TEACHER RESOURCES



Rays Awareness — Preventing Skin Cancer

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LESSON OVERVIEW

Lesson Title:	Rays Awareness — Preventing Skin Cancer
Grade Levels:	6–12
Duration:	Two Class Periods (40 minutes each)
Standards:	This lesson has been aligned to CDC National Health Education Standards (NHES) for grades 6-12.

In this lesson, students learn about ultraviolet (UV) radiation from the sun and tanning beds, how it affects their skin, and why protecting themselves from both forms of UV exposure is critical to preventing skin cancer. Two types of UV rays reach Earth's surface: ultraviolet A (UVA) and ultraviolet B (UVB). UVA rays are longer and primarily cause premature skin aging, while UVB rays are shorter and commonly cause sunburns. Both UVA and UVB rays contribute to skin damage, eye damage, and skin cancers. This lesson teaches students lifelong sun safety habits.

OBJECTIVES

After finishing this lesson, students will be able to

- understand ultraviolet radiation, including UVA and UVB rays.
- explain how UV radiation affects their skin.
- understand the effects of indoor and outdoor tanning.
- understand the various forms of skin cancer.
- understand how to detect skin cancer.
- protect themselves from UV radiation exposure.

TEACHER BACKGROUND INFORMATION

The sun gives off more than just visible light. It emits waves of energy known as radiation. Ultraviolet radiation (UV) is the form of radiation with wavelengths shorter than visible light on the electromagnetic spectrum. It is classified into three main categories according to wavelength. UVA has the longest wavelength, UVB a shorter wavelength, and UVC shorter still, but it is mostly absorbed by the ozone layer and does not reach the earth.

With a shorter wavelength than UVA, UVB rays can reach only the skin's epidermis (outer layer). UVB radiation is the main cause of sunburn and one of the main causes of skin cancer. The intensity of UVB rays can vary during the day and across the seasons. Although they can damage and burn the skin year-round, the most intense UVB rays hit the continental United States between April and October from 10 AM to 4 PM.

UVA rays have a longer wavelength and can penetrate into the skin's dermis (inner layer). UVA rays are relatively constant during the day and throughout the year and can travel through clouds and glass. Exposure to UVA rays damages the skin's DNA and causes the skin to darken or tan in an attempt to shield the cells from further radiation damage. This tan, which is never healthy, is a sign that cellular damage, which can lead to skin aging and wrinkling as well as skin cancer, has already taken place.



Cancer occurs when damage to DNA causes genetic changes or mutations that lead to uncontrolled cell division. Cancer is caused by agents known as carcinogens, which cause DNA damage to cells. Like tobacco, UV radiation from the sun or tanning beds is considered a carcinogen because the damage it does to the DNA inside skin cells can lead to cancer. The body repairs much of the damaged DNA, but some damage will remain, especially with repeated exposure to UV radiation.

VOCABULARY

Actinic Keratosis (AK) [ak-tin-ik • ker-uh-toh-sis] The most common skin precancer, these scaly or crusty growths (lesions) are caused by damage from the sun's ultraviolet rays (UVR). AKs are also known as solar keratoses. They typically appear on sun-exposed areas such as the face, bald scalp, lips, and the back of the hands. Untreated AKs can advance to squamous cell carcinoma (SCC), and some experts believe they are actually the earliest stage of SCC.

Basal Cell Carcinoma (BCC) [bey-suhl • sel • kahr-suh-**noh**-muh] The most common form of skin cancer, BCCs are abnormal, uncontrolled growths or lesions that arise in the skin's basal cells, which line the deepest layer of the epidermis (the outermost layer of the skin). BCC is usually caused by a combination of cumulative UV exposure and intense, occasional UV exposure, and can be highly disfiguring if allowed to grow. In some rare cases, BCCs can multiply more rapidly and spread (metastasize) to other parts of the body, becoming deadly.

Broad-spectrum Protection The ability of a product to protect the skin adequately from both UVA and UVB rays.

Dermis Layer of the skin found below the epidermis; contains blood vessels, nerve endings, glands, hair follicles, and connective tissue such as collagen and elastin.

DNA Deoxyribonucleic acid, the chemical substance within cells that contains genetic information needed for the cell to live and grow.

Epidermis Protective outer layer of skin; consists of many layers of cells including basal cells, squamous cells and melanocytes.

