

# **Grade 5 Sample Lesson Plan Summative Sun Safety**

#### **Objectives/Goals**

- Examine ultraviolet radiation and effects on the skin
- Examine the health risks associated with unprotected sun exposure.
- Determine strategies to protect against the harmful effects of the sun

#### Vocabulary

- <u>Ultraviolet A Rays</u>- UVA penetrates the skin more deeply than UVB and plays a major part in skin aging and wrinkling. Tanning booths primarily emit UVA and emit doses of UVA 12 times that of the sun.
- <u>Ultraviolet B Rays</u>- UVB rays have slightly more energy than UVA rays. They damage the DNA in skin cells directly, and are the main rays that cause sunburns. They are also thought to cause most skin cancers. https://www.skincancer.org/prevention/uva-and-uvb
- <u>Epidermis</u>—New skin cells are made here. It is also where melanin is made. Melanin is what gives skin its color.
- <u>Dermis</u>—It has nerves that help you feel sensations. It's also where sweat, oil, and goose bumps are made. It helps bring blood to your skin. It is also where hairs start.
- <u>Subcutaneous</u>—It connects the dermis to your muscles and bones and stores fat to help protect
  them from bumps and falls. It helps your blood vessels and nerve cells reach the rest of your
  body. This layer helps keep your body from getting too hot or cold.\_
  <a href="http://www.scholastic.com/sunsafety/pdfs/teacherguide.pdf">http://www.scholastic.com/sunsafety/pdfs/teacherguide.pdf</a>
- <u>Melanin</u> is a chemical in the skin that protects it from sun damage by reflecting and absorbing UV rays. <a href="https://kidshealth.org/en/kids/summer-safety.html?WT.ac=ctg#catout">https://kidshealth.org/en/kids/summer-safety.html?WT.ac=ctg#catout</a>

#### **Materials**

- Pre/Post-Test on Sun Safety
- Prompt
- Rubric

#### Health Smart Virginia Lesson Plan

#### **Steps**

- Review the formative lesson by asking the sun safety pre/post test questions.
- Divide the class into groups of three. Provide props: wide brim hats, sunscreen, glasses, sun safe clothing
- Distribute the prompt
- As the students design and practice their role play, formatively assess.
  - o 5.1.b- Examine the health risks associated with unprotected sun exposure.
  - o 5.2.a- Determine strategies to protect against the harmful effects of the sun.
- Pick names from a hat for groups to perform.
- Use the analytical rubric to summatively assess.
- End of class review includes the content and skill taught.

#### **Assessment Idea**

- Prompt
- Analytical rubric

#### References

- <a href="https://kidshealth.org/en/kids/summer-safety.html?WT.ac=ctg#catout">https://kidshealth.org/en/kids/summer-safety.html?WT.ac=ctg#catout</a>
- <a href="http://www.scholastic.com/sunsafety/pdfs/teacherguide.pdf">http://www.scholastic.com/sunsafety/pdfs/teacherguide.pdf</a>
- https://www.skincancer.org/prevention/uva-and-uvb

#### **Handout**

- Post-test, What do you know about sun safety?
- Self-check for the summative assessment

## What do you now know about sun safety?

Question	True	False
1. A baseball cap is more protective than a wide-brimmed hat.		
2. You can be sunburned in the winter.		
3. The sun's rays are strongest between 6 a.m. and 10 a.m. every day.		
4. When you are in the shade, you are always protected from the sun's rays.		
5. All sunglasses protect your eyes against the sun's rays.		
6. Sunscreen is not needed on cloudy days.		
7. The sun's rays are most harmful when your shadow is shorter than you are.		
8. You do not ever need to reapply sunscreen when you are outside.		
http://www.scholastic.com/sunsafety/pdfs/teacherguide.pdf	•	

## **Prompt**

19



### **Prompt**

Cara invited Carly and Simon to the beach with her family. They arrived at noon. There is a volleyball net and swings on the play ground. When they got there, they set up their blanket and picnic basket under a big, shady tree.

All three friends love to be active and swim. Cara and Simon followed the sun safety rules of Cara's family (sunscreen, hats, sunglasses) but Carly didn't want to. She never gets a sunburn so is not worried.

Your challenge role play is to convince Carly to use sun safety by explaining

- 1. Two risks of unprotected sun exposure
- 2. Seven sun safety strategies to use to protect herself from the UVA and UVB rays.









ı

ROTECT YOURSELF IN FIVE WAYS FROM SKIN CANCER

## Summative Assessment Self-Check



Sun Safety Strategy	Complete
Health risks of unprotected sun exposure	
<ul><li>Sunburn</li></ul>	
<ul> <li>Skin damage</li> </ul>	
Sun safety strategies	
<ul> <li>Limit time in the sun between 10:00</li> </ul>	
A.M. and 4:00 P.M.	
<ul> <li>Wear sunscreen that has a 30+ SPF</li> </ul>	
<ul> <li>Take breaks from the sun</li> </ul>	
<ul> <li>Apply sunscreen 15-20 minutes before</li> </ul>	
going out into the sun	
<ul> <li>Apply sunscreen every 2 hours</li> </ul>	
<ul> <li>Apply sunscreen to tops of ears, back</li> </ul>	
of the neck, part in the hair, face,	
tops of feet.	
<ul> <li>Wear clothing that blocks the sun's</li> </ul>	
rays.	
<ul> <li>Wear a wide brim hat.</li> </ul>	
<ul> <li>Wear sunglasses with UV protection</li> </ul>	

## Analytical Rubric

Standard	4	3	2	1	0
		Standards	Critoria		
5.1.b- Examine the health risks associated with unprotected sun exposure.	The examination of the two health risks associated with unprotected sun exposure are accurate.	The examination of the two health risks associated with unprotected sun exposure are mostly accurate.	The examination of the two health risks associated with unprotected sun exposure have some accuracies.	The examination of the two health risks associated with unprotected sun exposure are inaccurate.	Not enough evidence to score
5.2.a- Determine strategies to protect against the harmful effects of the sun.	The explanation of the seven strategies to protect against the harmful effects of the sun were accurate.	The explanation of the seven strategies to protect against the harmful effects of the sun were mostly accurate.	The explanation of the seven strategies to protect against the harmful effects of the sun have some accuracies.	The explanation of the seven strategies to protect against the harmful effects of the sun were inaccurate.	Not enough evidence to score
		Non-Standa	rds Criteria		
Criteria				Acceptable	Not acceptable
Collaboration					
Effective use of pr	ops				

Standards score
Non-standards score (% of standards)
Final score
Comments: