

The Genographic Project Classroom Companion

Where do I come from? Geneticist Spencer Wells and a team of scientists are attempting to answer that question by collecting DNA samples from people all over the world. The Genographic Project is a five-year effort to understand the human journey—where we came from and how we got to where we live today. This unprecedented effort will map humanity's genetic journey through the ages.

The Genographic Project

<https://www3.nationalgeographic.com/genographic/>

Learn more about the project, get a genetics overview, explore the Atlas of Human Journey, and discover how *you* can trace your deepest ancestry.

Related Materials from National Geographic

Lesson Plans

Grades K-2

- **Human Migration: The Story of a Community**

<http://www.nationalgeographic.com/xpeditions/lessons/09/gk2/humanmigration.html>

In this National Geographic Xpeditions lesson, students come to understand some key concepts of human migration through the examination of maps and migration patterns.

Grades 3-5

- **Human Migration: The Story of a Community's Culture**

<http://www.nationalgeographic.com/xpeditions/lessons/09/g35/humanmigration.html>

In this National Geographic Xpeditions lesson, students research and document the impact of migration on a region's cultural landscape. They examine migration patterns on a global and national scale as a class and then apply that understanding to telling a migration story about their own community.

Grades 6-8

- **Human Migration: The Story of the Cultural Landscape**

<http://www.nationalgeographic.com/xpeditions/lessons/09/g68/humanmigration.html>

In this National Geographic Xpeditions lesson, students learn about key concepts of human migration through the examination of maps and census data.

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Grades 9-12

- **Genographic: Mapping the Human Journey**

<http://www.nationalgeographic.com/xpeditions/lessons/09/g912/genographic1.html>

In this National Geographic Xpeditions lesson, students explore the concept of migration from a historical perspective. Students define migration, focus on the different types of movements of people, examine causes and examples of migration, and consider the impact of historical events.

- **Genographic: Permanent Markers**

<http://www.nationalgeographic.com/xpeditions/lessons/09/g912/genographic2.html>

In this National Geographic Xpeditions lesson, students review background information about the basics of DNA and chromosomal structure. They then explore the Genographic Project and the work of lead scientist Dr. Spencer Wells.

- **Connecting the Dots: Genographic's Markers in Context**

<http://www.nationalgeographic.com/xpeditions/lessons/09/g912/genographic3.html>

In this National Geographic Xpeditions lesson, students examine markers of human migration. Students begin by conducting a hands-on study of patterns of genetic markers. They consider ways in which contextual information provides scientists with clues about ancient migratory patterns.

- **Genographic's Legacy: Preservation and Projections**

<http://www.nationalgeographic.com/xpeditions/lessons/09/g912/genographic4.html>

In this National Geographic Xpeditions lesson, students consider ways in which the Genographic Project is impacted by scientific and technological advances. They learn why indigenous communities play such a crucial role in unlocking the secrets of our common ancestry, examine how those communities are being threatened, make projections about future challenges to their ways of life, and consider how research such as the Genographic Project can play a role in preserving them.

Activities

- **Tell a Migration Story ... With Interviews**

<http://www.nationalgeographic.com/xpeditions/activities/09/interviewing.html>

In this National Geographic Xpeditions student activity, students become reporters for the local newspaper and conduct interviews with someone who has migrated to their community. After they finish their interviews, students share what they have learned about their interviewees' experiences, memories, and feelings about coming to live in their new community.

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• Tell a Migration Story...with Maps

<http://www.nationalgeographic.com/xpeditions/activities/09/>

In this National Geographic Xpeditions student activity, students share information about migration in their communities by planning and creating migration maps. After learning about mental maps and mapmaking in general, they create their own maps to illustrate how migration has helped to shape their local areas.

• Tell a Migration Story...With Photos

<http://www.nationalgeographic.com/xpeditions/activities/09/photography.html>

In this National Geographic Xpeditions activity, students take pictures that tell the story of their community's cultural heritage and the story of human migration that is unique to their area. They consider how they can tell a story with a sequence of photographs, and then put their thoughts into action by creating photo essays.

Magazine Articles

• The Dawn of Humans—Who Were the First Americans?

<http://www.nationalgeographic.com/ngm/0012/feature3/index.html?>

From the December 2000 *National Geographic*: Who were the first Americans? It's an open question as archaeologists weigh the newest evidence. Includes an article excerpt, photo gallery, map, and more.

• Family Ties—Dmanisi Find

<http://www7.nationalgeographic.com/ngm/0504/feature2/index.html>

From the April 2005 *National Geographic* magazine: Our ancestors had already ventured out of Africa 1.8 million years ago—and settled in the republic of Georgia. This online feature includes an article excerpt, photo gallery, map, and more.

• Georgian Skull Find

<http://magma.nationalgeographic.com/ngm/0208/feature1/>

From the August 2002 *National Geographic* magazine: This 1.75-million-year-old skull from the republic of Georgia might have belonged to one of the first humans to leave Africa. And it doesn't look anything like what scientists thought it would. Includes article excerpt, photo gallery, a map, and more.

