? When do humans first arrive on the timeline?
7. Discuss with students what they have learned about the span of time and the arrival of humans.

Objectives

- to practice research skills
- to create a timeline

Materials

- large chart paper
- tape
- writing materials

Curriculum Standards

- **NCSS**
Culture: Compare similarities and differences in the ways groups, societies, and cultures meet human needs and concerns.
- **NCTE/IRA**
Students read a wide range of print and nonprint texts to build an understanding of texts, themselves, and of cultures of the United States and the world.

Activity 2

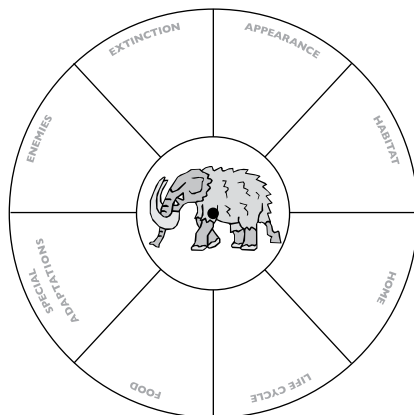


Fascinating Facts

In this activity, students research and learn about prehistoric animals.

Procedure

1. Remind students that the Time Warp Trio encounter some prehistoric animals during their adventure. Provide or have students brainstorm a list of animals that a prehistoric man or woman might meet (e.g., woolly mammoth, saber-toothed tiger, megaloceros, mastodon).
2. Have each student choose one animal to research. They will need to find the following information:
 - appearance (size, coloring, etc.)
 - habitat (earth's physical features that support this life form)
 - home (nest? caves? groups? alone?)
 - life cycle (development from infant to adult)
 - food (What does it eat? How does it get food?)
 - special adaptations (unique features that help the animal survive in its habitat)
 - enemies (Who are they? How do they interact? Why are they enemies?)
 - extinction (when and how they became extinct)
3. After they have completed their research, have each student complete an eight-segment "data disc." Students will need to fill in the information under the appropriate heading on the larger circle.
4. Now have students draw or copy a picture of the animal on the smaller circle. This circle should be centered on the data disc and attached with a brass fastener.
5. Ask students to present their findings using their data discs.
6. Discuss how the earth's habitat and its inhabitants changed over time.



Objectives

- to practice research skills
- to demonstrate creative presentation skills

Materials

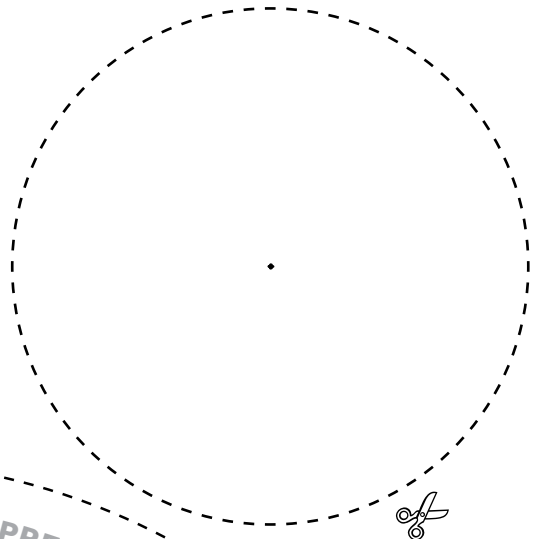
- "Make a Data Disc" handout
- writing and drawing supplies
- scissors
- brass fasteners

Curriculum Standards

- **NCSS**
People, Places, & Environments: Students will explore ways that the earth's physical features have changed over time.
- **NCTE/IRA**
Students adjust their use of spoken, written, and visual language to communicate effectively with a variety of audiences and for different purposes.

Make a Data Disc

- Draw a picture of the animal you selected on the smaller disc.
- Write facts from your research in the appropriate section on the larger disc—leaving room for the picture in the center.
- Cut out the circles and fasten them together.
- Present your data disc to the class.



Recommended Books

For Teachers

Becoming Human: Evolution and Human Uniqueness by Ian Tattersall. (Harcourt, 1998)

This book examines the evolution of human intelligence by looking at our living relatives and the evidence left by our extinct ones.

Extinct Humans by Ian Tattersall and Jeffrey H. Schwartz. (Westview Press, 2000)

A thorough investigation into the history of the human species, with fossil evidence and theories as to why one type of hominid became modern humans.

From Lucy to Language by Blake Edgar and Donald C. Johanson. (Simon and Schuster, 1996)

This large-format book about human evolution describes Lucy, a female hominid who lived 3.2 million years ago.

The Human Career: Human Biological and Cultural Origins by Richard G. Klein. (University of Chicago Press, 1999)

Chronicles the evolution of people from the earliest primates through the emergence of fully modern humans within the past 200,000 years.

Missing Links: The Hunt for Earliest Man by John Reader. (Little Brown, 1981)

This book offers an illustrated history of paleoanthropology.

The Neanderthals: Changing the Image of Mankind by Erik Trinkaus and Pat Shipman. (Knopf, 1992)

A history of the discovery, analysis, and contentious nature of Neanderthal fossils.

World Prehistory: A Brief Introduction, 5th edition by Brian M. Fagan. (Prentice Hall, 2001)

Written by a leading archeologist, this comprehensive overview includes information on human origins and the development of the earliest civilizations.

For Students

Fiction

Your Mother Was a Neanderthal by Jon Scieszka. Illustrated by Lane Smith. (Puffin, 1993)

Sam, Joe, and Fred travel back to the Stone Age where they meet cave people; face a saber-toothed cat; and check out some cave paintings as they search for *The Book* and a way to time warp home.

