# From Earth to Energy: Hands-on Learning Starts Here









Explore the role of rocks, soil, and natural materials in shaping sustainable energy solutions through engaging classroom activities.

#### **Rock & Mineral Specimen Key Cards**



# **Put Rocks and Minerals to Work in Your Classroom**

Explore our Geology Specimen Key Cards and 10 creative ways to use them in your classroom! Students connect specific rocks and minerals to energy use, like coal for electricity or mining bauxite as an aluminum source, for renewable energy technologies. These printable cards are perfect for hands-on stations or outdoor comparisons, highlighting materials used in fuel, manufacturing, and more.



#### **Soil Types + Activities**



Explore More

## **Beneath the Surface:**Soil's Role in the Energy Equation

Soil is more than just dirt; it's a powerhouse for energy systems! Help students discover soil's surprising roles in growing biofuel crops, supporting geothermal heat pumps, and storing carbon. Explore the composition, uses, and importance of different soil types. Plus, download the Soil Types Classroom Poster for free, which includes a product reference guide.



### **Porosity & Permeability Activity**



**Explore More** 

# **Model Energy Movement Below the Surface**

From pores to power, it's a fluid journey through Earth's secrets! Explore how Earth's materials affect the movement and storage of vital resources like groundwater and oil. In this classroom-ready activity, learners test porosity and permeability of soil, rocks, sand, clay, and asphalt to better understand energy systems.



