- ✤ Learning Objectives
- ✤ Curriculum Overview
- ✤ Suggested Lesson Plans
- ✤ Support Activities
- ✤ Additional Activities













TEACHER'S KEY
SunSafe Test
Name:
Date:
Teacher:Grade:
 Instruction: Fill in the blanks. 1. Name three ways to protect yourself when in the sun. <u>HAT</u> <u>SHIRT</u> <u>SUNSCREEN</u> (EXAMPLES) Instruction: Circle one answer only, for each.
 2. The only protection you need when in the sun is a good strong sunscreen? 1) Yes ✓ 2) No
 3. You should protect yourself from the sun: 1) when bike riding 2) when playing ball 3) at school recess 4) when at a lake or ocean area ✓ 5) all of the above

- 4. Sunscreens should be put on:
 - 1) only face, nose and lips
 - 2) only back, arms and legs
 - \checkmark 3) any part of the body that is NOT protected by clothing
 - 4) the side of the body facing the sun
- 5. Which skin damage is NOT caused by the sun:
 - 1) wrinkles
 - 2) heat rash
 - 3) peeling
 - ✓ 4) pimples
- 6. The sun's rays are strongest during:
 - 1) 7am. to 10am.
 - ✓ 2) 11 am. to 3pm
 - 3) 3pm. to 5pm
 - 4) 6pm. to 9pm.
- 7. Do you need to put sunscreen on again, after you get out of the water and towel off?
 - ✓ 1) Yes (Sunscreen can rinse or rub off.)
 2) No, why not? _____
- 8. The **SPF** on sunscreens stands for: 1) Skin **Pro Form**
 - 1) Skin Pro Form
 - ✓ 2) Sun Protection Factor
 - 3) Sun's Primary Feature
 - 4) Skin Program Formula
- 9. What is the lowest **SPF** number that your sunscreen should have?
 - 1) 7
 - 2) 2
 - 3) 10
 - \checkmark 4) 15 or higher

Inst	Instruction: Circle yes or no for each letter of Question 10.				
10.	Which of the following ways are you <u>willing</u> to be safe in the sun: (No right or wrong answers — use these to promote discussion.)				
	A. Wear a hat?1) Yes				
	2) No, why not?				
	B. Wear a short-sleeved shirt?1) Yes				
	2) No, why not?				
	C. Wear long shorts to the knee or below?1) Yes				
	2) No, why not?				
	D. Play in the shade?1) Yes				
	2) No, why not?				
	E. Use sunscreen with a SPF 15 or higher?1) Yes				
	2) No, why not?				
11.	 Do you protect your skin from the sun now? 1) No, and I am not thinking about starting to, in the future. 2) No, but I am thinking about starting to, soon. 3) No, but I have tried it and plan to start soon. 4) Yes, I have been protecting my skin, but for <u>fewer than 6 months</u>. 5) Yes, I have been protecting my skin for <u>more than 6 months</u>. 				
12.	 Do you think you will be protecting your skin from the sun a year from now? 1) I definitely will. 2) I probably will. 3) I probably will not. 4) I definitely will not. 				

No state	SunSafe Test
Nan	ne:
Dat	e:
Tea	cher:Grade:
1. Inst	Name three ways to protect yourself when in the sun. 1)
2.	The only protection you need when in the sun is a good strong sunscreen? 1) Yes 2) No
3.	 You should protect yourself from the sun: 1) when bike riding 2) when playing ball 3) at school recess 4) when at a lake or ocean area 5) all of the above

- 4. Sunscreens should be put on:
 - 1) only face, nose and lips
 - 2) only back, arms and legs
 - 3) any part of the body that is NOT protected by clothing
 - 4) the side of the body facing the sun

