

Spreading the Word About Critical Minerals

THIS ACTIVITY WAS DEVELOPED BY THE MINERALOGICAL SOCIETY OF AMERICA FOR
EARTH SCIENCE WEEK 2026.

INTRODUCTION

We hear the term “critical minerals” all the time in the news. But think about how, exactly, do minerals make it on the “critical minerals” list? Who decides what minerals go on that list? This activity is designed to connect what members of the general public think that they understand about critical minerals with how critical minerals are officially designated by the U.S. Geological Survey (USGS), which is part of the U.S. Department of the Interior.

You will need to be a bit of a detective for this activity: Conducting research both online and with real people; then assembling what you find out into an exciting and educational podcast. The goal is to start from where people *are now* and help them move to a clearer understanding of critical minerals. This includes what these minerals are and why they are important to society, but may also include: What will happen to us if we can’t get these critical minerals? What will we have to do without? What has to happen for us to get these minerals? Are they here in the U.S.? If not, where are they, and how can we get them? What happens if we don’t have a good relationship with the countries where these minerals are? Are you up to it??

WHAT TO DO

1. Let’s start with the official designation of “critical mineral.” The official definition and list are on the [website of the USGS](#).
2. Choose one of the critical minerals on the list and find out what elements make it up, how it forms, where it can be found, what its properties are, and how it is used.
3. Work with your group to develop a short survey about your critical mineral. Your goal is to find out what your friends and family know about your critical mineral, not to share what you have found out. You are on a fact-finding mission! You might ask:
 - a. What do you know about critical minerals? Why do you think they are called “critical”?
 - b. What do you know about [name of your critical mineral]? How do you think it might be used? Where do you think that critical mineral comes from?
4. Use the data from your survey to create a script for a five-minute podcast on your critical mineral. In writing the script, you need to consider: Who is the specific audience and what is the message? You can find material for your podcast on the USGS website, as well as:
 - a. The Handbook of Mineralogy (<https://handbookofmineralogy.org/>),
 - b. Mindat (<https://www.mindat.org/>),
 - c. National Critical Minerals Data Dashboard (<https://bit.ly/critical-minerals-data>),
 - d. Interactive Atlas of Critical Minerals (<https://on.doi.gov/4pTSnMj>),
 - e. and others from NASA, universities, and other reliable sources.

