



Sustainability Online Merit Badge Class

March 30-April 3, 2020

Merit Badge Counselor: Chris Spinale

Central Florida Council

Email: aspinale@cfl.rr.com

Pre-Homework: March 29

Requirement 1: Before starting work on any other requirements for this merit badge, write in your own words the meaning of sustainability. Explain how you think conservation and stewardship of our natural resources relate to sustainability. Have a family meeting and ask family members to write down what they think sustainability means. Be sure to take notes. You will need this information again for requirement 5.

Req 1 Google Form: <https://forms.gle/vSSFQCu4LEhMDHZt5>

Video: Kids Contribution to Sustainability - <https://youtu.be/IT9iHuK9Do>

Begin thinking about Requirement 2: Requirement 2 is the most extensive requirement of this merit badge. You will notice that several of its subtopics have some time duration associated with it. So, the sooner you start thinking about these and begin planning, the sooner you will complete the time requirement. Everyone must complete requirement A of the subcategories.

Homework: due no earlier than April 29

- **Requirement 2A (Water):** Develop and implement a plan that attempts to reduce your family's water usage. Examine your family's water bills reflecting usage for three months (past or current). As a family, choose three ways to help reduce consumption. **Implement those ideas for one month.** Share what you learn with your counselor and tell how your plan affected your family's water usage.

Req 2A Water Google Form: <https://forms.gle/jPB6vVLxR9KeqWTK7>

- **Requirement 2B (Energy):** Develop and implement a plan that attempts to reduce consumption for one of your family's household utilities. Examine your family's bills for that utility reflecting usage for three months (past or current). As a family, choose three ways to help reduce consumption and be a better steward of this resource. **Implement those ideas for one month.** Share what you learn with your counselor and tell how your plan affected your family's usage.

OR

Requirement 2C (Energy): Evaluate your family's fuel and transportation usage. Review your family's transportation-related bills (gasoline, diesel, electric, public transportation, etc.) reflecting usage for three months (past or current). As a family, choose three ways to help reduce consumption and be a better steward of this resource. **Implement those ideas for one month.** Share what you learn with your counselor and tell how your plan affected your family's transportation habits.

Req 2B or 2C Energy Google Form: <https://forms.gle/cyUA6f4GwhuxpUkK7>

- **Requirement 5A:** After completing requirements 1 through 4, have a family meeting. Discuss what your family has learned about what it means to be a sustainable citizen. Talk about the behavioral changes and life choices your family can make to live more sustainably. Share what you learn with your counselor. **(Because you have to complete requirements 1-4, you cannot submit no sooner than April 29)**

Req 5A Google Form: <https://forms.gle/YDLmygS7LZxRQtHQ6>

Homework: due no earlier than April 9

- **Requirement 2A (Food):** Develop and implement a plan that attempts to reduce your household food waste. Establish a baseline and then track and **record your results for two weeks**. Report your results to your family and counselor.
This PDF from the US Environmental Protection Agency is a good tool to help get you and your family started: https://www.epa.gov/sites/production/files/2016-02/documents/get_smart_ftgtw_2_1_2016_pubnumberadded_508.pdf
Req 2A Food Google Form: <https://forms.gle/Kozbc9XDggTALwLn6>
- **Requirement 2A (Stuff):** **Keep a log** of the “stuff” your family purchases (excluding food items) **for two weeks**. In your log, categorize each purchase as an essential need (such as soap) or a desirable want (such as a DVD). Share what you learn with your counselor.
Req 2A Stuff Google Form: <https://forms.gle/2M8NHRwoezNzCJn3A>

March 30-April 2

Requirement 2B Water: Using a diagram you have created, explain to your counselor how your household gets its clean water from a natural source and what happens with the water after you use it. Include water that goes down the kitchen, bathroom, and laundry drains, and any runoff from watering the yard or washing the car. Tell two ways to preserve your family’s access to clean water in the future.

