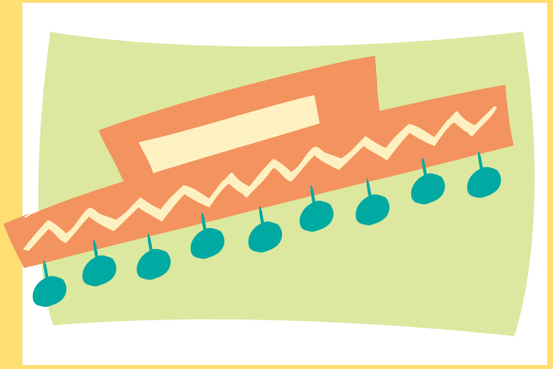
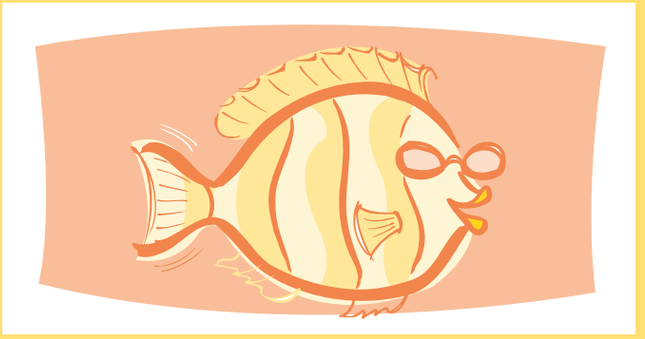
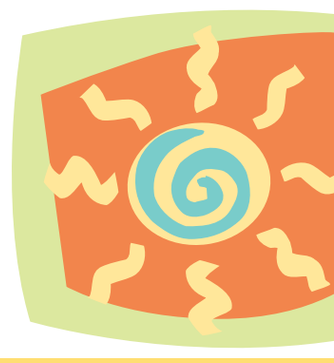
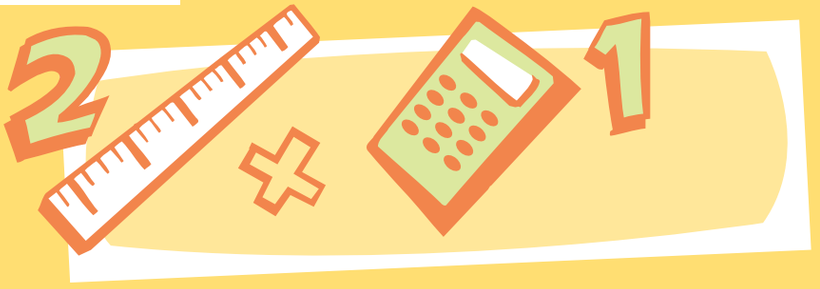
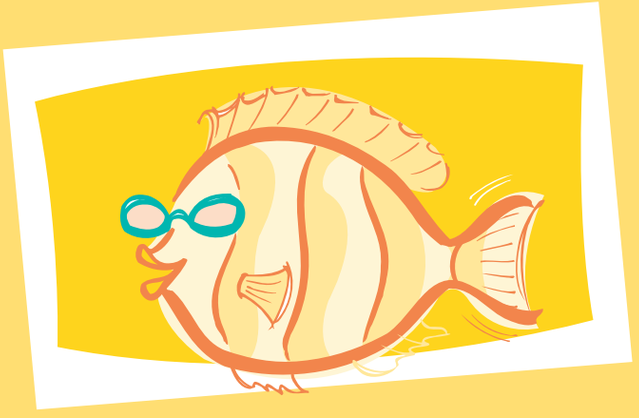
grades K-2

