

## Earth Science Week Contests

Every year AGI sponsors contests that inspire involvement with geoscience related ideas. This year's contests are:

- **"Minerals in Society" Visual Arts Contest**  
(U.S. students in grades K–5)
- **"Balancing Sustainability and the Demand for Critical Minerals" Essay Contest**  
(U.S. students in grades 6–9)
- **"Reimagining Resources" Photography Contest**  
(Any individual, worldwide)
- **"From Mine to Market" Video Contest**  
(Any individual or team, worldwide)

All entries must be submitted by **Friday, October 16, 2026**. For more information and contest rules, visit online: [www.earthsciweek.org/contests](http://www.earthsciweek.org/contests).



Credit: Lorna Hutchinson



Credit: Nicole Dimitropoulos

### Walking Towards a Sustainable Future

By Annabelle Ash

"Have you ever wished you could create energy with just a step? Scientists recently made this possible with Kinetic Floor Technology. These tiles can be placed anywhere people walk, from sidewalks to dance floors. The principle of piezoelectricity is that vibrations cause electrical. ..."  
(Read the rest of this essay online on the ESW website.)



Credit: Mariella Cusing

Earth Science Week 2025 Visual Arts, Essay and Photography Contest entries from listed participants, highlighting "Energy Resources for Our Future."

### INTERACT WITH ESW ONLINE

AGI wants to keep you updated on Earth Science Week! Six free newsletter updates are emailed and posted to our website as the upcoming celebration is planned. Sign up for these email newsletters to learn about educational resources produced for Earth Science Week by AGI and our partners, professional development and conference sessions hosted by AGI's Education and Outreach department, and to be one of the first to see the next year's theme. Additional "Special Alerts" may also be issued to inform you about news and opportunities from partners or special events.

For more information and to sign up for the Earth Science Week newsletter, please visit: [www.earthsciweek.org/support/newsletter](http://www.earthsciweek.org/support/newsletter)

Additionally, follow @earthsciweek on a variety of social media platforms:



# Earth Science Week Webinars

Join us for an exciting lineup of webinars during Earth Science Week, all centered around this year's theme, "Critical Minerals for a Thriving Society." Register for the webinars now at [www.earthsciweek.org/webinars](http://www.earthsciweek.org/webinars). Tune in at 1 PM ET on YouTube Live to catch each webinar premiere! Engage directly with the presenters as they field your questions and contribute to discussions in the chat.

**Monday, October 12**

## Critical Minerals in a Circular Economy

Sponsored by American Geosciences Institute



Credit: Photo by Tasha Kostyuk on Unsplash

**Tuesday, October 13**

## From Mine to Market: Minerals Critical to our Food

Sponsored by Nutrients for Life



Credit: Photo by Nathan Dumlao on Unsplash

**Wednesday, October 14**

## Let's Talk: Critical Minerals, Sustainability, and Energy

Sponsored by The University of Texas at Austin, Choose Energy K-12 Outreach Program



Credit: Photo by Call Me Fred on Unsplash

**Thursday, October 15**

## Innovative Technologies for Critical Minerals Supplies

Sponsored by American Geosciences Institute



Credit: Photo by Jandira Sonnendeck on Unsplash

**Friday, October 16**

## Exploring Critical Minerals Through Place-Based Learning

Sponsored by Xplorlabs



Credit: ULRi Xplorlabs

# AGI's Education and Outreach Department



AGI Education and Outreach staff work with teachers, students, and professional geoscientists around the country at workshops, conferences, and various events.

Credits: AGI Education and Outreach staff

## Geoscience+ Career Explorer

Help students discover careers that make a difference with AGI's Sustainability Interactive and Geoscience+ Career Explorer. Assess real-world challenges and discover geoscience pathways to see how geoscience and related fields help build a more sustainable and resilient society.

<https://bit.ly/geoscience-career-explorer>

The Educator Resources webpage can provide some ideas on how to incorporate both into your teaching!



