

A graphic banner with a light blue background and a grid pattern. On the left, there is a stylized blue icon of a person's back with a large 'T' shape over it. To the right of the icon, the text 'LESSON PLAN' is written in large, bold, blue capital letters. Below that, 'FDA & YOU - ISSUE 7' is written in a slightly smaller, bold, blue font. The background of the banner features faint, light blue illustrations of various items like a pencil, a ruler, and a book.

LESSON PLAN

FDA & YOU - ISSUE 7

***The Truth About Tanning:
What You Need to Know to Protect Your Skin***

Lesson Plan for Grades 10-12

Adaptable for Grades 6-9

Note: This lesson plan is intended to be used as a guide in planning a classroom activity on the risks associated with tanning and UV exposure. This is a supplement to *FDA & YOU* issue 7, available at <http://www.fda.gov/cdrh/fdaandyou>.

Goals

The goal of this lesson plan is to help students understand the risks associated with tanning and UV exposure. The lesson will also explain the various tanning products available and the risks associated with each.

Objectives

1. Students will have a better understanding of the risks associated with tanning and tanning products.
2. Students will have a better understanding of illnesses associated with UV exposure.
3. Students will have a better understanding of how to protect their skin from the sun and tanning products.

Prerequisites

- Prior to beginning the lesson students should read *FDA & YOU* issue 7 on tanning.
- Students should have a basic understanding of tanning and the skin.
- Decide ahead of time which topics you want groups of students to cover for poster presentation project.

Materials

1. *FDA & YOU* issue 7
2. Poster Project Worksheet
3. Review Worksheets

Lesson Procedure

1. At the end of class the day prior to this lesson, ask students what they know about tanning and skin protection. Make a list of the students' responses on the chalk board, an overhead, or paper.
2. Pass out the review worksheets.
3. For homework have students read *FDA & YOU* issue 7 and complete the review worksheets.
4. The next day, return to the list made the previous day about tanning and skin protection. Ask students if there is anything not on the list that they learned from the reading about these topics.

5. Have a general discussion with students regarding the risks associated with tanning. Included in this class discussion should be specific information regarding the skin diseases associated with UV exposure.
6. Divide the class into groups of 3-4 and assign each a different topic related to issue 7 to prepare a 5 minute presentation. Topics could include:
 - Skin Cancer
 - Sunburn
 - Sunscreen
 - Sunless Tanning
 - Tanning Pills
 - Tanning Salons
 - UV Rays
7. Give students specific instructions on how each group should complete the project and your expectations for the final product. You can use the poster project worksheet with this lesson plan if desired.
8. Give students the remainder of the class period to work on their group presentations.
9. Assign the groups to complete their presentations as homework and assign a date for the groups to present. Usually no longer than one week should be required to complete this project.
10. Allow one class period for groups to give a poster presentation on their assigned topic.
11. After all groups have presented, review any material regarding tanning, UV exposure and skin protection that you feel was not covered.

Closure/Conclusion

As a homework assignment have students write a one-page paper on the scenario below. You can also include questions in the next classroom quiz/test that address topics covered in this lesson.

Your sister is getting married next summer. Her friends have told her that her wedding dress will look better on her if she has a tan. Based on your knowledge of tanning and UV exposure, evaluate the pros and cons of her options for receiving a tan for her wedding day.



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Review Worksheets

TRUE OR FALSE

Directions: *Read each statement below and determine whether it is true or false. If it is false, underline the incorrect part and correct it.*

- _____ 1. A tan is just a healthy glow, and does not cause skin damage.
- _____ 2. Ultraviolet light, like UVA and UVB, is classified by wavelength.
- _____ 3. The lower layer of your skin is called the epidermis.
- _____ 4. The minimum recommended SPF for sunscreen is 2.
- _____ 5. Erythema is another name for sunburn.
- _____ 6. You can see sunburn right away, so you'll always know when it's time to go inside.
- _____ 7. Severe sunburn can be treated with cool baths, over-the-counter creams, and aspirin.
- _____ 8. UV rays cause obvious short-term damage, such as sunburn or a tan, as well as long-term damage that accumulates with each exposure.
- _____ 9. Wearing sunscreen alone will protect you from skin cancer.
- _____ 10. Artificial tanning, using tanning lamps and pills, is safer than sitting in the sun.
- _____ 11. Tanning pills are approved by the FDA.
- _____ 12. All self tanners have sunscreen in them to give your skin an extra layer of protection.



FILL IN THE BLANK

Directions: Using the words from the word bank, fill in each blank space with the appropriate word. Each word will only be used once.

