



Environmental Protection Agency Sample at Home Service Project Ideas

Environmental Protection and Public Health Service Hour Options

View the Healthy Homes Action Card and Checklist: https://www.epa.gov/sites/production/files/2014-05/documents/healthy_homes_action_card_english.pdf

<i>Environmental Categories</i>	1 hour	2 hours	3 hours
<p>Radon Testing Radon is a colorless, odorless, and tasteless, radioactive gas. It is also the second leading cause of lung cancer and can also cause damaging effects to the human DNA structure. Radon gas decays into radioactive particles that can get trapped in your lungs when you breathe. As they break down further, these</p>	<p>Troop Radon Test Project: Radon has been found in homes all over the United States. Any home can have a radon problem. On average, one out of every fifteen U.S. homes has a problem. The only way to know whether or not your home has a radon problem is to test for it. Radon levels within a building often change. Highest indoor levels are often found during the heating season. Weather conditions, operation of furnaces and fireplaces, and opening/closing of windows and doors are among the factors that cause these patterns. Short-term test kits are the quickest way to test.</p>	<p>Test your home for Radon: Radon is formed by the natural radioactive decay of uranium in rock, soil, and water. Naturally existing, low levels of uranium occur widely in Earth's crust. It can be found in all 50 states. Once produced, radon moves through the ground to the air above. Some remains below the surface and dissolves in water that collects and flows under the ground's surface. Two houses side by side can have very different radon levels. This is due to the geology below the individual homes, including the types of soil and rock and the cracks and fissures. Test your home for Radon by contacting the National Radon Program (at Kansas State University) to request a test kit.</p>	<p>Radon Science Fair Project: Radon is a colorless, odorless, tasteless, and chemically inert radioactive gas. Radon gas can also be a wonderful topic for student science fair projects. The National Radon Program Science Fair Project provides ideas for science fair projects that explain the science, health</p>

<p>particles release small bursts of energy. This can damage lung tissue and lead to lung cancer over the course of your lifetime.</p> <p>As children are spending more time socially distanced in their homes, exposure to Radon is more of a concern, especially during the winter months.</p>	<p>As a troop project: supply all the families in your troop with short-term radon test kits (contact Kansas State University at radon@ksu.edu or call 1-800-557-2366 to discuss orders of over 24). Have each family test the lowest lived in level of the home.</p>	<p>National Radon Hotline: <i>Purchase radon test kits by phone.</i> 1 (800) SOS-RADON (767-7236)</p>	<p>risks, exposure routes, mitigation and other aspects of radon. Students who complete a radon science fair project can send a summary to Kansas State University. Students will receive a Certificate of Participation in appreciation for their efforts in helping to educate the public regarding radon.</p> <p>https://sosradon.org/science-fair-projects</p>
<p>Asthma Awareness Increase public awareness of the asthma epidemic and to take action to get asthma under control in communities across the nation. Asthma affects more than 25 million people of all ages and races. And, though asthma is widespread, public awareness of common asthma triggers and effective asthma management strategies needs to be shared.</p>	<p>Asthma Media Announcement: Post the National Childhood Asthma Media Campaign public service announcements (PSAs) on your scout websites with links to more information. https://www.youtube.com/watch?v=KG1TCHHzalE</p> <p>And know the signs of an asthma attack and what you should do? https://www.scouting.org/health-and-safety/incident-report/incident-reviews/asthma/</p>	<p>Asthma Cub Scout Education: Coordinate with your local Cub Scout Leader to show (in person or virtually) a Cub Scout Pack of 5 members or more the YouTube Asthma Awareness public service announcement “Why is Coco Orange?” https://www.youtube.com/watch?v=4TAuzMniolU</p>	
<p>Integrated Pest Management</p>	<p>IPM Activity Book:</p>	<p>Make Your Home a Green Home:</p>	