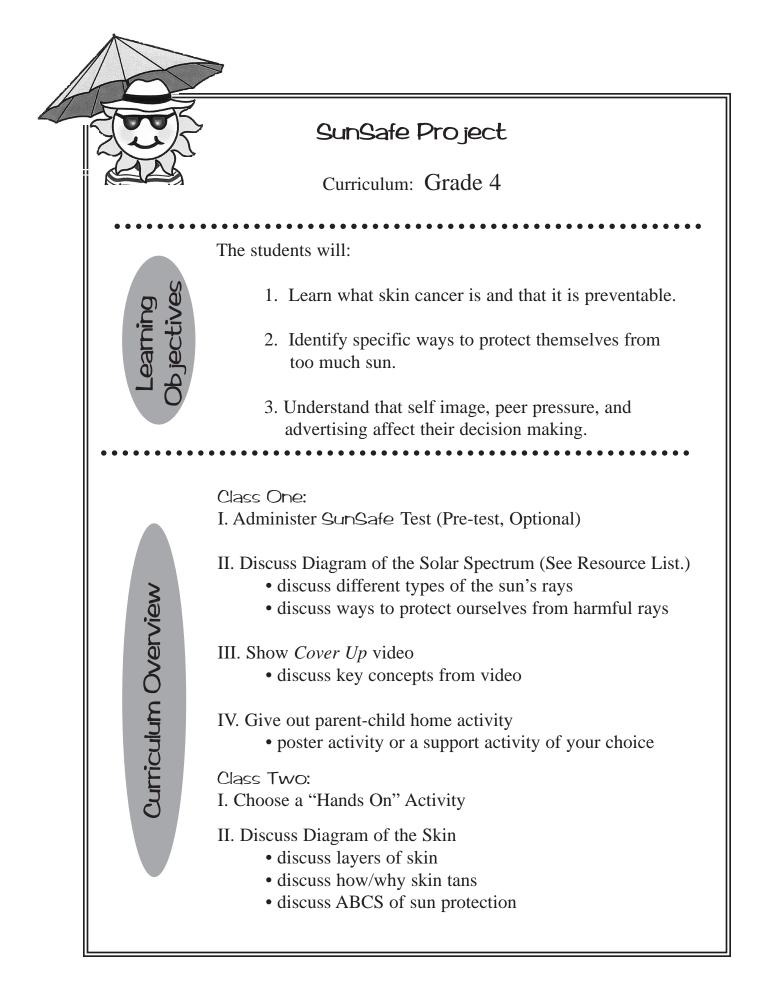
5. Which skin damage is NOT caused by the sun:

- 1) wrinkles
- 2) heat rash
- 3) peeling
- 4) pimples

6. The sun's rays are strongest during:

- 1) 7am. to 10am.
- 2) 11 am. to 3pm
- 3) 3pm. to 5pm
- 4) 6pm. to 9pm.
- 7. Do you need to put sunscreen on again, after you get out of the water and towel off?
 - 1) Yes (Sunscreen can rinse or rub off.)
 - 2) No, why not? ______
- 8. The **SPF** on sunscreens stands for:
 - 1) Skin Pro Form
 - 2) Sun Protection Factor
 - 3) Sun's Primary Feature
 - 4) Skin Program Formula
- 9. What is the lowest **SPF** number that your sunscreen should have?
 - 1) 7
 - 2) 2
 - 3) 10
 - 4) 15 or higher

Instruction: Circle yes or no for each letter of Question 10.				
10.	Which of the following ways are you willing to be safe in the sun:			
	 A. Wear a hat? 1) Yes 2) No, why not? 			
	B. Wear a short-sleeved shirt?1) Yes2) No, why not?			
	C. Wear long shorts to the knee or below?1) Yes2) No, why not?			
	 D. Play in the shade? 1) Yes 2) No, why not? 			
	E. Use sunscreen with a SPF 15 or higher?1) Yes2) No, why not?			
11.	 Do you protect your skin from the sun now? 1) No, and I am not thinking about starting to, in the future. 2) No, but I am thinking about starting to, soon. 3) No, but I have tried it and plan to start soon. 4) Yes, I have been protecting my skin, but for <u>fewer than 6 months</u>. 5) Yes, I have been protecting my skin for <u>more than 6 months</u>. 			
12.	 Do you think you will be protecting your skin from the sun a year from now? 1) I definitely will. 2) I probably will. 3) I probably will not. 4) I definitely will not. 			