Melanoma [mel-*uh*-**noh**-muh] The most dangerous form of skin cancer, these cancerous growths develop when unrepaired DNA damage to skin cells (most often caused by ultraviolet radiation from sunshine or tanning beds) triggers mutations (genetic defects) that lead the skin cells to multiply rapidly and form malignant tumors. These tumors originate in the pigment-producing **melanocytes** in the basal layer of the epidermis. Melanoma is caused mainly by intense, occasional UV exposure (frequently leading to sunburn), especially in those who are genetically predisposed to the disease. Melanoma kills an estimated 8,790 people in the U.S. annually.

Squamous Cell Carcinoma (SCC) [skwey-muhs • sel • kahr-suh-noh-muh] The second most common form of skin cancer, SCC is an uncontrolled growth of abnormal cells arising in the squamous cells, which compose most of the skin's upper layers (the epidermis). SCC is mainly caused by cumulative UV exposure over the course of a lifetime. It can become disfiguring and sometimes deadly if allowed to grow. An estimated 700,000 cases of SCC are diagnosed each year in the U.S., resulting in approximately 2,500 deaths.





Sun Protection Factor (SPF) A measure of a product's ability to protect the skin from exposure to harmful UVB rays. The SPF number tells how many times longer it will take a person to burn while wearing a sun protection product compared to how long it would take the same person not wearing protection to burn. For example, a person wearing an SPF 15 sunscreen will take 15 times longer to burn than without sunscreen.

Ultraviolet (UV) Radiation A high-energy form of light that is invisible to the human eye but can cause damage to DNA.

UVA Ultraviolet rays with the lowest energy level and longest wavelength. UVA rays can penetrate deep into the dermal layer of the skin. The rays are the primary cause of wrinkling and premature skin aging. They also can cause cataracts. Like UVB rays, they contribute to skin cancer.

UVB Ultraviolet rays that have a higher energy level and shorter wavelength than UVA rays. UVB rays are the primary cause of sunburns. Along with UVA rays, they are a key cause of skin cancer.

Credit

Jessica J. Krant, M.D., M.P.H., Founder of Art of Dermatology on Fifth Avenue in Manhattan, and Assistant Clinical Professor of Dermatology at SUNY Downstate Medical Center, NYC.



LESSON PROCEDURES

1) TRUE OR FALSE INTERACTIVE ACTIVITY

Begin class by quizzing students on skin cancer. Use this activity to gauge your students' knowledge of skin cancer and reveal any misconceptions they may have. Read each statement on the quiz. After each statement, tell students, "Raise your hand if you think this statement is true." Then ask students to raise their hands if they think the statement is false. Note the class majority's response. After the show of hands, read the correct response. Continue to quiz students with each true or false statement.

TRUE OR FALSE?

- 1. Statement: Skin cancer is rare. (FALSE) Fact: 1 in 5 Americans will get skin cancer in their lifetime.
- 2. Statement: You can die from skin cancer. (TRUE) Fact: You can die from skin cancer if it spreads to your internal organs. Melanoma is the deadliest form of skin cancer. However, when caught early, about 99% of all melanomas are curable. That's why it's important to go to a dermatologist to catch skin cancer early—so it doesn't spread and become fatal.
- Statement: Skin cancer is a disease that affects only old people. (FALSE)
 Fact: Melanoma is the second most common form of cancer among 15–29 year olds.
- Statement: People with dark skin can get skin cancer. (TRUE)
 Fact: No one is immune from the dangers of the sun. In fact, skin cancer is rarer but more deadly among darker skinned people.
- 5. Statement: Experiencing five or more sunburns can double your risk of developing skin cancer. (TRUE)

Fact: Experiencing just one bad sunburn as a child or teen doubles your risk of getting melanoma. Five sunburns by *any* age also doubles your chances of developing melanoma.

6. Statement: Two forms of ultraviolet radiation – UVA and UVB – reach the earth and can cause skin cancer. (TRUE)

Fact: UVA penetrates the skin even more deeply than UVB and damages the inner layer of skin. These rays play a major role in skin aging and wrinkling, as well as skin cancer. UVB is a shorter wave that damages the skin's top epidermal layers. UVB rays are chief causes of skin reddening and sunburn and play a key role in the development of skin cancer, as well as a role in skin aging.