<p>In the agricultural industry, P2 is important for reducing the use of water and chemicals, using less environmentally harmful pesticides and protecting sensitive areas. Integrated Pest Management combines science and a way to control pests that is not harmful to our health. Children are exposed to more pesticides than adults because they are smaller (less body weight), and their developing organs are often more sensitive to toxic exposures.</p> <p>The best way to combat pests is to create an uninviting environment by denying them access to food, water, and shelter.</p>	<p>Complete activities in the Pest Patrol Backyard Activity Book on Integrated Pest Management. Explain to your troop what Integrated Pest Management (IMP) is, and how scouts can practice IMP in their daily lives.</p> <p>https://www.epa.gov/sites/production/files/2014-04/documents/join_our_pest_patrol.pdf</p>	<p>Most spend over 90% of their time indoors. This brochure offers ways to make your home a healthy place for you and your family. It provides you with information on mold, radon, carbon monoxide, asthma and allergies, second-hand smoke, volatile organic compounds.</p> <p>https://www.epa.gov/sites/production/files/2014-05/documents/healthy_homes_brochure_english.pdf</p> <p>Read the Healthy Home Brochure and give a presentation to your troop about ways to stay healthy and avoid indoor air contaminants.</p>	
<p>Pollution Prevention (P2) Pollution prevention (P2) is any practice that reduces, eliminates, or prevents pollution at its source, also known as "source reduction." Source reduction or avoiding waste should</p>	<p>Waste Reduction P2: Make a video of ways your troop practices P2 – <i>Reduces</i>/Avoids trash, <i>Reuses</i> materials instead of buying disposable materials, and <i>Recycles</i> what can't be reused - on a scout camp out.</p> <p>Share the video on your Troop webpage or Facebook.</p>	<p>Energy Reduction P2: Organize a neighborhood or school "Unplug Day" and calculate how much energy was saved (hours may vary depending on effort).</p> <hr/> <p>P2 Outreach and Education: Write an article for your scout or school newspaper on the topic "Why P2 is important". Include information about environmentally friendly fuel</p>	<p>Waste Reduction P2: Develop a Pollution Prevention (P2) Pledge for Campouts and BSA Award Ceremonies:</p> <ul style="list-style-type: none"> List 5 ways to reduce or avoid waste

<p>be every scouts goal. P2 protects the environment by conserving and protecting natural resources like wetlands, groundwater sources and other critical ecosystems - areas in which we especially want to stop pollution before it begins.</p> <p>P2 can be applied to many pollution-generating activities, including those found in the energy. Increased energy efficiency comes from using environmentally friendly fuel sources like solar or wind power, and reducing the environmental damages from extraction, processing, transport and combustion of fuels.</p>	<hr/> <p>Create a composting area for your family's food scraps. Learn what types of food can and cannot be composted.</p>	<p>sources, and ways your troop practices pollution prevention on camp outs.</p>	<ul style="list-style-type: none"> • List 5 things to reuse instead of buying • List 5 ways to recycle <p>Share your list with your troop. Sign your pledge along with your Scoutmaster. Pledge to carry out to the best of your ability.</p> <p>Post your pledge on your scouts Facebook page or website.</p>
<p>Water Quality Water quality describes the condition of the water, including chemical, physical, and biological characteristics, usually with respect to its suitability for a particular purpose such as drinking or swimming.</p>	<p>Water Conservation: Purchase and setup a rain barrel for your family to water plants, flowers, and garden.</p> <hr/> <p>Help a parent install low-flow shower heads at your home.</p> <hr/> <p>Tracking Water Pollution: A Hazardous Whodunit!</p>	<p>Natural Resource Preservation: Participate in a Stream or River Clean-up (service hours may vary).</p> <hr/> <p>An interactive water filtration experiment: https://www3.epa.gov/safewater/kids/flash/flash_filtration.html Conduct this water filtration experiment and share your findings with your Scout troop.</p>	<p>Water Pollution: Work with your local police department and pharmacy to organize a neighborhood safe collection of outdated prescription drugs (so they don't end up in your water supply).</p>

<p>In almost any town, a large variety of chemicals and wastes are used or disposed of in day-to-day life. If things like gasoline, road salt, pesticides or sewage are not used or discarded wisely, they can contaminate a town's water supply.</p>	<p>Riverville is a fictional town with a real problem. Each week, more citizens are complaining that their drinking water tastes bad. So Riverville has a problem and no one is sure who is responsible. The mayor needs some way of proving who is causing the pollution and who should clean it up. You will be the "detective" who helps prove where the pollutant is coming from.</p> <p>https://www3.epa.gov/safewater/kids/pdfs/activity_grades_9-12_trackingpollution.pdf</p>		
<p>Lead Awareness Lead is a naturally occurring element that can be found in all parts of our environment – the air, the soil, the water, and even inside our homes. While it has some beneficial uses, it can be toxic to humans and animals. Childhood lead poisoning is the nation's number one environmental health threat.</p>	<p>Poster or Bulletin Board Display: Design a "Let's Make All Kids Lead-Free" bulletin board or poster for your school, elementary school, or church. Use EPA's (see Lead awareness videos for information)</p>	<p>Lead Awareness videos: Watch these videos with your parents or guardians, then answer the 4 questions below:</p> <p><i>Missouri Department of Health and Senior Services video series on Lead Awareness (3 videos):</i> https://www.youtube.com/playlist?list=PLh5mk8BxSPggfQ4_Jungv_if7hN5sdT8</p> <p><i>Gross Science: What Lead Poisoning do to Your Brain?</i> https://www.youtube.com/watch?v=76RKSQgduVQ</p> <ol style="list-style-type: none"> 1. How can Lead harm me or my family? 2. How can a Lead paint problem be fixed? 3. What can I do to protect myself from Lead-poisoning? 4. If your house was built before 1978, where can Lead-based paint be found in your home? 	