Curriculum Overview-continued III. Review parent-child home activity IV. Propose Poster Contest (Optional) V. Give a second parent-child home activity • peer pressure and sun safe behaviors or a support activity VI. Administer SunSafe Test again (Post-test) VII. Present SunSafe sticker and certificate Suggested Lesson Plans I. Administer the SunSafe Test (Pre-Test). II. Discuss the Diagram of the Solar Spectrum. 1. Let's talk a little about the sun. What does the sun do? Draw a sun on the board with sun beams coming from it. Brainstorm ideas about what the sun does and write one on each sun beam. Possibilities include: it shines and gives us light, it warms us up, it makes plants grow, etc. Be sure that "it makes us tan" is included. Class One 2. Draw some clouds beneath the sun. Ask what happens on a cloudy day. Do we still get some light from the sun? Do we still get warm? Can we still get a tan? (yes) So some of the sun must still get through the clouds. Ask them if they know anything else that blocks the sun. Possibilities include umbrellas, trees, houses, etc. Some students may also know about the ozone layer. Explain that the ozone layer is an invisible layer in sky that blocks some of the sun rays. Class One-continued



Class One-continued from previous page

3. Point to the drawing on the board and explain that the sun has different kinds of sun beams for the different jobs. To demonstrate some of the different kinds of beams:

a) to demonstrate how the sun warms us up, have a student stand in front of a window and let the sun shine on his/her back until he/she is warm. Alternately, place a glass of water in the window at the beginning of the lesson. Ask a student to touch it and feel if it has warmed up. Tell the students that the infrared light is the kind of sun beam that warms us up.

b) to show the visible rays of light, shine a flashlight through your hand in a darkened room. Tell the students that this is called visible light.

c) tell the students that there is another kind of sunbeam that we can't see or feel. This kind causes suntans and it also causes sunburns, wrinkles and blotches on our skin. It is called ultraviolet light.

- 4. Pass out the Diagram of Solar Spectrum sheet. Have the students look at the three kinds of rays that are explained in #3 (ultraviolet, visible, infrared). Ask them what other kinds of rays are shown on the sheet. (gamma and x-ray). What happens to them? Do they reach the earth?
- 5. Explain that you want to look more closely at the invisible type of light. Remind students that this type of light causes sun tans and it also causes sunburns. Ask if anyone has had a sunburn. Ask when and where they got it. Ask them how it felt. Ask them if they want another one.
- 6. Tell students that it is important to protect themselves from ultraviolet light. When a person receives years and years of this type of sunlight, it can cause skin cancer.

Class One-continued from previous page

- 7. Ask students for suggestions on how to avoid ultraviolet light. If a student suggests that clouds will protect them, ask them to look at the Diagram of Solar Spectrum again and see if all of the ultraviolet light is blocked.
- 8. Brainstorm ideas for how we can protect ourselves. Be sure to highlight the ABCS:
- Avoid the sun from 11am-3pm. <u>Ask students why</u>. (Because that is when the sun's rays are strongest.) <u>Brainstorm</u> activities to do during that time.
- ✤ Block the sun with sunscreen that has an SPF of at least 15. <u>Ask students what SPF stands for</u>. (Sun Protection Factor). Ask them what the lowest number on the sunscreen bottle should be (15 or higher). <u>Ask them if putting sunscreen</u> <u>on just once is okay</u>. (No, it is important to reapply it every couple of hours, even if it is waterproof.)
- * **Cover-up** with hats, clothing, and sunglasses
- * Say something to your family, friends and neighbors about how important it is to protect themselves from the sun. Show them ways that they can be SunSafe.

Remind students that these are the best ways to protect themselves from the ultraviolet light of the sun.



····· Class Two

Class One-continued from previous page

III. Show Cover Up Video.

Discuss key concepts from video:

How to dress for sun protection and avoid a sunburn. Discuss the importance of protection during all outdoor activities and specifically the time of day when the sun is strongest. Review the ABCS of sun prevention.

IV. Give out parent-child home activity. You could ask the students and their parents to make a poster on advertising images that glamorize a tan or choose from the other support activities.

I. Choose a "Hands On" Support or Additional Activity.

- II. Discuss Diagram of the Skin (make overhead of Diagram of the Skin)
 - 1. We have already talked a little about how to dress for sun safety. What are some of the ideas that we discussed? What do we need to remember before going out in the sun? What is the best thing that we can do to reduce our exposure to the sun (avoid peak hours). What is next best thing to do ?
 - 2. Why do we need to remember the ABCS of sun safety? (To protect our skin, to avoid sun burns, to avoid wrinkles, heat rash, and to reduce our risk of skin cancer later in life.)
 - 3. Well, let's talk some more about our skin. What do we already know about the skin? What does it do? Brainstorm ideas. Write the students' responses on the board. They may include: it is the largest human organ, it protects us, it holds us together, it is elastic, it grows, it can be damaged, etc.

4. We have talked some about what happens when we spend time in the sun without protecting ourselves -- suntans, sunburns, heat rash, etc. But why does our skin turn brown or red when we are in the sun? What is actually happening inside our skin that makes it do that?

Class Two-continued



Class Two-continued from previous page

- 5. First, let's take a look at our skin. (Show overhead of the Diagram of the Skin). What do we see here? How many main layers are there? What are they called? They all have "derm" in them, don't they? What is a skin doctor called? Right, a dermatologist. So if you see a word that has "derm" in it, what does that probably mean?
- 6. Let's start at the bottom. Which layer is deepest? What is it made of? What does that do for us? (Fat is stored energy . When we exercise or play, we use up some of our stored energy.)
- 7.What layer is in the middle? What is it made of? What do you think blood vessels do? (nourish the skin, bring oxygen to it, take away waste, etc.)
- 8. Now the outermost layer. What is it called? It is made of a couple of different things.

The different kinds of cells:

a) **Squamous cells** -- these are the cells that are on the surface of skin. They are cells that are rubbed off with every day wear and tear. They protect the deeper layers of skin.

b) **Prickle cells** -- these offer more layers of protection.

c) **Basal cells and Melanocytes**. The melanocytes produce melanin. Melanin is what gives your skin its color. Everyone has the same number of melanin producers no matter what color their skin is. The difference is that in darker-skinned people, the melanin producers make more melanin than in fair-skinned people. That is why people with dark skin have

more natural protection. We need to remember though
that everyone can get a sunburn, and everyone needs to protect themselves.

Class Two-continued

Class Two-continued from previous page

9. Now do you remember the different types of sun rays that we talked about? (The students may want to get their Diagram of the Solar Spectrum sheet out.) There were how many kinds? Some were not harmful -- which ones? Which is the one we want to protect ourselves from?

- 10. When ultraviolet light hits your skin, it activates the melanin producers and they start producing melanin. The melanin makes your skin turn brown. But why does our skin produce melanin? Our skin does this to try to protect itself. The sunlight will be absorbed by the melanin and not by our skin. The problem is that it is impossible for our skin to produce enough melanin to stop all of the ultraviolet rays. The melanin producers will try and try, but they won't be able to stop the harm to your skin.
- 11. Since our skin can't protect itself from the sun, what do we have to do? Right, we need to remember the SunSafe ABCS. What are those? See page 38.
- III. Review parent-child home activity.
- IV. Announce poster contest. Possible titles include: "The SunSafe ABCS", "Being Safe in the Sun can still be Fun", "I Protect my Skin by...", or another title of your (or your students') choosing.

V. Give out second parent-child homework activity. Options include:

a) Have students, with parental help, write up a few scenes on how to be protected when playing outdoors or at the beach with friends. Have them discuss how peer pressure can possilby have a negative affect on their sun protection efforts.

b) Choose a support activity for the student and parent to do at home.

Class Two-continued

Class Two-continued from previous page

VI. Administer SunSafe Test again (Post-test).

VII. Present SunSafe certificate.

Class Three and on

A lthough we suggest two class periods to introduce sun protection, we encourage you to do a reminder activity each week until the end of the school year. Some weeks you may have time to assign one of the worksheets included in the curriculum. They may be easily included in a language or writing lesson. If there is no time to do one of the activities, the **reminder** could be as simple as asking the students on Friday what they are planning to do over the weekend, and then asking them if they remember what they should do to protect themselves from the sun.

Thank you for teaching the SunSafe curriculum and helping to reduce your students' chances of developing skin cancer.

Support Activities



- Choose from Support Activities.
- Draw a picture of your family at the beach being SunSafe.
- Using magazines and books show well known personalities and sports figures wearing hats and other protective clothing. Discuss what people should be wearing. Highlight how this is particularly important for people who work out side like lifeguards, carpenters, construction workers and farmers.
- Read from *Play It Safe In The Sun* Reading Book or hand out Activity books (see Resource List).
- Choose an activity from Additional Activities. Some of the activities have more advanced concepts to appeal to fourth graders.