11,000 Years Lost by Peni R. Griffin. (Harry N. Abrams, Inc., 2004)

When 11-year-old Esther is magically transported back to the Ice Age, she is adopted by a tribe of mammoth hunters. Can she return to the future?

Adventures in the Ice Age by Linda Bailey. (Kids Can Press, 2004)

The Good Times Travel Agency series. The Binkerton kids are transported to the Ice Age where they have nothing but a guidebook to direct them.

Boy of the Painted Cave by Justin Denzel. (Philomel, 1988)

Tao only wants to be left alone to draw, but he is forced from his clan. How can he survive in the savage world 18,000 years ago? *Return to the Painted Cave* is the sequel.

In the Shadow of the Mammoth by Patricia Nikolina Clark. (Blue Marlin, 2003)

Instead of being excited, Zol is afraid he will disgrace himself and his father's memory on his first mammoth hunt.

Peter Dickinson's The Kin, Po's Story by Peter Dickinson. (Grosset & Dunlop, 1998)

Young Po wants to prove his bravery to The Kin, a group of people living in prehistoric times, by leading them to new land. Other books in the series tell *Noli's Story*, *Suth's Story*, and *Mana's Story*.

Timespinners by Luli Gray. (Houghton Mifflin, 2003)

Twins Allie and Fig spin back in time and see Neanderthals and mammoths. Each chapter of the story is followed by an entry in Fig's journal (complete with drawings) that describes what life may have been like back then.

A Woolly Mammoth Journey by Debbie S. Miller. (Little Brown, 2001)

This is the story of a band of woolly mammoths, led by a matriarch named Wise One, as they experience birth, death, dangers, and travel.

Nonfiction

The Bone Detectives by Donna M. Jackson. (Little Brown, 1997)
Describes the forensic techniques used to investigate not only crimes but history as well, including the Lucy fossil and a 5300 year-old “iceman” found in the Alps.

The Human Story: Our Evolution From Prehistoric Ancestors to Today by Christopher Sloan. (National Geographic Children’s, 2004)
A look at human development, including the methods scientists use and the theories of paleoanthropology.

Ice Age Cave Bear by Barbara Hehner. (Scholastic, 2004)
Dramatic illustrations show the conditions on earth at the time of the last Ice Age and the evolution of bears.

The Mystery of the Mammoth Bones and How It Was Solved by James Cross Giblin. (HarperCollins, 1999)
When giant bones were found on a farm in 1901, Charles Wilson Peale realized they came from a creature that would eventually be known as a mastodon. *Frozen Mammoth* by Dougal Dixon (Gareth Stevens Publishing, 2004) tells a similar story for younger readers.

National Geographic Prehistoric Mammals by Alan Turner. (National Geographic, 2004)
Beautiful illustrations by Mauricio Antón show the amazing variety of animals—from deinothere to giant sloths to man—that lived in prehistoric times.

Native American Rock Art, Messages From the Past by Yvette La Pierre. (Thomasson-Grant, 1994)
Explore the Native American petroglyphs and pictographs left on stones and in caves all across what is now the United States and Canada.

Prehistory by Roberto Carvalho de Magalhães. (Peter Bedrick, 2000)
How early man lived, including burial rituals, homes, early architecture, and arts and crafts.

Secrets From the Rocks: Dinosaur Hunting with Roy Chapman Andrews by Albert Marrin. (Dutton, 2002)
A biography of Andrews that focuses on the adventure and science of his explorations and dinosaur discoveries in the Gobi Desert of Mongolia. Brian Floca’s *Dinosaurs at the Ends of the Earth* (DK Ink, 2000) is a fictionalized picturebook version.

Stone Age Farmers Beside the Sea: Scotland’s Prehistoric Village of Skara Brae by Caroline Arnold. (Clarion Books, 1997)
An introduction to the ancient village of Skara Brae on Scotland’s Orkney Islands, inhabited from 3100 to 2500 B.C.E.

Walking with Cavemen by John Lynch and Louise Barrett. (DK Publishing, 2003)
This companion volume to the BBC television show tells of the evolution of man from the first apes that walked on two feet to modern man.

Who Came First? New Clues to Prehistoric Americans by Patricia Lauber. (National Geographic, 2004)
This book challenges the popular theory that the first Americans came across a land bridge from Asia.

Web Sites

CRO MAGNON EVIDENCE

www.bbc.co.uk/sn/prehistoric_life/
Explore these facts, gathered by the BBC, about prehistoric life.

THE HUMAN ORIGINS PROGRAM AT THE SMITHSONIAN INSTITUTION

www.mnh.si.edu/anthro/humanorigins/index.htm
This comprehensive site includes photographs of skulls believed to be from Cro-Magnons and Neanderthals, and information about five million years of human evolution.

NEANDERTHAL

www.channel4.com/history/microsites/N/neanderthal/
This companion site to the documentary *Neanderthal* tells the story of a small clan of Neanderthals living in France 35,000 years ago, including the tools they used, the way they lived, and the language they used.

NEANDERTALS: A CYBER PERSPECTIVE

sapphire.indstate.edu/~ramanank/
Explore topics such as “The Fate of Neandertals,” “Hunting and Diet,” “Linguistic Capability,” and more.

NEANDERTHALS ON TRIAL

www.pbs.org/wgbh/nova/neanderthals
This companion site to the PBS television program explores the Neanderthals’ place in evolution.

SCIENTIFIC AMERICAN—THE LATEST NEANDERTHAL

www.sciam.com/article.cfm?articleID=00011272-3CDE-1C75-9B81809EC588EF21&sc=1100322
Reports on some of the changing views about Neanderthals.

Please note:

Although these sites were verified at the time of publication, Web site addresses and content are frequently subject to change.