## Educator Resources

Check out the AGI Education and Outreach website for educator opportunities, resources, and more!

<https://bit.ly/AGI-EandO>

Visit the AGI Education and Outreach website for lessons and activities related to:

- Sustainability
- Soils
- Rivers and Flash Flooding
- Rain Gardens
- National Parks
- Ocean Coring
- Geoheritage
- And more!



## Education GeoSource

Browse AGI's Education GeoSource for a curated collection of geoscience resources from a range of organizations!

<https://bit.ly/education-geosource>

Have a great geoscience-related lesson, activity, or other resource you want to share with other educators? Contact us at [outreach@americangeosciences.org](mailto:outreach@americangeosciences.org) to suggest a resource to add to Education GeoSource.



# Connecting with the Broader Geoscience Community

In addition to being a celebration of the work and contributions of the geoscience community, **Earth Science Week** is an opportunity to connect with others in the broader geoscience education community and beyond. Whether you are looking for classroom resources, professional development, funding opportunities, or new collaborators, Earth Science Week can serve as a gateway to a network of organizations and individuals dedicated to Earth Science education. Building these connections can help strengthen your teaching, expand opportunities for your students, and support continued learning throughout the year.

**As you look for ways to connect your classroom to the broader geoscience community**, explore opportunities offered by AGI, Earth Science Week partners, and other organizations that can support your teaching throughout the year, in ways such as:

- **Find local resources** — Visit your state geological survey for geologic and soils maps, data, and classroom materials.
- **Join a professional society** — Connect with educator-focused groups like NESTA or NAGT, education sections within GSA or AGU, or your state earth science teaching association. Browse all AGI member societies.
- **Apply for grants** — Funding is available through societies such as the AEG Foundation and the Paleontological Society.
- **Pursue awards and recognition** — Check out **AGI's Edward C. Roy Jr. Award** and partner organization websites for additional recognition opportunities in earth science education.
- **Build community partnerships** — Connect with local parks, museums, universities, and geoscience professionals to bring real-world Earth science experiences into your classroom.
- **Explore nearby geoscience sites** — Connect classroom learning to nearby parks, natural areas, and geological landmarks through place-based learning experiences.



Teachers attended a field trip, workshop, and conference sessions at the Geological Society of America's (GSA) annual conference, GSA Connects, in San Antonio, Texas.

Credit: AGI

## Be Recognized for Your Excellence!

### AGI's Edward C. Roy Jr. Award

Every year, in addition to Earth Science Week, AGI recognizes one teacher in the U.S. (grades K–8) or the U.K. (Key Stages 1–3) for excellence in earth science teaching. The award includes a **\$2500 prize** and a grant of **up to \$2500** to cover costs to attend the National Earth Science Teachers Association (NESTA) "Friends of Earth Science Reception" held at the National Science Teaching Association (NSTA) annual spring conference to accept the award.

For more information and application details, visit:  
[www.americangeosciences.org/education/awards/roy](http://www.americangeosciences.org/education/awards/roy).



Photo courtesy of 2026 Ed Roy Award winner, Misti Newby



Misti Newby accepts the 2026 Edward C. Roy Jr. Award at a reception held at the spring National Science Teachers Association (NSTA) conference in Anaheim, California.

Credit: L. Brase, AGI

## Free Resources Offered by GeoRef

**G**eoRef, the most comprehensive database in the geosciences, offers several boutique databases free to the public. Search by keyword or try the geographic search to search by map area. Links to full text are provided where available.

### GEOLOGIC GUIDEBOOKS OF NORTH AMERICA DATABASE

<https://guidebooks.americangeosciences.org/vufind/>

The Geologic Guidebooks of North America Database consists of references to geologic field trip guidebooks of North America (United States, Canada, Mexico). Most of the guidebooks cited are from the period 1940–the present. This guidebook database builds on a long history of collaboration between the Geoscience Information Society (GSIS) and AGI.

