



WE CU VOLUNTEER

National Youth Science Day

Kits on sale now through Shop 4-H!!!



This October, 4-H will launch the 2019 National Youth Science Day (NYSD) challenge, *Game Changers*. Designed by Google and West Virginia Extension service, *Game Changers* teaches kids ages 8-14 how to use computer science (CS) to create games, solve problems and engage with topics they're passionate about. *Game Changers* uses physical activity and puzzles to teach kids important CS concepts and problem-solving skills, creating real-world connections between computer science and civic engagement, healthy living and

agriculture. Although the challenge includes one computer-based and two unplugged activities to help kids learn CS, all can be completed without internet access.

New to NYSD? Teachers and facilitators don't need any prior experience with computer science or coding to bring *Game Changers* to their students. Get your [GAME CHANGERS KIT](#) today!

Buy your Kit!



The South Carolina State Fair is celebrating its 150 anniversary this year! The South Carolina State Fair is a local, self-sustaining, non-profit organization. Since 1997, did you know the Fair has donated over \$3 million in scholarships for SC students?! Mark your calendars and make plans to join us at the Fair on Saturday, October 12, 2019 to enjoy "prize-winning memories". Wear your South Carolina 4-H T-shirt to show your 4-H pride and get into the Fair free with membership/volunteer card.

Upcoming Statewide Programs:



Junior Beef Round-Up
August 2-4, 2019
 Youth beef cattle contest open to the southeast region (for all age divisions)
Registration closed



Volunteer Leaders Symposium
Saturday, August 10, 2019
 Training for all volunteers across the state to network and learn (for adults)
Register by July 31st



Ambassador Training
Saturday, August 10, 2019
 Hands-on leadership training for youth (for ages 14-18). **Registration TBA**
Register by July 31st



4-H Day at the SC State Fair
Saturday, October 12, 2019
 All youth and volunteers with active membership cards get in FREE
No pre-registration required

"4-H has a huge impact on my life. I have learned so much about agriculture, community service, public service, and being a leader in my 4-H community...I am thankful I'm a part of this wonderful organization." 4-H'er



Monthly 4-H Club Activity Idea

by Ashley Burns



Exploring Sun Protection

Objective: To understand basic concepts of sun protection.

Age Range: All ages.

Hands-on Activity: To create, experiment with, and demonstrate a sun protection.

Life Skills: HEAD – learning to learn, problem solving, decision making;
 HEART – communication, sharing;
 HANDS – self-motivation;
 HEALTH – healthy lifestyles choices.

Introduction

We all love spending time outside and time outdoors is a valuable experience for youth. We want to inspire kids and families to adopt healthy, sun-safe behaviors – rain or shine – for a lifetime of healthy fun in the sun. Depending on the age of the youth, you can explore various aspects of sun protection from brainstorming ways to protect yourself from the sun (hats, clothing, sunglasses, sunscreen, time of day, etc.) to researching various types of sunscreen (SPF levels, chemical formations, etc.). Use the activity below to explore efficacy of sunscreen.

Materials

Sun-sensitive paper*
 Plastic sandwich bags
 3 or more sunscreens
 Scissors
 Coins

Activity Instructions

1. If feasible, provide a wide variety of different sunscreens and allow the youth to decide as a group what they want to test (or work in small



- groups to design their own variables to investigate). They can choose to compare SPF levels of the same brand/type, the same SPF levels of different types (lotion, stick, spray, brand, etc.), or protective clothing.
2. Youth will label 3 to 5 plastic bags with the appropriate sunscreen and coat the outside of the bag with the sunscreen. Leave one bag as your “control” with no sunscreen applied.
3. Cut the sun-sensitive paper into squares, place them inside the bags with a coin on top of the paper.
4. Set the bags in the sun for 2 to 4 minutes*.

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5. Pull the paper out and visually assess differences in the color. The “control” should show the maximum difference indicating sun exposure.
6. Discuss the differences or similarities youth see.

Reflective questions

- What did you like about this activity?
- What happened during this activity? Did you encounter any differences?
- How would you teach someone about this concept?

Conclusion

This activity is a quick way to teach a basic sun protection. Youth get to see sunscreens in action to reinforce learning. Manipulation of parameters in this activity can allow for additional expansion/learning.

*You can use black construction in lieu of sun-sensitive paper, but the timing of sun exposure should be lengthened to 6-8 hours.

Resources:

- Sun Smarts for Kids. National 4-H Council. <https://4-h.org/get-involved/supporters/coppertone-sun-smarts/#!resources>
- 4-H +Me = Health: Sun Safety. Purdue Extension. <https://extension.purdue.edu/4h/Documents/4-H%20Health/Sun%20Safety.pdf>
- Spangler, Steve. Nature Sun Sensitive Paper. Steve Spangler Science. <https://www.stevespanglerscience.com/lab/experiments/sun-sensitive-paper-experiment/>

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Sun Smarts for Kids

1 Sunscreen Q&A

HOW ARE YOUR SUN SMARTS? Match the questions on the left side with the correct answers on the right side by filling in each circle with the appropriate number. When you're done, check your answers below.

- 1 It's cloudy outside - do you need sunscreen?
- 2 When is the sun the strongest?
- 3 One bad, blistering sunburn can...
- 4 Beach day! What do you wear for sun protection?
- 5 You or a friend has darker skin, is sunscreen needed?

- 4 Hat, sunglasses & sunscreen.
- 1 Increase your risk of skin cancer.
- 2 Between 11 AM and 1 PM.
- 3 Yes! Clouds can't stop all of the sun's rays.
- 5 Yes! The sun's rays cause damage no matter your skin color.

LEARN all the most important Sun Fun words and share with your friends!

2 Sun Fun Dictionary

SPF: Sun Protection Factor – the number on a sunscreen label that measures protection against sunburns.

UV RAYS: Ultraviolet rays are invisible sun rays that can harm your skin.

UVA AND UVB RAYS: 2 types of UV rays – UVA ages skin cells, causing wrinkles. UVB can burn your skin. Remember UVA=Aging & UVB=Burn.

BROAD SPECTRUM: Sunscreen that protects against UVA & UVB rays.

SPF 30: You should wear sunscreen everyday.

2 HOUR RULE: No matter the SPF, reapply sunscreen at least every 2 hours.

SHADE: Your best friend (next to sunscreen), if you're outside in the sun. Wearing a brimmed hat and sunglasses can help create some shade -- so you stay cool.

3 Experiment time!

PUT YOUR SUN SMARTS TO THE TEST. Try this experiment (with an adult's help) and see why sunscreen is so important. Put your sun smarts to the test.

WHAT YOU'LL NEED:

- ✓ Black construction paper
- ✓ Sunny day
- ✓ Coppertone® sunscreen lotion

WHAT YOU'LL DO:

- 1 Take the black construction paper and fold it in half.
- 2 Apply sunscreen to only one half of the paper.
- 3 Put the entire sheet of paper in direct sunlight.
- 4 After 6-8 hours, go outside and get your paper.
- 5 What do you see?!

WHAT DID YOU FIND OUT? Are the 2 sides of the paper different?

What did the sun's UV rays do to the paper with no sunscreen? If this happens to paper, what can happen to your skin?

Protect WHAT MATTERS MOST | 4-H.ORG/SUNSMARTS | 4-H GROWS HERE | Coppertone