Project S.A.F.E.T.Y.

(Sun Awareness for Educating Today's Youth)

Objective: to demonstrate to girls how to prevent skin cancer and understand how to practice sun safety year round.

General information

Information about Skin Cancer[1]*:*

The suns rays provide the warmth and light that is necessary for life on our planet. Although we couldn't survive without it, girls need to understand how to protect their skin from the ultraviolet rays that are a part of the sunlight that makes the earth a livable planet.

Ultraviolet Radiation *(UVR)* contains Ultraviolet A rays *(UVA)* and Ultraviolet B rays *(UVB)*. When we feel the welcoming warmth of these rays on our skin, we need to protect our skin cells from damage that UVA and UVB can cause. Sometimes, this damage leads to skin cancer, especially if your skin is sunburned when you are young.

Skin cancer is the most common cancer in the United States. But the good news is that it is also the easiest to prevent. How? By practicing sun safety now, while you are young.

Program level complete # requirements:

Daisies:	**2** requirements.
Brownies:	**4** requirements.
Juniors:	**6** requirements.
Cadettes:	**8** requirements.
Seniors/Ambassadors:	**9** requirements.

1. Poster Time

Take the Sun Safety quiz found at the American Cancer Society's web site: www.cancer.org/healthy/toolsandcalculators/quizzes/sun-safety/index

Make a poster, write a skit or develop a presentation of your choice that shows how to practice sun safety, using all of the following elements. Share your presentation with another group of young people.

- Sunscreen: Use sunscreen at the start of every day, even when it's cloudy. *(Learn more about #'s related)*
- Headgear: Wear a hat with a broad brim
- Protective clothing: Throw on a long-sleeved shirt, and long pants.
- Midday scorcher: Limit your time in the sun 10 and 3 every summer day
- Sunglasses: Protect your eyes by wearing sunglasses with UVA and UVB protection.

2. The Sun and YOU

Learn how the sun affects your part of the world[2]:

Look around your house and pick a spot in front of the window that gets bright sunlight; now find another place in your house that gets no direct sunlight. You will need to do an experiment in these two places for seven days. In each place put:

- Half a sheet of newspaper
- A whole apple
- A darkly colored piece of construction paper *(dark blue, red, green or purple work best)* and place several objects with interesting shapes on top of each piece of paper, or use plastic letters

Write down what you see after a week, when you compare the objects that were in the sun, compared to the ones that were in the shade.

Understand your results by applying the following facts:

- Newspaper - the effect of the sun on the newspaper shows how sunlight can affect our skin.
- Apple - which apple stayed the same as at the beginning of the seven days, and which one started to age or even decay? The apple is made up of plant cells. The changes to the apple that stayed in the sun longer helps us understand that our skin has skin cells and they can also be affected by sunlight that

[1] Learn more from:
http://www.cancer.org/ *(American Cancer Society)*
http://www.aad.org/ *(American Academy of Dermatology*)

[2] This activity adapted from the U.S. EPA "SunWise" Tool Kit. Used with permission.

- ages our skin and causes damage that might lead to skin cancer.
- Construction paper – on which paper did the objects or letters leave a darker mark? The answers help us understand how we can help ourselves by blocking the sun's rays with staying in the shade, wearing hats and long-sleeved shirts, and always putting on sunscreen 20 minutes before you go out into the sun.

3. Geography and You.

One in five people in the United States will develop skin cancer in his or her lifetime, and this number jumps to one in three in the Sunbelt.

a) Discover where the Sunbelt in the United States is located. Find Latitude 37◦ and list all the states or regions of states that fall south of this line. The Sunbelt stretches from southern California to North Carolina

b) Find out if you live in the Sunbelt by looking at an atlas. No matter where you live, you need to practice skin cancer prevention everyday.

c) Now find your skin type:

Use the following rules to identify your skin type. Work with a friend and identify their skin type as well:

- *Type I* skin is very fair, always burns, never tans, and develops freckles easily. A person with this skin type usually has blue eyes, red or blonde hair, and, unprotected, starts to get sunburned after only 5 minutes in the sun.
- *Type II* skin is fair, burns easily, tans very little, and has blue or hazel eyes. A person with this skin type has red, blond, or brown hair, and may get sunburned after only 5 minutes in the sun.
- *Type III* skin burns occasionally, but gradually tans.
- *Type IV* skin has very little visible sunburn, and always tans. A person with this skin type has light to medium skin coloration, with dark brown hair, and dark eyes.
- *Type V* skin seldom burns and always tans. A person with this skin type has medium to dark skin coloration and dark eyes.
- Type VI skin seldom burns, tans darkly, and has dark skin coloration and dark eyes.

Once you know your skin type, check the UV rating for your city in the weather section of the newspaper or search on UV rating, usually visiting NOAA/EPA's web site. The UV forecast will predict high the ultraviolet radiation index will be for that day. This could help you plan your activities for the day. Just remember, any one can get skin cancer, no matter what their skin type, so it's important to wear sunscreen (at least SPF 15[3]) year round.

4. The ABCD's of Melanoma

Melanoma is the most serious of the skin cancers. Learn about the many facets of Melanoma: what does melanoma look like? Add some more questions…girls can get buddies and discover answers…in bite size pieces.

Any new growth, or a mole that changes and fits the following description could be a melanoma:

- **A**symmetry: if the growth were folded in half, the sides would not match
- **B**order irregularity: this growth has a jagged, scalloped, notched or blurred edge rather than a smooth and continuous line
- **C**olor variation: this example has more than one shade of color. Not all melanomas are dark; some contain light brown or pink.
- **D**iameter: any growth that is bigger around than a pencil eraser should be looked at by a doctor. Even if it's smaller, but fits the description otherwise, you need to seek attention.

Invite a medical professional to your troop to discuss this topic.