Word Bank:	skin tone	epidermis	itch
	melanoma	moles	UVI
	freckles	sun	ten
	peel	four	protection
	goggles	DHA	factor

1. UVB rays have a short wavelength that reaches the _____, or outer layer of skin.
2. _____ is a number from 1-11 that indicates the amount of skin-damaging UV rays reaching the earth's surface at any point in time.
3. The process of removing damaged cells can cause the skin to _____ and _____.
4. _____ is the least-common, but most dangerous form of skin cancer.
5. Everyone, no matter their _____ is at risk of skin damage.
6. _____ or _____ that change shape, color, or texture could be a sign of skin cancer.
7. The sun's rays are strongest from _____ a.m. until _____ p.m.
8. All sunscreens are labeled with an SPF, or _____.
9. Protective _____, specifically designed for tanning booths should always be worn when tanning at a salon.
10. _____ should not be inhaled, ingested, or used in such a way that the eyes and eye area are exposed to it because the risks, if any, are unknown.



WORD FIND

Directions: Find the words hidden in the word find, circle your answer.

<p>S M W B W R E A G M T Z I P Q Z K R S E U U N F T Q J A N T Q H I C U V O P V A U X Z H B B U N N B N U S J R B S C C E N A O E Q Y G Y N L V O R Q N C J E N P W B L O A S G T S E A R T I F I C I A L T A N E E S I M R E D I P E S N Q V L R E C E X T V J I S N S J S F C L U L P I L L S I N U E L T S G V A V P P C N Y D N X S A N G A N B L S G G K G J C O N U O M O C Z B N R U B N U S N S G W M K E R A T O S I S R E H E M A D V H C D Q R N A T R L</p>	<p><u>WORDS</u> ARTIFICIAL TAN CANCER EPIDERMIS GOGGLES KERATOSIS MELANOMA PILLS SELF TANNER SKIN SUN SUNBURN SUNGLASSES SUNSCREEN TAN TANNING BED UVA UVB</p>
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*The Truth About Tanning:
What You Need to Know to Protect Your Skin*

Answer Key

TRUE OR FALSE

- F** 1. A tan is ~~just~~ a healthy glow, and does ~~not~~ cause skin damage.
A: A tan is NOT a healthy glow, and DOES cause skin damage.
- T** 2. Ultraviolet light, like UVA and UVB, is classified by wavelength.
- F** 3. The lower layer of your skin is called the ~~epidermis~~.
A: The lower layer of your skin is called the DERMIS
- F** 4. The minimum recommended SPF for sunscreen is ~~2~~.
A: The recommended SPF for sunscreen is 15.
- T** 5. Erythema is another name for sunburn.
- F** 6. You can see sunburn ~~right away, so you'll always know when it's time to go inside~~.
A: You can NOT see sunburn UNTIL SEVERAL HOURS AFTER EXPOSURE.
- F** 7. ~~Severe~~ sunburn can be treated with cool baths, over-the-counter creams, and aspirin.
A: MILD sunburn can be treated with cool baths, over-the counter creams, and aspirin.
Or
A: Severe sunburn must be treated by a doctor.
- T** 8. UV rays cause obvious short-term damage, such as sunburn or a tan, as well as long-term damage that accumulates with each exposure.
- F** 9. Wearing sunscreen alone ~~will~~ protect you from skin cancer.
A: Wearing sunscreen alone WILL NOT protect you from skin cancer. Using sunscreen, a hat and sunglasses, and avoiding peak sun hours can help decrease your risk for skin cancer.

 ANSWER KEY

- F** 10. Artificial tanning, by using tanning lamps or pills, ~~is~~ safer than sitting in the sun.
A: Artificial tanning is NOT safer than sitting in the sun.
- F** 11. Tanning pills ~~are~~ approved by the FDA.
A: Tanning pills ARE NOT approved by the FDA.
- F** 12. ~~All Self tanners have sunscreen in them to give your skin an extra layer of protection.~~
A: MANY Self tanners DO NOT have sunscreen in them, and do not protect against UV rays.

FILL IN THE BLANK

1. epidermis
2. UVI
3. itch and peel or peel and itch
4. melanoma
5. skin tone
6. moles and freckles or freckles and moles
7. ten, four
8. sun protection factor
9. goggles
10. DHA

WORD FIND

S M W B W **R** E A G M T Z I P Q
 Z **K** R **S** E U **U** N F T Q J A N T
 Q H **I** C U **V** O P V A U X Z H B
 B U N N **B** N U S J R B S C C E
 N **A** O E Q Y **G** Y N L V O R Q N
C J E N P W B L O A S G T **S** E
 A R T I F I C I A L T A N E E
 S I M R E D I P E S N Q V L R
 E C E X T V J I S N S J S F C
 L U L P I L L S I N U E L T S
 G V A V P P C N Y D N X S A N
 G A N B L S G G K G J C O N U
 O M O C Z B N R U B N U S N S
 G W M K E R A T O S I S R E H
 E M A D V H C D Q R N A T R L

WORDS

ARTIFICIAL TAN
 CANCER
 EPIDERMIS
 GOGGLES
 KERATOSIS
 MELANOMA
 PILLS
 SELF TANNER
 SKIN
 SUN
 SUNBURN
 SUNGLASSES
 SUNSCREEN
 TAN
 TANNING BED
 UVA
 UVB