• The Greatest Journey

<http://www7.nationalgeographic.com/ngm/0603/feature2/>

From the March 2006 *National Geographic*: Genetic trails left by our ancestors are leading scientists back across time in an epic discovery of human migration. Includes an article excerpt, a map, video, and more.

• The Map of Us All

<http://www.nationalgeographic.com/adventure/0508/excerpt1.html?fs=www3.nationalgeographic.com>

From *National Geographic Adventure*: Spencer Wells is risking life and limb to collect DNA from the most isolated, remote peoples on the planet. Five years, 100,000 samples, and 40 million dollars later, he'll have a new road map to human history.

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• Meet the Family

http://www7.nationalgeographic.com/ngm/0603/feature2/online_extra.html

Curious about unexpected Genographic Project matches to her DNA, *National Geographic* magazine writer Cassandra Franklin-Barbajosa set out to learn more about her "genetic cousins."

• The People Time Forgot

<http://www7.nationalgeographic.com/ngm/0504/feature1/index.html>

From the April 2005 *National Geographic* magazine: Diminutive hominins make a big evolutionary point: Humans aren't exempt from natural selection. This online feature includes an article excerpt, a photo gallery, multimedia, and more.

• Who Were the Phoenicians?

<http://magma.nationalgeographic.com/ngm/0410/feature2/index.html?>

From the October 2004 *National Geographic* magazine: We know they dominated sea trade in the Mediterranean for 3,000 years. Now DNA testing and recent archaeological finds are revealing just what the Phoenician legacy meant to the ancient world—and to our own. This online feature includes an article excerpt, photo gallery, map, and more.

Maps

• Africa Map

<http://mapmachine.nationalgeographic.com/mapmachine/viewandcustomize.html?task=getMap&themeld=p85>

• World Map

<http://mapmachine.nationalgeographic.com/mapmachine/viewandcustomize.html?task=getMap&themeld=p5>

• Africa (Outline Map)

<http://www.nationalgeographic.com/xpeditions/atlas/index.html?Parent=africa&Mode=d&SubMode=w>

• World (Outline Map)

<http://www.nationalgeographic.com/xpeditions/atlas/>

News Articles

• Genographic Project News Archive

<http://news.nationalgeographic.com/news/genographic.html>

See all National Geographic News articles relating to the Genographic Project.

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- **Global Gene Project to Trace Humanity's Migrations**

http://news.nationalgeographic.com/news/2005/04/0413_050413_genographic.html

New DNA studies suggest that all humans descended from a single African ancestor who lived some 60,000 years ago. To uncover the paths that lead from him to every living human, the National Geographic Society today launched the Genographic Project at its Washington, D.C., headquarters.

- **Human Genome Shows Proof of Recent Evolution, Survey Finds**

http://news.nationalgeographic.com/news/2006/03/0308_060308_evolution.html

Signs of recent evolution by natural selection are widespread across the human genome, experts say.

- **Millions of Men May Be Descended From Irish King, Study Says**

http://news.nationalgeographic.com/news/2006/01/0120_060120_irish_men.html

Up to three million men living around the world today could be descended from a fifth-century Irish king, according to a new study.

- **Neandertals Hunted as Well as Humans, Study Says**

http://news.nationalgeographic.com/news/2006/01/0125_060125_neanderthal.html

Drawing on evidence from animal remains—largely the bones of a mountain goat species called the Caucasian tur—scientists have determined that Neandertals were as capable hunters as the modern humans who later lived in the area.

Photos

- **Dmanisi Find**

<http://www7.nationalgeographic.com/ngm/0504/feature2/gallery1.html>

See photos of a *Homo erectus* discovery in the republic of Georgia.

- **Footsteps of My Ancestors**

http://www.nationalgeographic.com/traveler/photos/genographic0510/genographic_gallery.html

From *National Geographic Traveler* magazine: After a DNA analysis reveals his ancestors' migration route, American traveler Donovan Webster goes on a quest to meet his relatives in Africa, Uzbekistan, and beyond. Famed photographer Steve McCurry captures it all.

- **Georgian Skull Find**

<http://magma.nationalgeographic.com/ngm/0208/feature1/zoom1.html>

See images from the August 2002 *National Geographic* magazine article.

- **The People Time Forgot**

<http://www7.nationalgeographic.com/ngm/0504/feature1/gallery1.html>

See images from the *National Geographic* magazine article detailing the discovery of hominins on the Indonesian island of Flores.



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Video

- **Written in Blood**

<http://www7.nationalgeographic.com/ngm/0603/feature2/multimedia.html>

It's a question we all ask: Where do I come from? Geneticist Spencer Wells and a team of scientists are attempting to answer that question by collecting DNA samples from people all over the world.

About the National Geographic Magazine Community

www.ngsednet.org/ngm

The National Geographic Magazine Community, part of National Geographic's Education Network (EdNet), is a place for educators of all kinds to get exclusive teaching materials, discuss teaching methods and issues raised by the magazine's articles, and—for the first time ever—subscribe to National Geographic magazine at a special low rate.

Take advantage of all these resources (and get more Classroom Companions like this one) at www.ngsednet.org/ngm.