



Please contact the Learning Center Coordinator and let us know you are interested in the Scout Ranger Program at Flight 93 National Memorial. We will answer questions and provide further information to help you work toward the patch or certificate.

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## Soil and Water Conservation



### Requirements:

1. Do the following:
  - a. Tell what soil is. Tell how it is formed.
  - b. Describe three kinds of soil. Tell how they are different.
  - c. Name the three main plant nutrients in fertile soil. Tell how they can be put back when used up.
2. Do the following:
  - a. Define soil erosion.
  - b. Tell why soil erosion is important. Tell how it affects you.
  - c. Name three kinds of soil erosion. Describe each.
3. Do the following:
  - a. Tell what is meant by “conservation practices.”
  - b. Describe the effect of three kinds of erosion-control practices.
  - c. Take pictures of or draw three kinds of erosion-control practices.
4. Do the following:
  - a. Explain what a watershed is.
  - d. Explain what a river basin is. Tell why all people living in a river basin should be concerned about land and water use in the basin.
  - e. Explain what an aquifer is and why it can be important to communities.

5. Do the following:
- Make a drawing to show the hydrologic cycle.
  - Explain how removal of vegetation will affect the way water runs off a watershed.
  - Tell how uses of forest, range, and farmland affect usable water supply.
  - Explain how industrial use affects water supply.
6. Do the following:
- Tell what is meant by "water pollution."
  - Describe common sources of water pollution and explain the effects of each.
  - Tell what is meant by "primary water treatment," "secondary waste treatment," and "biochemical oxygen demand."
7. Do TWO of the following:
- Make a trip to two of the following places. Write a report of more than 500 words about the soil and water and energy conservation practices you saw:
    - 2) A managed forest or a woodlot, range, or pasture
    - 3) A wildlife refuge or a fish or game management area
  - Make a list of places in your neighborhood, camps, school ground, or park that have erosion, sedimentation, or pollution problems. Describe how these could be corrected through individual or group action.