

Explore Dominion's Nuclear Information Center



Contact the center ahead of time to be sure someone will be available to play the video for you.

Surry NIC: 757 357 5410 North Anna NIC: 540-894-2029 or 804-771-3200

All membership levels must visit one of the sites and complete at least one activity from each Leadership Key: Discover, Connect and Take Action, plus:

- Girl Scout Daisies – no additional activities are required
- Girl Scout Brownies – One additional activity
- Girl Scout Juniors – Two additional activities
- Girl Scout Cadettes – Three additional activities
- Girl Scout Seniors – Four additional activities
- Girl Scout Ambassadors – Five additional activities

DISCOVER:

- 1) Watch the at least one age appropriate video:
 - Junior, Cadette, Senior, Ambassador – *Fuel Storage*
 - Daisy, Brownie, Junior – Louie the *Lightning Bug* and/or *The Great Search*
- 2) Find out what each of the following contributed
 - a) Marie & Pierre Curie
 - b) Enrico Fermi
 - c) Henri Becquerel
 - d) Ernest Rutherford
 - e) Lise Meitner
- 3) Define the following:
 - a) Fission
 - b) Nuclear Energy
 - c) Parts of an Atom
 - d) Chain Reaction
- 4) How many closed water systems are there in a pressurized water reactor system?
- 5) What are the three types of radiation?
- 6) What makes up the containment wall and how thick is it?

CONNECT:

- 1) Name four sources of renewable and non-renewable energy.
- 2) What body of water is used for cooling?
- 3) How many nuclear power plants are owned by Dominion Power? How many individual nuclear reactors? What percentage of power in the USA comes from nuclear energy?
- 4) How much coal and oil does it take to produce the same amount of energy contained in one nuclear fuel pellet? Name one way energy is controlled in a nuclear reactor.

TAKE ACTION (remember to always check safety wise before making plans):

- 1) Teach your family what you learned about Nuclear Power.

- 2) Clean up picnic area at a nuclear information center.
- 3) With your troop or family, determine 5 ways you can conserve energy and implement them.
- 4) Clean-up along the banks of a cooling water source (the James River or Lake Anna).
- 5) Teach a younger group of Girl Scouts about nuclear energy.
- 6) Volunteer to lead a younger group of girls through the nuclear information center.
- 7) Help a younger group of girls to earn a power or energy related award.
- 8) Put together a presentation on the pros and cons of nuclear power and present it at your school or service unit meeting or event.

This Silver Award project is respectfully submitted by Amanda Bowden, Cadette, Troop 4194. Thank you to Mrs. Michelle Brereton for guiding me through the steps leading up to my project, and for hints and tips along the way; to Mr. Paulin Cheatham, Surry Nuclear Information Center Representative, and Dominion Power for their amazing support and to my troop leader (Mom).