- 7. Statement: Though a sunburn is a sign of sun damage, a tan is a sign of health. (FALSE)
 Fact: Both sunburns and suntans are signs that your skin cells have been damaged by the sun. There is no such thing as a "healthy tan." Both sun tans and burns can lead to skin cancer.
- 8. Statement: Sunshine clears up acne. (FALSE) Fact: Sun exposure appears to help acne at first, but in the end it can aggravate it and make it worse. If you use acne medication, be sure to apply sunscreen, wear protective clothing, and seek the shade. Many acne medications make your skin more likely to burn in the sun, which makes you more susceptible to sun damage.



- 9. Statement: "SPF" stands for Sun Protection Factor. (TRUE) Fact: SPF indicates how long it will take for UVB rays to redden skin when using a sunscreen, compared to how long skin would take to redden without the product. For instance, someone using a sunscreen with an SPF of 15 will take 15 times longer to redden than they would without the sunscreen. An SPF 15 sunscreen screens approximately 93 percent of the sun's UVB rays; SPF 30 protects against 97 percent.
- 10. Statement: Tanning beds are safer for you than sunlight. (FALSE)
 Fact: There is no such thing as a safe tan, especially in tanning beds. People using tanning beds may receive as much as 12 times the annual dose of harmful UVA radiation compared to the dose they receive from sun exposure. Using a tanning bed increases your risk of melanoma by 74%.

2) VIDEO SEGMENT #1 - REAL STORY (CHELSEA)

Tell students that you want to show them a real story about someone just out of college who has skin cancer. Project the video on a screen or via your interactive whiteboard.



3) WHAT TO LOOK FOR...

Ask students how many are surprised that this could happen to someone so young. Mention to students that they've learned some facts about skin cancer in this lesson so far and have also heard a personal story from someone who is battling melanoma, the deadliest form of skin cancer. Now tell them that you will show them how to detect various forms of skin cancer.





THE ABCDES OF MELANOMA

Moles, brown spots and growths on the skin are usually harmless — but not always. Anyone who has more than 100 moles or one or more unusual looking or atypical moles is at greater risk for melanoma. That's why it's so important to get to know your skin very well and to recognize any changes in the moles on your body. Look for the **ABCDE** signs of melanoma, and if you see one or more, make an appointment with a dermatologist immediately.

The pictures below show normal moles and melanomas.

	Benign (Normal)	Malignant (Cancerous)	
Symmetrical	C.		ASYMMETRICAL (the two sides do not match)
Border is even		A State of the second	BORDER is uneven
One color	•	The second secon	Two or more COLORS
Smaller than 1/4 inch	0	會會	DIAMETER is larger than 1/4 inch
Ordinary mole		·	EVOLVING or changing in size, shape, color, or another trait





THE UGLY DUCKLING SIGNS

Tell students that while the ABCDE rule helps detect many melanomas; some melanomas do not exhibit the ABCDE features. This method is based on the concept that these melanomas look different – they are "ugly ducklings" – compared to other moles nearby. "Normal" moles resemble each other, like siblings, while a potential melanoma **looks** or **feels** different than the other moles. Melanomas, unlike normal moles, also tend to keep growing and changing.

These three different scenarios depict "ugly duckling" moles that should prompt suspicion. Squares A, B, and C each represent a body area such as the back.



Figure 1. Three Examples of an Ugly Duckling

- In **A**, there is a dominant mole pattern with slight variation in size. The "ugly duckling" is clearly darker and larger than all other moles.
- In **B**, there are two main patterns, one of larger moles and the other of smaller, darker moles. The "ugly duckling" is small but lacks pigmentation/color.
- In **C**, there is only one lesion on the back. If this lesion is changing, causing a problem, or deemed unusual or atypical, see a dermatologist and have this "ugly duckling" examined.

An approach combining the ABCDEs and the "Ugly Duckling" technique should improve the chances of early detection of all types of melanoma and help save lives.

OTHER FORMS OF SKIN CANCER AND PRECANCER

More than 3.5 million new skin cancers in over two million people are diagnosed every year in the U.S. If caught early, almost all are curable.

BASAL CELL CARCINOMA

Basal Cell Carcinoma (BCC) is the most common form of skin cancer. It can be a raised, translucent, pearly nodule, a scar-like area that is white, yellow or waxy, a reddish patch or irritated area, an open sore that bleeds, oozes or crusts and doesn't heal, or a pink growth with a slightly elevated border and a crusted indentation in the center. It is usually caused by both cumulative and intermittent, intense sun exposure or tanning machine exposure.





