

Rocks and Minerals

A Regional Science Consortium
Education Initiative



Subject: Science

Grades: 9-12

Number of Participants: 30

Regional Science Consortium

Rocks and Minerals

This lesson incorporates an informative PowerPoint lecture and hands-on activity to introduce students to the science of rocks and minerals as well as how to identify them.

Supply List

In this lesson:

- Digital copies of materials available at www.RegSciConsort.com
 - Rocks and Minerals lesson (ppt)
 - Rocks and Minerals lesson (mp4)
 - Educational video
 - Paperwork
 - Introduction (pdf)
 - Vocabulary (pdf)
 - Activity instructions (pdf)
 - Mineral identification flow chart (pdf)
 - Student worksheet (pdf)
 - Teacher guide (pdf)
 - Skype with a Scientist discussion points (pdf)
- Activity materials
 - Mineral sample bags #1-10
 - 30 magnifying glasses
 - 30 glass plates
 - 30 magnets

Component	Length
Lesson	10:05
Video	4:41
Activity	15 min
Worksheet	
Skype with a Scientist session	15 min

Goal

After completing this lesson, students will have gained a detailed understanding of rocks and minerals, how they are formed, and how they are identified. Students will utilize the information and skills they have learned to identify unknown minerals by following a flow chart of characteristics in the same way a field geologist would determine the identity of a sample.

Additional Resources

Related RSC Lessons:

- Buoys and Weather
- Erosion

Citizen Science Programs:

- Rockd
 - <https://www.citizenscience.gov/catalog/360/#>

Pennsylvania Academic Standards

Grade 4	Grade 7	Grade 10	Grade 12
3.1.4. C, E	3.1.7. C, E	3.1.10. C, E	3.1.12. C
3.2.4. A, B, C	3.2.7. C	3.2.10. B, C	3.2.12. C
3.4.4. A	3.4.7. A	3.5.10. A	
3.5.4. A, B	3.5.7. A	3.7.10. B	
3.7.4. A	3.7.7. B		