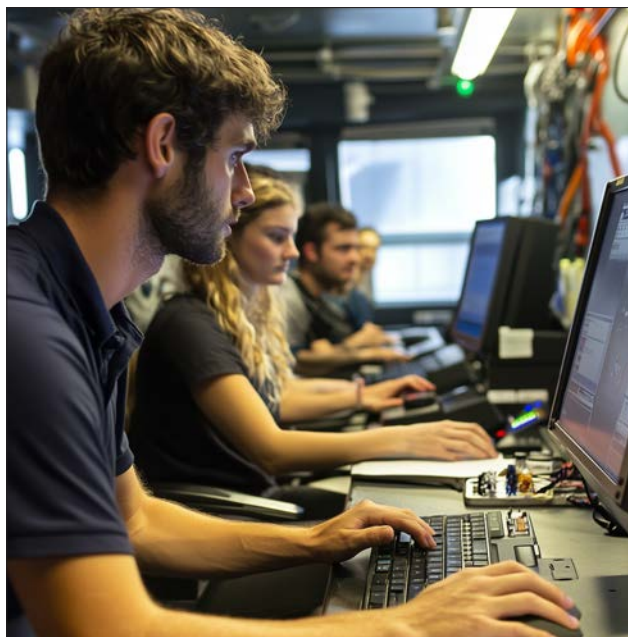


Credit: Midjourney/AGI

### SCIENTIFIC OCEAN DRILLING BIBLIOGRAPHIC DATABASE

<https://iodp.americangeosciences.org/vufind/>

The Scientific Ocean Drilling Database contains bibliographic records related to Deep Sea Drilling Project (DSDP), Ocean Drilling Program (ODP), Integrated Ocean Drilling Program, and International Ocean Discovery Program (IODP) research spanning from 1969 to the present.



Credit: Midjourney/AGI



### GEOLOGICAL SURVEYS DATABASE

<https://statesurveys.americangeosciences.org/vufind/>

The Geological Surveys Database project is a collaborative effort between the American Geosciences Institute and U.S. state geological surveys to help increase the discoverability and use of geological survey publications. The Geological Surveys Database includes publications from the state geological surveys and factsheets from the U.S. Geological Survey.



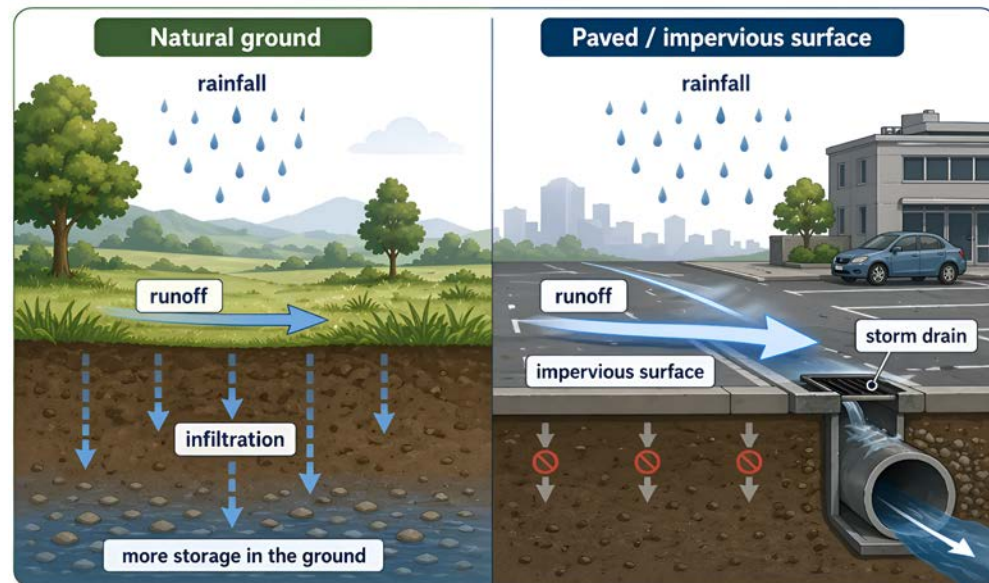
Credit: Gert Boers on Unsplash

# Resources from AGI's Workforce Department

Expand your Earth science knowledge with AGI's collection of policy resources. Designed to communicate complex topics in an accessible way, these reports and fact sheets provide valuable background information on water and natural hazards.