Req 2B Water Google Form: <https://forms.gle/9bFQziw2fv3UGsow5>

Video: Clean Water: A Long Journey from the Source to Our Tap - <https://youtu.be/-bvZCdMecEo>

Video: Where Does the Water Go? - <https://youtu.be/wAcZrC1wnss>

Video: Graywater recycling Shower Houses, Summer Bechtel Reserve - <https://youtu.be/xhy73y4RvhA>

Requirement 2B Food: Discuss with your counselor the ways individuals, families, and communities can create their own food sources (potted plants, family garden, rooftop garden, neighborhood or community garden). Tell how this plan might contribute to a more sustainable way of life if practiced globally

Req 2B Food Google Form: <https://forms.gle/vSXYueiqXndZL2d6>

Video: Growing Power - https://youtu.be/ozvrp_uTH98

Requirement 2A Community: Draw a rough sketch depicting how you would design a sustainable community. Share your sketch with your counselor, and explain how the housing, work locations, shops, schools, and transportation systems affect energy, pollution, natural resources, and the economy of the community.

Req 2A Community Google Form: <https://forms.gle/6VTZqBUaNQaY4iCH9>

Requirement 2B Community: With your parent’s permission and your counselor’s approval, interview a local architect, engineer, contractor, or building materials supplier. Find out the factors that are considered when using sustainable materials in renovating or building a home. Share what you learn with your counselor.

Req 2B Community Google Form: <https://forms.gle/527ay2HrSvGJaoJP7>

Video: Interview with Joel Hirshberg, owner of Green Building Supply - <https://youtu.be/kGcEFWsYRWM>

Requirement 2A Energy: Learn about the sustainability of different energy sources, including fossil fuels, solar, wind, nuclear, hydropower, and geothermal. Find out how the production and consumption of each of these energy sources affects the environment and what the term “carbon footprint” means.

Discuss what you learn with your counselor and explain how you think your family can reduce its carbon footprint.

Req 2A Energy Google Form: <https://forms.gle/LjgRs3LdBB9SEE427>

Req 2A Energy continued

Video: Can 100% Renewable Energy Power the World? - <https://youtu.be/RnvCbquYeIM>

Requirement 2C Stuff: Discuss with your counselor how having too much “stuff” affects you, your family, and your community. Include the following: the financial impact, time spent, maintenance, health, storage, and waste. Include in your discussion the practices that can be used to avoid accumulating too much “stuff.”

Req 2C Stuff Google Form: <https://forms.gle/4z6sdXcWq9HELHYp7>

Requirement 3A: Explain to your counselor how the planetary life-support systems (soil, climate, freshwater, atmospheric, nutrient, oceanic, ecosystems, and species) support life on Earth and interact with one another.

Req 3A Google Form: <https://forms.gle/XezDY2CP3ixxpHAK6>

Video: Sustainability: Simple Definition (Cycles) - <https://youtu.be/beidaN3SNdA>

Requirement 3B: Tell how the harvesting or production of raw materials (by extraction or recycling), along with distribution of the resulting products, consumption, and disposal/repurposing, influences current and future sustainability thinking and planning.

Req 3B Google Form: <https://forms.gle/izaz1QGALZ1QQrSp7>

Requirement 4: Explore TWO of the following categories. Have a discussion with your family about the two you select. In your discussion, include your observations, and best and worst practices. Share what you learn with your counselor.

Req 4 Google Form: <https://forms.gle/Kw4yFRFCH7wGa5R86>

Video: Legacy of Dian Fossey - <https://youtu.be/CWnk6PTsZNo>

Requirement 5B: Discuss with your counselor how living by the Scout Oath and Scout Law in your daily life helps promote sustainability and good stewardship.

Req 5B Google Form: <https://forms.gle/osY5krtq3ZPsuwaG8>

Requirement 6: Learn about career opportunities in the sustainability field. Pick one and find out the education, training, and experience required. Discuss what you have learned with your counselor and explain why this career might interest you.

Req 6 Google Form: <https://forms.gle/1LKMzwEZtHeBmgWi9>