

# Geologic Jargon

Location: RiverWalk Learning Station 6  
Program Levels: Junior, Cadette, Senior, Ambassador

**Objective:** Girls will gain a new geologic vocabulary and apply their knowledge to describe a rock outcrop on the trail.

## Materials Provided

- Geologic Jargon Crossword Puzzles
- Geologic Jargon clue sheets & word bank
- Crossword puzzle solution
- Dry erase markers
- Magnifying glasses
- Geologic map of the area



## Activity Steps

1. Pass out the Geologic Jargon Crossword Puzzles and have the girls complete them.

*\*\*Juniors and Cadettes can use the word bank on the back of the clue sheet to help solve the puzzle.*

2. After about 10 minutes (or when girls are done), go over the answers to the puzzle. If the girls have questions about any of the terms, you can address them at this point.
3. Now that they have a “geology vocabulary,” encourage the girls to use these words to describe the rock outcrop in front of them. Use the discussion questions to help them get started. Pass out the magnifying glasses to help them investigate the rock up close.

## **Seniors and Ambassadors only**

4. Use the geologic map to identify what geologic formation the rock outcrop belongs to. Then use the map key to find out more about the rocks. How old are they? Were you right about what type they are? What other information can a geologic map tell you?

## Discussion Questions

- **Is the rock made up of grains or crystals?** Grains
- **Are the grains/crystals all the same size?** No – they range from tiny sand grains to big pebbles and cobbles
- **Are the grains/crystals big or small?** Both – not well sorted
- **If they are grains, are they well rounded and smooth or are do they have jagged sharp edges?** Well-rounded
- **What type of rock is it? Sedimentary, igneous, or metamorphic? How can you tell?** (hint: use your answer to the first question)  
Sedimentary – remember that sedimentary rocks are made up of grains instead of crystals like igneous or metamorphic
- **Can you classify it even further and name the rock? (sandstone, limestone, granite, etc)**  
Conglomerate – basically a sandstone with big and little pieces mixed together
- **Can you tell if anything has happened to the rock since it was formed? Is it weathered?**  
It is weathered, but it hasn't been bent or cracked since the layers are still flat on top of each other
- **Would you expect to find the same kind of rock all throughout Virginia or just in the local area?**  
You'll find sandstone and conglomerates all over the state, but they'll all be a little different – different ages, different minerals, different colors, etc.

### Extensions

#### On the Trail

As you walk, look for other rocks and describe them. Are they the same or different as the first outcrop?

#### Beyond the Trail

Start a rock collection! Each time you find or buy a new rock, learn as much about it as you can.

Visit the United States Geological Survey headquarters in Reston, Virginia. Learn how they create maps, monitor geologic changes occurring right now, and much more. Find more information online at [www.usgs.gov](http://www.usgs.gov)