Also check out the Geoscience Intersections webpage to explore how geoscience intersects with societal challenges and informs our understanding of critical issues such as climate change and resource management. Whether preparing lessons or answering student questions, you can use these resources to connect science content with real-world issues, and perhaps inspire students to consider a rewarding career in the geosciences.

Access these free resources at [https://bit.ly/AGI\\_policy](https://bit.ly/AGI_policy).



Flooding is influenced by many factors, including precipitation, land cover, topography, soils, and human development. Explore AGI's *Flood Concepts* infographics in the Policy Resources collection to learn more about the science behind floods and their impacts on communities. Also check out AGI's Streams of Data lessons for hands-on classroom activities that investigate flooding, streamflow, watersheds, and real-world data at <https://education.americangeosciences.org/resources/streams-of-data/>.

Credit: Leila Gonzales / AGI / Codex



Credit: Jonathan Godt, USGS



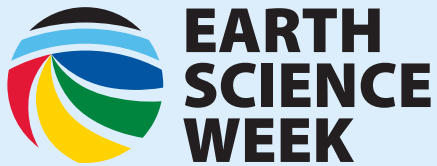
Credit: mrjn photography on Unsplash



Credit: Ann Tihansky, USGS

# Thank you for celebrating!

**T**hank you for celebrating Earth Science Week with us! This year's theme, "Critical Minerals for a Thriving Society," highlights the essential role the geosciences play in powering modern technology, supporting resilient communities, and building a more sustainable future. Explore this year's webinars, activities, and educational resources at [www.earthsciweek.org](http://www.earthsciweek.org).



## EARTH SCIENCE WEEK

Get ready to celebrate Earth Science Week 2027! Visit the AGI Storefront in the summer of 2027 to order your next ESW Toolkits and other available items:  
<https://geosciencestore.org/>



**Titanium**

Credit: Hi-Res Images of Chemical Elements, CC 3.0



**Copper**

Credit: USGS National Minerals Information Center/James St. John



**Chromium**

Credit: Hi-Res Images of Chemical Elements, CC 3.0



**Manganese ore**

Credit: James St. John



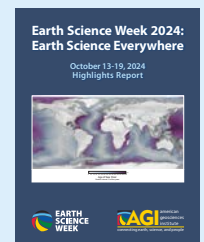
**Bismuthinite**

Credit: USGS National Minerals Information Center

## Past ESW Celebrations

Want to see how others celebrate Earth Science Week? Explore the ESW Highlights reports to discover classroom activities, community events, field experiences, museum programs, and celebrations from across the country and around the world.

[www.earthsciweek.org/support/highlights/](http://www.earthsciweek.org/support/highlights/)



