

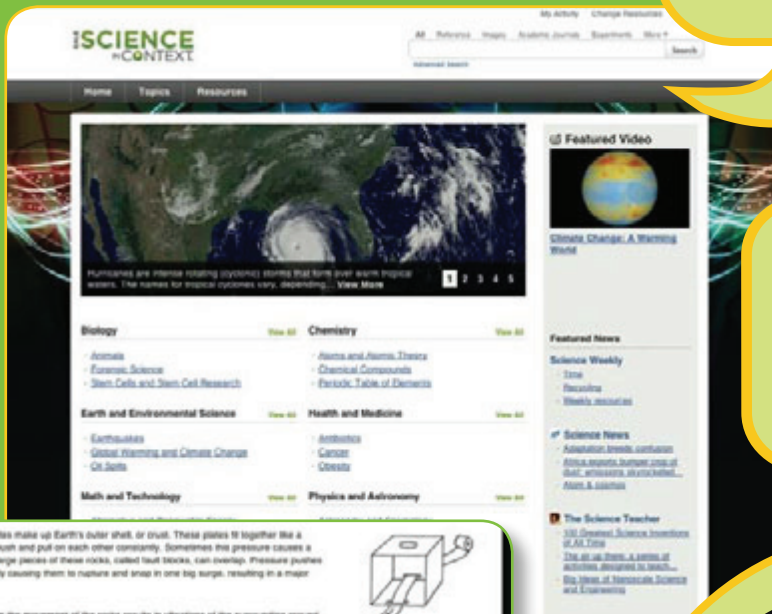
21st century learning is placing new emphasis on science topics from global warming to space exploration

Critical thinking. Information literacy. Innovation and creativity. Today's 21st century skills demand 21st century resources, and Gale *In Context* is ready to deliver. This remarkable family of online knowledge portals is designed to enhance student outcomes across the curriculum.

Only Gale *In Context* offers access to full-text reference sources from Gale and its premier partners – integrated with the best of multimedia. The result is an experience that engages students and supports learning in the classroom, the library and at home.

Curriculum-aligned reference content

- Top Gale reference includes *Gale Encyclopedia of Science*, *Chemical Elements*, *Science in Dispute* and *Macmillan Science Library*
- Exclusive experiments from *U•X•L Experiment Central*
- Aligned to National and State Science Education Standards



Engage students with multimedia

- Continuously updated video, audio and podcasts
- Eye-catching image galleries
- Full-text articles from national and global newspapers, magazines and journals

SCOPE AND DEPTH

Science in Context draws students into the subject matter by integrating pure information with today's headlines and videos – showing how scientific disciplines relate to real-world issues, from weather patterns to obesity.

Huge blocks of rocks called plates make up Earth's outer shell, or crust. These plates fit together like a cracked egg shell. The plates push and pull on each other constantly. Sometimes the pressure causes a fault, or a break in the rocks. Large pieces of these rocks, called fault blocks, can overlap. Pressure pushes on the rocks for centuries, finally causing them to rupture and snap in one big surge, resulting in a major earthquake.

Like a chain reaction, force from the movement of the rocks results in vibrations of the surrounding ground. These vibrations, or seismic waves, (pronounced SEE-zmic, relating to earthquakes) travel away from the break, strong shaking from these waves lasts from 30 to 60 seconds and can cause buildings and highways to collapse.

Earthquakes can actually be beneficial. The constant shifting and upheaval of Earth's crust builds mountains and highlands. The planet would be flat without them.

Developing a theory

On November 1, 1755, the part of Lisbon, Portugal, was hit by a terrible earthquake. More than 60,000 people died. The day of the earthquake was a religious holiday, and many of those killed were crushed in churches. Because earthquakes were thought to be a punishment from God, it did not make sense that one would take place on a holy day. People also asked why innocent children would be punished? Soon after the earthquake, some people started to look for scientific reasons. The Marquis de Pombal, a Portuguese statesman, asked Lisbon's surviving priests to fill out questionnaires documenting information about the earthquake. The questionnaires included questions about the time and the direction of the earthquake's shock.

In 1780, John Michell, an English physicist, came up with an interesting theory. He reasoned that if you could record the underground shock waves and the points at which the waves stopped, you could determine the point of origin, or epicenter, of an earthquake. Epicenters existed deep in the rocks beneath the sea. He said his theories, which were fairly accurate, were the start of seismology, the science of earthquakes, and how waves

Experiments

Earthquakes

Experiment Central, July 24, 2008

According to the ancient Greeks, earthquakes occurred when the god Atlas shifted the weight of the world from one....

Spotlight feature: Experiments

Click on "Science Fair Projects and Experiments" to find a wide variety of experiments and projects, from very simple to more complex.

To find out how *Science in Context* can contribute to teaching and learning at your institution:

- For a free trial, pricing or further information contact emea.marketing@cengage.com
- For more information about the *In Context* series of databases and the Resource Center Migration visit www.gale.cengage.com/InContext/
- For more information about our products visit www.gale.cengage.co.uk

Premier portals support 21st century learning

Gale *In Context* is the result of user input and a study of research processes. Our findings revealed that students prefer resources that combine web-like functionality with high-quality information. To help students streamline their efforts and identify the most relevant content, we created eye-catching, engaging portals that seamlessly integrate authoritative reference from Gale and its partners with media-rich, curriculum-aligned content that spans core subjects and 21st century themes.

Gale *In Context* resources:

- Engage and motivate students with a web-like experience that promotes information discovery
- Facilitate collaboration between media specialists and teachers in fostering 21st century skills like critical thinking and information literacy
- Include tools to support differentiated learning and diverse student populations
- Deliver helpful topic pages and enhanced search results to streamline the research process

Technology enhances the learning experience

Gale *In Context* knowledge portals deliver authoritative content complemented by intuitive features:

- Content organized by type (reference, news, primary sources, multimedia and more) supports all levels of learners
- Factboxes provide a quick overview of biographical highlights
- Related Topics and weblinks aid discovery of other relevant content
- On-demand text translation into 9 languages accommodates diverse student populations
- ReadSpeaker text-to-speech technology supports differentiated learning and those with impaired vision
- MLA7 and APA6 citation tools facilitate understanding of proper use of copyright materials
- Search Assist (with "Did You Mean?" functionality) efficiently guides users
- Tools to bookmark, print, download, email and share online encourage collaboration
- Topic Overviews give accurate context to each subject

EXPLORE THEM ALL

Topical editions include:

- *Biography*
- *Canada*
- *Global Issues*
- *Opposing Viewpoints*
- *Science*
- *Student Resources*
- *U.S. History*
- *World History*

For more information, trials or pricing please contact emea.marketing@cengage.com



PARTNERSHIP FOR 21ST CENTURY SKILLS

Gale is committed to supporting student achievement and learning outcomes. As a board member of the Partnership for 21st Century Skills (www.p21.org), Gale supports the organization's mission to help learners take their place in the global economy.

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 Power to the user™

Reliable overviews join headlines, video, audio and more to deliver a well-rounded science-research experience

