Sun Safety Reading Comprehension

We all need some sun exposure - it's the top source of Vitamin D, which helps our bodies absorb calcium for stronger, healthier bones.

However, repeated, unprotected exposure to the sun's ultraviolet (UV) rays can cause skin damage, eye damage and skin cancer.

Most children get much of their lifetime sun exposure before age 18, so it's important for parents to teach them how to enjoy fun in the sun safely.



Taking the right precautions is very important when protecting your skin.

Sun Exposure

The sun radiates light to the earth, and part of that light consists of invisible UV rays. When these rays reach the skin, they cause tanning, burning, and other skin damage. Sunlight contains three types of ultraviolet rays: **UVA**, **UVB** and **UVC**:

- UVA rays cause skin aging and contribute to skin cancer. Because UVA rays pass effortlessly through the ozone layer (the protective layer of the atmosphere, or shield, surrounding the earth), they make up the majority of our sun exposure.
- **UVB** rays are also dangerous, causing sunburns and eye damage (cataracts). They also contribute to skin cancer. Melanoma, the most dangerous form of skin cancer, is associated with severe UVB sunburns that occur before the age of 20. Most UVB rays are absorbed by the ozone layer, but enough of these rays pass through to cause serious damage.
- **UVC** rays are the most dangerous, but fortunately, these are blocked by the ozone layer and don't reach the earth.







Melanin: The Body's First Line of Defense

UV rays react with a chemical called melanin that's found in skin. Melanin absorbs dangerous UV rays before they cause skin damage. The lighter someone's natural skin colour, the less melanin it has and the darker a person's natural skin colour, the more melanin it has to protect itself.

As the melanin increases in response to sun exposure, the skin tans. Those who are regularly exposed to the sun are at a much greater risk. Sunburn develops when the amount of UV exposure is greater than what can be protected against by the skin's melanin.

Avoid the Strongest Rays of the Day

Seek shade when the sun is at its strongest (usually from 10am to 4pm). If you are in the sun during this time, be sure to apply and reapply sunscreen. Most sun damage occurs as a result of incidental exposure during day-to-day activities, not sunbathing! Even on cloudy, cool or overcast days, UV rays travel through the clouds. Clouds don't filter out UV rays and this 'invisible sun' can cause unexpected sunburn and skin damage. People are often unaware that they're developing sunburn on cooler or windy days because the temperature or breeze keeps skin feeling cool.

Cover Up	Use Sunscreen	Use Protective Eyewear
One of the best ways to protect yourself from the sun is to cover up and shield skin from UV rays. Be sure that clothes will screen out harmful UV rays by placing your hand inside the garments and making sure you can't see it through them. Babies under 6 months should be kept out of the sun.	 Select an SPF of 30 or higher to prevent sunburn and tanning, both of which are signs of skin damage. Choose a sunscreen that protects against UVA and UVB rays. For sunscreen to do its job, it must be applied correctly. So be sure to: Apply sunscreen whenever you are in the sun and reapply often (every 2 hours). Apply a water-resistant sunscreen around water or when swimming. 	Sun exposure damages the eyes as well as the skin. The best way to protect eyes is to wear sunglasses. Not all sunglasses provide the same level of ultraviolet protection; Purchase sunglasses with labels ensuring that they provide 100% UV protection.





Sun Safety Questions

- 1. How does Vitamin D help our bodies?
- 2. What are the three types of ultraviolet rays which radiate from the sun? Which is the least dangerous and which is the most dangerous?
- 3. How does the ozone layer work to protect us from the sun's rays?
- 4. How does melanin protect the skin?
- 5. Why does sunburn happen?
- 6. When is the sun at its strongest?
- 7. True or false: Clouds filter out UV rays.
- 8. What is meant by 'invisible sun'?
- 9. What precautions should parents of babies take?
- 10. Why is it important to reduce 'tanning'?
- 11. True or false: Sunscreen should protect against UVC rays.
- 12. What should you look for when purchasing sunglasses?





Answers

1. How does Vitamin D help our bodies?

Vitamin D helps our bodies by absorbing calcium for stronger, healthier bones.

2. What are the three types of ultraviolet rays which radiate from the sun? Which is the least dangerous and which is the most dangerous?

UVA, UVB, UVC. UVA are the least dangerous to humans. UVC rays are the most dangerous to humans.

3. How does the ozone layer work to protect us from the sun's rays?

It protects us completely from UVC rays and from some UVB rays.

4. How does melanin protect the skin?

Melanin absorbs dangerous UV rays before they cause skin damage.

5. Why does sunburn happen?

Sunburn develops when the amount of UV exposure is greater than what can be protected against by the skin's melanin.

6. When is the sun at its strongest?

Usually from 10am to 4pm.

7. True or false: Clouds filter out UV rays.

False

8. What is meant by 'invisible sun'?

Even on cloudy, cool or overcast days, UV rays travel through the clouds.

9. What precautions should parents of babies take?

Babies under 6 months should be kept out of the sun.

10. Why is it important to reduce 'tanning'?

As the melanin increases in response to sun exposure, the skin tans.

11. True or false: Sunscreen should protect against UVC rays.

False

12. What should you look for when purchasing sunglasses?

Purchase sunglasses with labels ensuring that they provide 100% UV protection.