SQUAMOUS CELL CARCINOMA

Squamous Cell Carcinomas (SCCs) can be seen as scaly red patches, raised growths with a sore in the center, open sores that bleed and crust, or wart-like growths that crust and may bleed. Long-term, cumulative sun exposure is the most common cause. A small percentage become deadly.

ACTINIC KERATOSES

Actinic Keratoses (AKs) are precancers caused by the sun and usually appear as small, crusty or scaly bumps. While most are benign, some can develop into invasive SCCs if left untreated.

4) SUN SMART STEPS HANDOUT AND ANIMATED VIDEO

Tell students that they've learned about skin cancer and how to detect it – so now they'll learn to tools to prevent it. Hand out the Sun Smart Steps one-sheet and play the animated video for the class.

SUN SMART STEPS

- Seek shade Play it safe in the shade whenever possible and avoid midday sun. UV rays are especially strong between 10 AM and 4 PM.
- **Cover up** Make your own shade with a wide-brimmed hat and long-sleeved shirts and long pants such as blue jeans. Baseball caps and visors shade the face but leave the neck, lower face, and ears exposed. A broad-brimmed hat can help prevent skin cancer in those areas.
- **Wear sunglasses** Protect your eyes with UV-blocking sunglasses. Look for a tag that says the lenses block 99% or more UV radiation.
- Learn not to burn! Just one blistering sunburn when you're a child or teen more than doubles your risk of developing melanoma (the deadliest form of skin cancer) later in life. Using sun protection every day may be the smartest thing you can do for yourself!
- Use sunscreen every day UV rays are strongest during summer, but they can cause damage year-round. Use 2 tablespoons of a broad-spectrum (UVA/UVB) sunscreen with an SPF of 15 or higher every day—in every season—no matter what your skin color. For extended outdoor activity, use a water-resistant, broad-spectrum sunscreen with an SPF of 30 or higher. Be sure to reapply every 2 hours or after swimming or sweating.
- **Don't use tanning beds** Indoor tanning poses an equally great or even greater risk of causing skin cancer than sun exposure.
- **Get checked!** See a dermatologist every year for a professional skin exam, and sooner if you find a suspicious mole.

Ask students where they think the concept of tanning comes from. Why do people tan? Why do people use tanning beds? Do you think most celebrities really tan? (*This provides a segue to the next video.*)

5) GO WITH YOUR OWN GLOW

Show "Go With Your Own Glow" video with Chelsea speaking about real beauty.





6) EVALUATION PROJECT

Hand out the Skin Type Quiz to each student for them to fill out independently. This will help each student be able to understand their own skin and how the information they've learned in the lesson can be applied to his/her habits and sun safety procedures.

Who's your Celebrity Skin Twin? After students fill out the Skin Type Quiz, project images of celebrities according to skin type, so the students can see who they resemble. Reveal one skin type at a time with one female celeb and one male celeb per skin type.

Ask the students to write a paragraph or two. "Now that you know your own skin type, how are you going to protect your skin?"

EVALUATION RUBRIC

How well did your students comprehend the lesson and understand their own skin type in relation to the Sun Smart Steps?

Use the rubric below to rate each student's essay and class participation on a scale of 1 to 10.

Maximum score is 100. Minimum score is 5.

CRITERIA											
Shows basic understanding of UV radiation and		very poor		poor		average		excellent		ent	
how it affects the skin	1	2	З	4	5	6	7	8	9	10	
Shows understanding of various forms of skin	very poor		poor		average		excellent		ent		
cancer and how to detect it	1	2	З	4	5	6	7	8	9	10	
Showe understanding of own skin type	very poor		poor		average		excellent		ent		
Shows understanding of own skin type	1	2	З	4	5	6	7	8	9	10	
Shows understanding of how to protect himself/		very poor		poor		average		excellent		ent	
herself from UV radiation exposure	1	2	З	4	5	6	7	8	9	10	
Shows understanding of Sun Smart Stops	very poor		poor		average		excellent				
Shows understanding of Sun Smart Steps	1	2	З	4	5	6	7	8	9	10	
Total Raw Score											
Multiply Total Raw Score by 2 to determine											
Total Score											



7) LIVE SMART – VIDEO SEGMENT #3 REAL STORY CONCLUSION (CHELSEA)

Project final video segment of Chelsea for students to view.