# PERIODIC TABLE OF CRITICAL MINERALS

|                                   |                                    |                                                |                                                                                                                                                                                                                                                                                                                                                                                            |                                   |                                       |                                     |                                     |                                     |                                       |                                      |                                      |                                      |                                      |                                    |                                      |                                     |                                     |                                 |  |
|-----------------------------------|------------------------------------|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|---------------------------------|--|
| <div>H</div> <div>Hydrogen</div>  |                                    | <div>PERIODIC TABLE OF CRITICAL MINERALS</div> |                                                                                                                                                                                                                                                                                                                                                                                            |                                   |                                       |                                     |                                     |                                     |                                       |                                      |                                      |                                      |                                      |                                    |                                      |                                     |                                     | <div>He</div> <div>Helium</div> |  |
| <div>Li</div> <div>Lithium</div>  |                                    | <div>Be</div> <div>Beryllium</div>             | <div>Wait. Aren't these elements?</div> <div>The Energy Act of 2020 describes “critical minerals” as minerals, elements, substances, or materials that (1) are essential to the economic or national security of the United States, (2) have supply chains at risk of disruption, and (3) are vital for making a product without which the United States would suffer<sup>[1]</sup>.</div> |                                   |                                       |                                     |                                     |                                     |                                       |                                      |                                      |                                      | <div>B</div> <div>Boron</div>        | <div>C</div> <div>Carbon</div>     | <div>N</div> <div>Nitrogen</div>     | <div>O</div> <div>Oxygen</div>      | <div>F</div> <div>Fluorine</div>    | <div>Ne</div> <div>Neon</div>   |  |
| <div>Na</div> <div>Sodium</div>   | <div>Mg</div> <div>Magnesium</div> | <div>Nb</div> <div>Niobium</div>               | <div>Elements in RED are listed as critical minerals in the 2025 USGS critical mineral list<sup>[2]</sup>. Graphite (C), barite (BaSO<sub>4</sub>), metallurgical coal, phosphate rock, potash, and fluorspar (CaF<sub>2</sub>) are also listed as critical minerals in the 2025 USGS critical mineral list<sup>[2]</sup>.</div>                                                           |                                   |                                       |                                     |                                     |                                     |                                       |                                      |                                      |                                      | <div>Al</div> <div>Aluminum</div>    | <div>Si</div> <div>Silicon</div>   | <div>P</div> <div>Phosphorus</div>   | <div>S</div> <div>Sulfur</div>      | <div>Cl</div> <div>Chlorine</div>   | <div>Ar</div> <div>Argon</div>  |  |
| <div>K</div> <div>Potassium</div> | <div>Ca</div> <div>Calcium</div>   | <div>Sc</div> <div>Scandium</div>              | <div>Ti</div> <div>Titanium</div>                                                                                                                                                                                                                                                                                                                                                          | <div>V</div> <div>Vanadium</div>  | <div>Cr</div> <div>Chromium</div>     | <div>Mn</div> <div>Manganese</div>  | <div>Fe</div> <div>Iron</div>       | <div>Co</div> <div>Cobalt</div>     | <div>Ni</div> <div>Nickel</div>       | <div>Cu</div> <div>Copper</div>      | <div>Zn</div> <div>Zinc</div>        | <div>Ga</div> <div>Gallium</div>     | <div>Ge</div> <div>Germanium</div>   | <div>As</div> <div>Arsenic</div>   | <div>Se</div> <div>Selenium</div>    | <div>Br</div> <div>Bromine</div>    | <div>Kr</div> <div>Krypton</div>    |                                 |  |