Make a poster write a skit or develop a presentation of your choice that illustrates how to recognize melanoma skin cancer using the

[3] About "SPF" = multiply the SPF number (e.g.15) by the number of minutes it takes before your skin turns pink in the sun (e.g.10). The answer reveals how many minutes of protection from the sun that particular sunscreen would grant you. In the above example, you would be protected from sunburn for 150 minutes, provided that the sunscreen stayed on.

ABCD rule and present it at your GS community meeting, local school, library or other community group. Visit American Cancer's site for info.

5. Hats On for Sun Safety

Put on a hat show for your troop. The hats you and your friends wear need to have a brim of at least three inches all the way around. If you don't have a hat already, make one out of cardboard or other material, and decorate it with crayons and by gluing on yarn or other colorful decorations.

6. School-yard Sun Safety

First make a blue print, or detailed drawing, of your school's or local park's grounds. Now look around the grounds on a sunny day, and notice where students can find shade, and where they are exposed to the sunlight while they eat lunch, play, or just sit and chat. Also think of how students could be protected from the sun's rays when they use the playground. Use these ideas:

- Design shade structures for the playground equipment and for the places where most students sit and talk. Include these designs in your blueprint. Draw a side-view and a top view of each structure.
- List the ways that students playing a game on the grass or blacktop could protect themselves from the sun.

Taking Action:
Find out from the school nurse or your health teacher or local parks and recreation staff how you can share your ideas with other students, teachers, Parent Teacher Organizations or local community groups or interested citizens. Ask if the school/park would allow students to put on sunscreen before PE or recess, and if they would be permitted to wear hats in the school grounds.

7. The SPF of Clothes

Write down the clothes you wear to school on an average day. Now figure out the Sun Protection Factor *(SPF[4])* of the clothes you and your family usually wear to school, work or other activities every day in the spring or fall. From this information, you will know which clothes protect you and which don't offer much protection at all.

Cotton shirt: SPF 7; Cotton/polyester T-shirt: SPF 15; Denim jeans: SPF 95-100
Polyester/lycra surfer shirt: SPF 35.
Do further research to find out if there are ways to increase the SPF of clothes, and present this information to your troop. Resources include ACA http://www.cancer.org/cancer/cancercauses/sunanduvexposure/skincancerpreventionandearlydetection/skin-cancer-prevention-and-early-detection-u-v-protection

8. What do magazines tell us?

Look through several kinds of magazines, such as those intended for young children, teens, women and men. Now cut out pictures from ads or articles that show people enjoying the outdoors, both in sun or shade. Gather at least six pictures each of kids, teens, and people over age 20. Sort them into two groups:

Group A: Those who are wearing hats or protective clothing, are in the shade, or are using sunscreen

Group B: Those who are not wearing hats or protective clothing, and are not in the shade, or using sunscreen

Which was the larger group? If it was Group A, then the results show that people who read magazines are not getting the right message about protecting their skin.

Take what you have learned and write a letter to the sponsor of the ads from group B recommending some of the actions you have learned and explaining why. Include your ad *(#9)* with your letter.

9. Make your own Ad!

Design an ad for a summer outfit for pre-teens or teens. The purpose of the ad is that readers can look stylish and still protect themselves from sun damage.

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10. The Sun Shines Around the World[5]

Use encyclopedias, magazines and periodicals (National Geographic, for example), or books to research a country that is near or right on the equator.

Answer the following questions, and make up a report with pictures and words:

- Name of country?
- What continent is the country in?
- What types of houses do the people of the country build?
- How do the houses help the people of this country protect themselves from the sun?
- What kinds of clothes do the people of this country wear?
- How do the clothes and houses compare with your state or country?
- Does the government and medical professionals share information like what you have learned earning this patch to its citizens?

11. How short is your shadow?

You will need a partner for this activity, as well as a stick of sidewalk chalk. The shadow rule is a good guideline for sun safety: "If your shadow is shorter than you are tall, use sun protection and cover up."

Start by measuring your height rounded to the nearest whole inch or centimeter. Now go outside to a nearby spot on a driveway or sidewalk at about: 9:00 am, 12:00 noon, 2:00 pm, and 4:00 pm. *(Be sure to wear sunscreen when you do this activity!)* The first time you go outside, have your partner outline your shadow with the chalk starting and ending at your feet. Measure the length of the shadow, and write it down next to the outline and in a notebook.

For the next three times, go out to the same spot, repeat the outline, and measure the length of the shadow the "feet" to top, or "head" of the shadow.

When you have completed the last measurement, look at your recorded shadow lengths and identify the times of the day that your shadow was shorter than you are tall. Looking at your recorded results, decide what time of day it is safest to be out in the sun.

A rule for sun safety is to protect yourself from the sun when its rays are the strongest, between 10 and 3 in the summer months. Did your shadow measurements show that this is an important time of day to avoid sun exposure? If you need to be outdoors during this time, wear protective clothing, including a hat and sunglasses, and reapply sunscreen every two hours. Remember, this rule applies even in cold weather if there is snow on the ground, or you are at a high altitude.

12. Gear Up For Summer

The U. T. M.D. Anderson Cancer Center, in Houston, Texas, has produced a Project S.A.F.E.T.Y. video entitled "Gear up for Summer." Arrange to watch this video with your troop *(available in VCR tapes and come DVDs from Council Library at Program Place for Girls)* and write the main point the video makes about how to stay sun-safe, year round.

Further resources

Visit online or at your library:
American Academy of Dermatology
American Cancer Society (ACS)
Cancer Council of Australia, SunSmart program
UV Index: Environmental Protection Agency *(EPA)*
EPA SunWise program
National Weather Service

[5]Adapted from the U.S. EPA "SunWise" Tool Kit. Used with permission.