



Learning to pay attention to things like putting on sunscreen before going outside to work or play, or keeping hydrated on hot, humid days will help children become self-sufficient so they will make smart, safe and healthy decisions.

Materials

- Black construction paper (1-2 pieces per child)
- Several bottles of sunscreen (various SPF's)
- and wipes (e.g. baby wipes)

We all love to be in the sunshine, feel the warming rays of the morning sun, run through the warm grass but we should always remember to “have fun in the sun but not get overdone!” Sunburn can happen within 15 minutes of being in the sun, so protecting yourself from getting sunburn is really important. Not only is sunburn painful, it's also unhealthy.

Ask the children if anyone has ever had sunburn? Can they describe how it felt?

Ask for a show of hands – how many students like to wear sunscreen? How many know how sunscreen works?

Sunscreen contains several ingredients that absorb visible ultraviolet (UV) rays to reduce the amount that reaches the skin.

We can all agree that putting on sunscreen is not the most exciting thing to do but it's an important precaution to take when you are going to be outside in the sun. Let's find out what happens when sunscreen is used and when it's not.

Sunscreen vs No Sunscreen

Ask for 2 volunteers; have one volunteer hand out a single piece of black construction paper to each child. Ask the children to fold the paper in half. Have the other volunteer dispense 3-4 small drops of sunscreen on one side of the folded paper.

Let the children spread the sunscreen over ONE side of the paper. Once done have them write their name on the other side of the paper and then lay the paper near a window – make sure the sun is directly on the paper.

As long as the sun is shining on the paper you will start to see results within 15-20 minutes.

Ask the children – do you know what SPF means?

Sun Protection Factor. It's *not the amount* of protection against ultraviolet B (shortwave) rays, rather it's how long it will take for UVB rays to redden skin when using sunscreen, compared to how long skin would take to redden without sunscreen. For instance, if someone is using sunscreen with an SPF of 15 it will take 15 times longer to redden than without sunscreen.

And SPF 15 sunscreen screens out 93 percent of the sun's UVB rays; SPF 30 protects against 97 percent; and SPF 50 protects against 98 percent.

While you are waiting for results, challenge children to play a game of Sunscreen Logic. Have them identify parts of the body that need sunscreen. They can either point to the body part or shout it out.

- Face, nose, lips, neck, arms, legs, feet, toes, ears, shoulders

Get creative and have some fun by having the children point to distinct areas you shout out.

- Belly, elbows, wrists, thumbs, chin, cheeks, behind ears, ankles, knees

Ask the children if there are other ways to protect against sunburns.

- Wear protective clothing like sunglasses, hats, long sleeves.
- Get in the shade.
- Get under a large umbrella.
- Re-apply sunscreen every couple of hours.
- Re-apply sunscreen after being in the water.
- Avoid being in the sun when it's the strongest (10am – 4pm in the northern hemisphere).

Sunburn can happen within 15 minutes of being in the sun, so protecting yourself from getting sunburn is really important. Sunburn is painful and unhealthy too. Remember to wear sunscreen on your whole body. You should apply it at least 30 minutes before going outside so that your body has enough time to absorb sunscreen.

Ask the children if they know the symptoms of sunburn.

- Red and warm skin
- Pain and possibly tingling
- Itchiness
- Blistering
- Swelling
- Headache
- Nausea
- Fever and chills
- Dizziness

Time to check the experiment results. Ask the children to share their thoughts on how well the sunscreen worked. Remind them that we all need some sun exposure because that's one way we get vitamin D, and we need vitamin D to help us absorb calcium. And we all know that calcium help us build stronger, healthier bones. So remember, "have fun in the sun, but don't get overdone!"