| <div>Rb</div> <div>Rubidium</div> | <div>Sr</div> <div>Strontium</div> | <div>Y</div> <div>Yttrium</div>                | <div>Zr</div> <div>Zirconium</div>                                                                                                                                                                                                                                                                                                                                                         | <div>Nb</div> <div>Niobium</div>  | <div>Mo</div> <div>Molybdenum</div>   | <div>Tc</div> <div>Technetium</div> | <div>Ru</div> <div>Ruthenium</div>  | <div>Rh</div> <div>Rhodium</div>    | <div>Pd</div> <div>Palladium</div>    | <div>Ag</div> <div>Silver</div>      | <div>Cd</div> <div>Cadmium</div>     | <div>In</div> <div>Indium</div>      | <div>Sn</div> <div>Tin</div>         | <div>Sb</div> <div>Antimony</div>  | <div>Te</div> <div>Tellurium</div>   | <div>I</div> <div>Iodine</div>      | <div>Xe</div> <div>Xenon</div>      |                                 |  |
| <div>Cs</div> <div>Cesium</div>   | <div>Ba</div> <div>Barium</div>    | <div>Lanthanides</div>                         | <div>Hf</div> <div>Hafnium</div>                                                                                                                                                                                                                                                                                                                                                           | <div>Ta</div> <div>Tantalum</div> | <div>W</div> <div>Tungsten</div>      | <div>Re</div> <div>Rhenium</div>    | <div>Os</div> <div>Osmium</div>     | <div>Ir</div> <div>Iridium</div>    | <div>Pt</div> <div>Platinum</div>     | <div>Au</div> <div>Gold</div>        | <div>Hg</div> <div>Mercury</div>     | <div>Tl</div> <div>Thallium</div>    | <div>Pb</div> <div>Lead</div>        | <div>Bi</div> <div>Bismuth</div>   | <div>Po</div> <div>Polonium</div>    | <div>At</div> <div>Astatine</div>   | <div>Rn</div> <div>Radon</div>      |                                 |  |
| <div>Fr</div> <div>Francium</div> | <div>Ra</div> <div>Radium</div>    | <div>Actinides</div>                           | <div>Rf</div> <div>Rutherfordium</div>                                                                                                                                                                                                                                                                                                                                                     | <div>Db</div> <div>Dubnium</div>  | <div>Sg</div> <div>Seaborgium</div>   | <div>Bh</div> <div>Bohrium</div>    | <div>Hs</div> <div>Hassium</div>    | <div>Mt</div> <div>Meitnerium</div> | <div>Ds</div> <div>Darmstadtium</div> | <div>Rg</div> <div>Roentgenium</div> | <div>Cn</div> <div>Copernicium</div> | <div>Nh</div> <div>Nihonium</div>    | <div>Fl</div> <div>Flerovium</div>   | <div>Mc</div> <div>Moscovium</div> | <div>Lv</div> <div>Livermorium</div> | <div>Ts</div> <div>Tennessine</div> | <div>Og</div> <div>Oganesson</div>  |                                 |  |
| <div>Lanthanides</div>            |                                    |                                                | <div>La</div> <div>Lanthanum</div>                                                                                                                                                                                                                                                                                                                                                         | <div>Ce</div> <div>Cerium</div>   | <div>Pr</div> <div>Praseodymium</div> | <div>Nd</div> <div>Neodymium</div>  | <div>Pm</div> <div>Promethium</div> | <div>Sm</div> <div>Samarium</div>   | <div>Eu</div> <div>Europium</div>     | <div>Gd</div> <div>Gadolinium</div>  | <div>Tb</div> <div>Terbium</div>     | <div>Dy</div> <div>Dysprosium</div>  | <div>Ho</div> <div>Holmium</div>     | <div>Er</div> <div>Erbium</div>    | <div>Tm</div> <div>Thulium</div>     | <div>Yb</div> <div>Ytterbium</div>  | <div>Lu</div> <div>Lutetium</div>   |                                 |  |
| <div>Actinides</div>              |                                    |                                                | <div>Ac</div> <div>Actinium</div>                                                                                                                                                                                                                                                                                                                                                          | <div>Th</div> <div>Thorium</div>  | <div>Pa</div> <div>Protactinium</div> | <div>U</div> <div>Uranium</div>     | <div>Np</div> <div>Neptunium</div>  | <div>Pu</div> <div>Plutonium</div>  | <div>Am</div> <div>Americium</div>    | <div>Cm</div> <div>Curium</div>      | <div>Bk</div> <div>Berkelium</div>   | <div>Cf</div> <div>Californium</div> | <div>Es</div> <div>Einsteinium</div> | <div>Fm</div> <div>Fermium</div>   | <div>Md</div> <div>Mendelevium</div> | <div>No</div> <div>Nobelium</div>   | <div>Lr</div> <div>Lawrencium</div> |                                 |  |

Credit: U.S. Department of the Interior, U.S. Geological Survey. References: [1] Nassar, N.T., and Fortier, S.M., 2021, Methodology and technical input for the 2021 review and revision of the U.S. Critical Minerals List: U.S. Geological Survey Open-File Report 2021-1045, 31 p., <https://doi.org/10.3133/ofr20211045>. [2] <https://www.usgs.gov/news/national-news-release/us-geological-survey-releases-2022-list-critical-minerals>