8) TAKE-HOME ACTIVITY: SKIN TYPE QUIZ & SUN SMART STEPS (not to be graded)

Give students the Skin Type Quiz to bring home to their family members to take. Also, give student the

Sun Smart Steps handout to bring home to their families, so they will know how to protect themselves from the sun.

Sun Smart U Interactive Whiteboard elements have been developed and provided as a generous gift from Saferock Education. <u>www.saferockeducation.com</u>

> 1.877.753.7300 info@saferock.com



RAYS AWARENESS

THE ABCDES OF MELANOMA

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The pictures below show normal moles and melanomas.

	Benign (Normal)	Malignant (Cancerous)	
Symmetrical	e.		ASYMMETRICAL (the two sides do not match)
Border is even		A Company	BORDER is uneven
One color	0		Two or more COLORS
Smaller than 1/4 inch	0		DIAMETER is larger than 1/4 inch
Ordinary mole			EVOLVING or changing in size, shape, color, or another trait



SUN SMART STEPS

- **Seek shade** Play it safe in the shade whenever possible and avoid midday sun. UV rays are especially strong between 10 AM and 4 PM.
- **Cover up** Make your own shade with a wide-brimmed hat and long-sleeved shirts and long pants such as blue jeans. Baseball caps and visors shade the face but leave the neck, lower face, and ears exposed. A broad-brimmed hat can help prevent skin cancer in those areas.
- **Wear sunglasses** Protect your eyes with UV-blocking sunglasses. Look for a tag that says the lenses block 99% or more UV radiation.
- Learn not to burn! Just one blistering sunburn when you're a child or teen more than doubles your risk of developing melanoma (the deadliest form of skin cancer) later in life. Using sun protection every day may be the smartest thing you can do for yourself!
- Use sunscreen every day UV rays are strongest during summer, but they can cause damage year-round. Use 2 tablespoons of a broad-spectrum (UVA/UVB) sunscreen with an SPF of 15 or higher every day—in every season—no matter what your skin color. For extended outdoor activity, use a water-resistant, broad-spectrum sunscreen with an SPF of 30 or higher. Be sure to reapply every 2 hours or after swimming or sweating.
- **Don't use tanning beds** Indoor tanning poses an equally great or even greater risk of causing skin cancer than sun exposure.
- **Get checked!** See a dermatologist every year for a professional skin exam, and sooner if you find a suspicious mole.



SKIN TYPE QUIZ

Different skin types react differently to the sun and have different levels of skin cancer risk. Your skin type can be identified by looking at your genetic disposition and your typical reaction to sun exposure. Thomas Fitzpatrick, MD, of Harvard Medical School, developed a simple quiz to help people identify their skin type and the associated skin cancer risks. Knowing your skin type can help you know how to best protect yourself.

Please circle your answer to each of the following questions. Tally your scores for genetic disposition and for reaction to sun exposure. Then, combine those scores to calculate your Skin Type Score and your Fitzpatrick Skin Type.

PART I: GENETIC DISPOSITION

(circle your answer)

	Light blue, light gray, or light green	0		
	Blue, gray, or green	1		
Your eye color is:	Hazel or light brown	2		
	Dark brown	3		
	Brownish black	4		
	Red or light blonde	0		
	Blonde	1		
Your natural hair color is:	Dark blonde or light brown	2		
	Dark brown	3		
	Black	4		
	Ivory white	0		
	Fair or pale	1		
Your natural skin color (before sun	Fair to beige, with golden undertone	2		
exposure/ is.	Olive or light brown	3		
	Dark brown	4		
	Many	0		
	Several	1		
How many freckles to you have on	A few	2		
unexposed areas or your skin?	Very few	3		
	None	4		
TOTAL SCORE FOR GENETIC DISPOSITION:				





ADD UP YOUR GENETIC DISPOSITION AND SUN EXPOSURE TOTALS TO FIND YOUR SKIN TYPE SCORE AND YOUR FITZPATRICK SKIN TYPE:

TOTAL SCORE		FITZPATRICK SKIN TYPE
0–6	I	Pale, porcelain, ivory—that's you. Your hair tends to be reddish or blonde, and you may have light eyes. You always burn in the sun, never tan, and you are extremely susceptible to skin damage as well as cancers like basal cell carcinoma and squamous cell carcinoma. You are also at very high risk for melanoma, the deadliest type of skin cancer. Generally, follow the Sun Smart Steps. Use a broad spectrum (UVA/UVB) sunscreen with an SPF of 30+ and clothing with an ultraviolet protection factor (UPF) rating of 30 or higher. Seek the shade whenever you are out in the sun. Check your skin head-to-toe each month, paying careful attention to any suspicious growths, and make sure you have an annual professional skin checkup.
7–12	II	You're fair-skinned and may have green, blue, or hazel eyes. You almost always burn and rarely tan in the sun and are highly susceptible to skin damage, as well as both non- melanoma and melanoma skin cancers. Generally, follow the Sun Smart Steps. Use a broad spectrum sunscreen with an SPF of 30+ and clothing with an ultraviolet protection factor (UPF) rating of 30 or higher. Seek the shade whenever you are out in the sun. Check your skin head-to-toe each month, paying careful attention to any suspicious growths, and make sure you have an annual professional skin checkup.
13–18	III	You have light-to-medium skin, which may look peachy or beige. You sometimes burn and sometimes tan in the sun. You are susceptible to skin damage as well as both non- melanoma and melanoma skin cancers. Be sure to apply a sunscreen with an SPF of at least 15 or higher every day and for extended outdoor activity, use a water-resistant, broad spectrum sunscreen with an SPF of 30 or higher. Also wear sun-protective clothing and seek the shade between 10 AM and 4 PM, when the sun is strongest. Follow all other Sun Smart Steps as well. Check your skin head-to-toe each month, paying careful attention to any suspicious growths, and make sure you have an annual professional skin checkup.
19–24	IV	Your skin is golden- or olive-hued. You tend to have dark eyes, tan easily, and are less likely to burn. Nevertheless, you still need to protect yourself from the sun's harmful ultraviolet (UV) radiation. Use a broad spectrum sunscreen with an SPF of 15 or higher outside, a water-resistant, broad spectrum sunscreen with an SPF of 30 or higher for extended outdoor activity, and seek the shade between 10 AM and 4 PM. Follow all other Sun Smart Steps as well. Check your skin head-to-toe each month, paying careful attention to any suspicious growths, and make sure you have an annual professional skin checkup.



PART II: REACTION TO EXTENDED SUN EXPOSURE

(circle your answer)

	Always burns, blisters, and peels	0		
	Often burns, blisters, and peels	1		
How does your skin respond to the	Burns moderately	2		
Suite	Burns rarely, if at all	3		
	Never burns	4		
	Never—I always burn	0		
	Seldom	1		
Does your skin tan?	Sometimes	2		
	Often	3		
	Always	4		
	Not at all or very little	0		
	Lightly	1		
How deeply do you tan?	Moderately	2		
	Deeply	3		
	My skin is naturally dark	4		
	Very sensitive	0		
	Sensitive	1		
How sensitive is your face to the sun?	Normal	2		
	Resistant	3		
	Very resistant/never had a problem	4		
TOTAL SCORE FOR REACTION TO SUN EXPOSURE:				



25–30	V	You have dark hair and eyes, and your skin tone ranges from bronze to brown. Though you tan easily and rarely burn, you should still be cautious. Use a broad spectrum sunscreen with an SPF of 15 or higher, a water-resistant, broad spectrum sunscreen with an SPF of 30 or higher for extended outdoor activity, and seek the shade between 10 AM and 4 PM. Acral lentiginous melanoma, a very virulent form of the potentially deadly disease melanoma, is more common among darker-skinned people. These melanomas tend to appear on parts of the body not often exposed to the sun and often remain undetected until after the cancer has spread. Check your skin head-to-toe each month, paying careful attention to any suspicious growths, and make sure you have an annual professional skin checkup. The dermatologist should check for any suspicious growths, especially on the palms, soles of the feet, and mucous membranes such as inside your mouth, nose, eyes, and unexposed areas.
31+	VI	Your skin tone ranges from deep mahogany to ebony, and you have dark eyes. Although your skin does not burn, you should still follow sun safety precautions. Acral lentiginous melanoma, a very virulent form of the potentially deadly disease melanoma, is more common among darker-skinned people. These melanomas tend to appear on parts of the body not often exposed to the sun and often remain undetected until after the cancer has spread. You should wear sunscreen with an SPF of 15 or higher, a water-resistant, broad spectrum sunscreen with an SPF of 30 or higher for extended outdoor activity, and seek the shade between 10 AM and 4 PM. Check your skin head-to-toe each month, paying careful attention to any suspicious growths, and make sure you have an annual professional skin checkup. The dermatologist should check for any suspicious growths, especially on the palms, soles of the feet and mucous membranes such as inside your mouth, nose, eyes, and unexposed areas.

