Mining in Society Merit Badge
Sample Merit Badge Workshop Outline
Site Visit or Virtual Mine Tour

This outline assumes no access to a mine for the purposes of Requirement 5. If you as a counselor plan to access a mine please see the “Mine Tour Option” outline.

Counselors should adapt this outline to best fit the needs of the Scouts they work with.

<table>
<thead>
<tr>
<th>Mine visit for Requirement 5 is not an option</th>
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<tbody>
<tr>
<td>A. Distribute the Merit Badge Workbook:</td>
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<tr>
<td>B. Introduce the merit badge, outline the workshop, and review the requirements:</td>
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<tr>
<td>Requirements:</td>
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<tr>
<td><a href="http://www.mineralseducationcoalition.org/sites/default/files/uploads/misrequirements_0.pdf">www.mineralseducationcoalition.org/sites/default/files/uploads/misrequirements_0.pdf</a></td>
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<tr>
<td>C. <strong>Requirement 1</strong> – Minerals In Our Lives 35 minutes</td>
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<tr>
<td><em>May be lecture but splitting into small groups using different rooms is encouraged</em></td>
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<tr>
<td>a. Select 10 items from the room you are in– categorize the items as grown, mined, or both; list the minerals in each item. (Note: the list that is created should have items that have been grown, and items that have been manufactured from mined products.)</td>
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<tr>
<td>b. For each item grown – determine mining’s role in its cultivation, harvesting, manufacturing, transporting, promoting and sales.</td>
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<tr>
<td>c. Determine the countries where those minerals can be found.</td>
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<tr>
<td>d. Have scouts discuss what they learned with you, their counselor.</td>
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<tr>
<td>A. <strong>Requirement 2</strong> – Mining’s Local Presence 35 minutes</td>
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<tr>
<td><em>Classroom style with visual aids or small groups with handout maps</em></td>
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<tr>
<td>References will be needed for mine locations within your state/region</td>
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<tr>
<td><a href="http://www.msha.gov/drs/DRSextendedSearch.asp#.U4X0kXJdW4I">http://www.msha.gov/drs/DRSextendedSearch.asp#.U4X0kXJdW4I</a></td>
</tr>
</tbody>
</table>
1. Display map of your state or region showing major cities, highways, rivers, and railroads.

2. Show how the location of mines in your state can be determined and marked on the map.

3. Help Scouts identify and mark five mining enterprises on their own.

4. Find out what resource is processed at each location, and identify the mine as a surface or underground operation.

5. Discuss how the resources mined at these locations are used.

Note: The same map may be used for multiple Scouts so long as each Scout can mark five mines of their own. It is recommended to provide Scouts with individual maps of their state. These maps need not be extremely detailed, but must show “major cities, highways, rivers, and railroads.”

B. **Requirement 3 – Mine Safety**

The options for Requirement 5, other than a mine visit, may not provide an opportunity for an in-depth orientation on mine health and safety, hence there should be a good overview presented here using the resources covered in pages 70-74 in the pamphlet, which discusses:

– The potential hazards a miner may encounter at an active mine and the protective measures used by miners, including:

a. How the miner’s personal protective equipment is worn and used, including a hard hat, safety glasses, earplugs, dust mask or respirator, self-rescue device, and high-visibility vest.

b. How miners protect their hands and feet from impact, pinch, vibration, slipping, and tripping/falling hazards.

c. How monitoring equipment warns miners of imminent danger, and how robots are used in mine rescues.

C. **Requirement 4 – Abandoned Mines, Stay Out—Stay Alive!**

*Classroom lecture setting*
Reference Materials (Including 25 min video):
http://www.msha.gov/SOSA/SOSAhome.asp#.U4XxE3JdW4I
( Link may need to Copy/Paste into URL search bar)

– Discuss with the Scouts the dangers someone might encounter at an abandoned mine. Include information about the “Stay out—Stay Alive” program.

D. **Requirement 5** – Site Visit or Virtual Mine Tour

– Options other than a mine field trip include: Virtual Mine Tours, visiting a mining or minerals exhibit at a museum, visiting a mining equipment manufacturer or supplier, or a discussion with the counselor. See **MEC’s Page** for a list of virtual mine tours. See also the **NMA** page for a list of mining museums and tours.

E. **Requirement 6** – Mine Reclamation

The site visits or the virtual tours typically do not provide an opportunity to see first-hand mine reclamation, as in the case of an actual mine visit. Consider the following options and resources to meet this requirement: **MEC’s Reclamation Page**

See also this page about reclamation of the SBR:
http://www.dep.wv.gov/news/Pages/DEPbeginsworkonGardenGroundMountainproject.aspx

F. **Requirement 7** – The Future of Mining

– Select one: A, B, C, or D – prepare a lecture/presentation and/or activity using information from the Merit Badge Pamphlet (pg. 59-69).

G. **Requirement 8** – Careers in Mining

Perform ONE of three options:

a. – Have a professional meet with your Scouts to fulfill requirement 8a (Discuss the work, equipment, and technology used in this individual’s position, and learn about a current project. Ask to see reports, drawings, and/or maps made for the project. Find out about the educational and professional requirements for this individual’s position. Ask how the individual’s mining career began).
b. – Find out and discuss career opportunities in mining: See infomine.com for videos, and descriptions and pg. 85-89 in the handbook.

c. – Visit a local career academy or technical school to learn more about a mining career of interest.

**Final Check off**
5-15 minutes / Scout

– Meet with each Scout to make sure that they have qualified for the merit badge, check off blue cards, etc.

– Requirements may be checked off as Scouts complete them to make this final step easier.