

Arrow of Light	Adventure: Earth Rocks!
Objective Scout will Achieve:	<ul style="list-style-type: none"> • Learning about the science of geology • Identifying and testing rocks and minerals • Becoming aware of geological materials and landmarks in their area • Geology/earth scientist career awareness • Performing geological investigations while upholding the values of Leave No Trace
Characteristics Scout will Learn:	<p>Through this adventure, Webelos Scout will see the relevancy of earth science and how it impacts their daily lives. They will begin to understand the use of rocks and minerals in everyday items. Their investigations will give them an understanding of geological events and they will have the opportunity to learn about geological features in their own state.</p>
Materials for Virtual Meeting:	<ul style="list-style-type: none"> • Items for making pet rocks (Gathering): <ul style="list-style-type: none"> • — Medium-sized river rocks from craft stores • — Other craft items (wiggly eyes, felt, yarn, glue, construction paper, etc.) • Collection of rocks from your den outing (if allowed), a geological society, or a local school or university's science department • Field guide to rocks (found at On-line library or through local on-line rock clubs) • State road map for locating geological landmarks (Activity 1) • Materials for a mineral testing kit (Activity 2). Besides the minerals, you will need a penny, a small piece of glass, a piece of unglazed tile, a file or pocket knife, a small bottle of vinegar, and an eyedropper. Each Scout could be assigned to bring one or more of those items. • Items for the earth science investigation of your choice (see Meeting 2 Resources and the handbook). Prepare the required

	<p>materials for any investigation in advance, and allow time for some materials, such as laundry bluing (required for the crystal garden activity in the handbook), to be ordered if they are not widely available in stores.</p> <ul style="list-style-type: none"> • Read the Earth Rocks! adventure and plan a rock hunt around your meeting place or other conveniently accessible location. Verify if permission is also given for the Scouts to collect and keep the rocks they find, and review Leave No Trace guidelines regarding rock collecting. If permission is not given, encourage the Scouts to bring cameras or smartphones to capture their rock collections virtually for display at a den or pack meeting. • Each Scout will need the appropriate tools (see "Geologist's Equipment" in the Webelos Handbook). Scouts should also bring their handbooks to help with identification of specimens. • Notify Scouts of any personal items and special clothing they will need (water bottles, sunscreen, hats, closed-toe shoes).
<p>Questions to Ask Scout Before Meeting: (Want your Scout to get a shout out during the meeting, please submit answers to @ before the meeting. Include: Name, Den Level, Hometown and Pack Number if you are in one.)</p>	<p>Have the Webelos Scout complete requirement 1 and bring the information with them to discuss at the meeting</p>
<p>Activities during meeting:</p>	<ul style="list-style-type: none"> • Explain the meaning of the word "geology." • Explain why this kind of science is an important part of your world. • Look for different kinds of rocks or minerals while on a rock hunt with your family on a SHELTERD SAFE walk or in your own backyard or surrounding area. • Identify the rocks you see on your rock hunt. Use the information in your handbook to determine which types of rocks you have collected.

	<ul style="list-style-type: none"> • With a magnifying glass, take a closer look at your collection. Determine any differences between your specimens. • Share what you see with your family. • With your family, make a mineral test kit, and test minerals according to the Mohs scale of mineral hardness. • Record the results in your handbook. • Identify on a map of your state some geological features in your area. • Identify some of the geological building materials used in building your home. • Identify some of the geological materials used around your community
<p>Instruction for Activity 1</p>	<p>Rock Hunt</p> <p>If permitted to dig, remind them to leave the location as it was before digging, putting dirt back where it belongs. If Scouts cannot dig, they can take photos to create a visual display.(Recommended at THIS TIME)</p> <p>Have the Scout and family look for different kinds of rocks and identify what types they find according to their handbooks, which show the three main rock groups and provide an explanation of minerals.</p> <p>Scout and family should also try to identify any rocks that are typically used as building materials and record these findings under requirement 6 in their handbooks. Do they recognize any that were used in building their homes? In their communities?</p>
<p>Instruction for Activity 2</p>	<p>Finding Geological Sites</p> <ul style="list-style-type: none"> • Set the state road map on a table and help the Scouts locate sites near rivers, lakes, or mountains where they might find good geological specimens. Boys who have visited the locations with their families may offer suggestions.
<p>Instruction for Activity 3</p>	<p>Mineral Testing</p> <ul style="list-style-type: none"> • Set out the items for a mineral testing kit and explain what the kit is used for. • Show the Scouts how to do streak, scratch, and fizz (acid) tests on the minerals, following the directions in the

	<p>Webelos Handbook. Have them test different types of minerals and record the findings in their handbooks.</p>
<p>Additional Requirements needed to complete the Adventure (These requirements will not be on the Virtual Cub Scout Video):</p>	<ol style="list-style-type: none"> 1 With your family or den, identify on a road map of your state some geological features in your area. 2 Do the following: <ol style="list-style-type: none"> a. Identify some of the geological building materials used in building your home. b. Identify some of the geological materials used around your community. c. Record the items you find. <p>Do either A or B</p> <p>A: Go on an outing with your family or den to one of the nearby locations you discovered on your state map, and record what you see as you look at the geographical surroundings. Share with your family or den while on this outing what you notice that might change this location in the future (wind, water, ice, drought, erosion).</p> <p>B: Do the following:</p> <ol style="list-style-type: none"> i. With your family or your den, visit with a geologist or earth scientist and discover the many career fields that are included in the science of geology. ii. Ask the geologist or earth scientist about the importance of fossils that are found. iii. Ask the geologist or earth scientist what you can do to help preserve our natural resources. 3 Do at least one earth science demonstration or investigation with your den or with adult supervision, and explore geology in action.