This skin type quiz is for informational purposes only. The content is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health providers with any questions you may have regarding a medical condition.



EVALUATION PROJECT

Hand out the Skin Type Quiz to each student for them to fill out independently. This will help each student be able to understand their own skin and how the information they've learned in the lesson can be applied to his/her habits and sun safety procedures.

Who's your Celebrity Skin Twin? After students fill out the Skin Type Quiz, project images of celebrities according to skin type, so the students can see who they resemble. Reveal one skin type at a time with one female celeb and one male celeb per skin type.

Ask the students to write a paragraph or two. "Now that you know your own skin type, how are you going to protect your skin?"

EVALUATION RUBRIC

How well did your students comprehend the lesson and understand their own skin type in relation to the Sun Smart Steps?

Use the rubric below to rate each student's essay and class participation on a scale of 1 to 10.

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Total Raw Score											
Multiply Total Raw Score by 2 to determine											
Total Score											



SUN SMART U TEACHER NOTES



True or False Activity

Begin class by quizzing students on skin cancer. Use this activity to gauge your students' knowledge of skin cancer and reveal any misconceptions they may have. Read each statement on the quiz. After each statement, tell students, "Raise your hand if you think this statement is true." Then ask students to raise their hands if they think the statement is false. Note the class majority's response. After the show of hands, read the correct response. Continue to quiz students with each true or false statement.

Video Segment #1 Real Story:Chelsea

Tell students that you want to show them a real story about someone just out of college who has skin cancer. Project the video on a screen or via your interactive whiteboard.

The ABCDEs of Melanoma What to look for...

Ask students how many are surprised that this could happen to someone so young. Mention to students that they've learned some facts about skin cancer in this lesson so far and have also heard a personal story from someone who is battling melanoma, the deadliest form of skin cancer. Now tell them that you will show them how to detect various forms of skin cancer.

The Ugly Duckling Signs

Tell students that while the ABCDE rule helps detect many melanomas; some melanomas do not exhibit the ABCDE features. This method is based on the concept that these melanomas look different – they are "ugly ducklings" – compared to other moles nearby. "Normal" moles resemble each other, like siblings, while a potential melanoma looks or feels different than the other moles. Melanomas, unlike normal moles, also tend to keep growing and changing.

Sun Smart Steps–Prevention

Tell students that they've learned about skin cancer and how to detect it - so now they'll learn the tools to prevent it.

Sun Smart Steps–Tanning

Ask students where they think the concept of tanning comes from. Why do people tan? Do you think most celebrities really tan? Why do people use tanning beds? (This provides a segue to the next video.)

Video Segment #2

Show "Go With Your Own Glow" video with Chelsea speaking about real beauty. After viewing the video, hand out the Skin Type Ouiz to each student for them to fill out independently. This will help each student be able to understand their own skin and how the information they've learned in the lesson can be applied to his/her habits and sun safety procedures.

Celebrity Skin Type

Who's your Celebrity Skin Twin? After students fill out the Skin Type Ouiz, project images of celebrities according to skin type, so the students can see who they resemble. Reveal one skin type at a time with one female celeb and one male celeb per skin type.

Video Segment #3

Project final video segment of Chelsea for students to view. Ask the students to write a paragraph or two. "Now that you know your own skin type, how are you going to protect your skin?" How well did your students comprehend the lesson and understand their own skin type in relation to the Sun Smart Steps? Use the program rubric to rate each student's essay and class participation.

Take-Home Activity: Skin Type Quiz & Sun Smart Steps (not to be graded)

Give students the Skin Type Ouiz to bring home to their family members to take. Also, give students the Sun Smart Steps handout to bring home to their families, so they will know how to protect themselves from the sun.