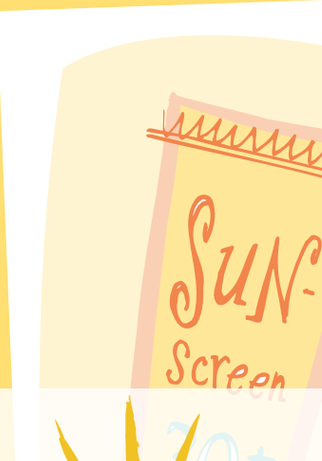


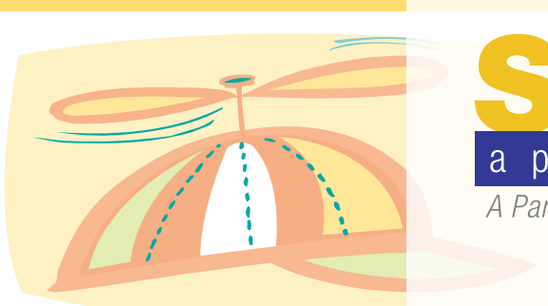












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	EDUCATIONAL STANDARDS	SUNWISE ACTIVITY TITLE	A SunWise Legend	Hot Potato with the Sun	A SunWise Beach Party	Buy SunWise	Speedy Sun Relay Race	Sunny Says	Watch Your Shadow	The Sun Shines Around the World	Keep an Eye on Sun Safety	**Supplemental**	Wacky Paper Sunglasses	SunWise Word Search
		SUBJECT	English/LA, Social Studies	Health, P.E.	Math	Math, English/LA	P.E., Health	P.E., Health	Science, English/LA	Science, English/LA, Social Studies	Science, English/LA		Art, Science	English/LA
English Language Arts	Ask and Answer Questions about Key Details in a Text (RI.K.1; RI.1.1; RI.2.1)		X											
	Actively Engage in Group Reading Activities (RL.K.10; SL.1.1b; SL.2.1b)		X											
	Use a Combination of Drawing, Dictating and Writing to Write Narratives (W.K.3; W.1.3; W.2.3)		X											
	Participate in Collaborative Conversations (SL.K.1; SL.1.1; SL.2.1)		X			X				X	X			
	Confirm Understanding of Text Read Aloud by Asking Questions (SL.K.3; SL.1.3; SL.2.3)		X											
	Participate in Shared Research Projects (W.K.7; W.1.7; W.2.7)									X	X			
	Describe with Relevant Details, Expressing Ideas and Feelings (SL.K.4; SL.1.4; SL.2.4)									X	X			
	Determine the Meaning of Words (RI.K.4; RI.1.4; RI.2.4)								X	X	X			X
Health	Health Concepts			X										
	Decision-making Skills						X							
	Goal-setting Skills						X	X						
	Health Enhancing - Behaviors and Risks						X							

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	SUNWISE ACTIVITY TITLE												
Mathematics	Measurement and Data			X									
Mathematics	Operations and Algebraic Thinking				X								
Mathematics	Number Operations in Base Ten			X	X								
Physical Education	Demonstrates Competency in a Variety of Motor Skills and Movement Patterns		X			X	X						
Physical Education	Applies Knowledge of Concepts Related to Movement and Performance		X			X	X						
Physical Education	Exhibits Responsible Personal and Social Behavior That Respects Self and Others		X			X	X						
Science	Patterns in Behavior That Help Animals Survive (1-LS1-2)												
Science	All Organisms Have External Parts That Protect Them (1-LS1-1)								X			X	
Science	All Animals Have Body Parts That Provide Information About Their Surroundings (1-LS1-1D)								X	X			
Science	Patterns of Sunrise and Sunset Can Be Observed, Described, and Predicted (1-ESS1-1)							X					
Social Studies	Culture	X							X				
Social Studies	People, Places, and Environment								X				

*Please note that the standards listed in the above table have been paraphrased. For more information on the standards used, please refer to the Educational Standards section of the Tool Kit (page 3).

A SunWise Legend

Wise Heart Saves the Day[1]

Once upon a time, a very long time ago, there lived a young Indian boy who was both smart and kind and who longed to make the world a better place for his people. His name was Wise Heart, and he belonged to the Cahto Indian Tribe that lived in what is now northern California. The world in which Wise Heart lived was cold and barren, with few plants or trees. During the day, his world was gloomy and grim, lit by only a faint, dim light that seemed to come from very far away. At night, his world was always cloaked in deep darkness, a darkness that was broken only by the campfire and the torches that the elders alone were allowed to carry.

Wise Heart knew that the world had not always been such a dark and gloomy place. Sometimes as his tribe huddled around the campfire at night, the elders told stories—ancient stories—of a time when a bright light they called the Sun had warmed the world during the day, while its distant relatives, the Moon and Stars, had filled the night.Wise Heart had also seen the ancient tribal cave paintings that showed a world filled with the bright light of the Sun and with towering trees and plants. Whenever Wise Heart or the other children asked the elders how the world had lost its Sun, Moon, and Stars, the elders would become quiet and warn the children not to ask such questions.

One night, while Wise Heart slept, he dreamed of the beautiful, Sun-filled world that he had seen in the cave paintings. There were blue skies, trees laden with delicious fruit, and smaller plants with fragrant flowers. Then, in his dream, he heard the sound of a fiercely shrieking wind, and the Sun suddenly seemed to be torn from the sky, leaving only a dim glow in its wake. Wise Heart woke from his dream troubled and unable to fall back asleep.

When the dim light of day returned, Wise Heart cautiously approached the oldest and most respected of the elders, a stooped old man named Running Water. The boy recounted his dream and asked the old man if he knew what had happened to the Sun so many years before. At first Running Water scolded the boy and warned him not to wonder about such things. Finally, however, seeing the boy's determination to know the truth, Running Water relented. He told the boy that many years before, an Evil Spirit had become jealous of the brilliance and warmth of the Sun and had stolen it from the sky and hidden it in a deep canyon on the far side of the world. The Evil Spirit had also stolen the Moon and Stars and hidden them away as well so that the humans would not have enough light to be able to search for and free the Sun from its captor. From that day on, Running Water explained, the world had been dimly lit. Bound with thick ropes to a giant boulder, the Sun could make only a few of its rays reach above the edge of the deep canyon.

All that day Wise Heart thought about Running Water's words. He watched his people as they struggled to survive by eating the few fish in the stream and few small plants on the hillsides. By the time darkness fell, Wise Heart had made a decision. He would journey across the mountains, to the far side of the world. He would find the deep canyon where the Sun, Moon, and Stars were being held by the Evil Spirit, and somehow, he would free them. That, he decided, was how he would help make the world better for his people.

Early the next evening, Wise Heart secretly set out for the distant mountains, carrying only a skin of water, some dried fish, and a sharp knife. As he traveled, he asked the kind spirits of his people to help him, and they did. Guided by a fierce and powerful eagle and thousands of fireflies, Wise Heart found his way through the steep, dark mountain range. A sure-footed

mountain goat led him to the edge of the deep canyon in which the Evil Spirit was guarding the Sun, Moon, and Stars. Just at that moment, a traveling family of field mice offered to chew through the ropes that bound the Sun, Moon, and Stars while Wise Heart distracted the Evil Spirit. Accepting their offer of help, Wise Heart climbed cautiously over the rim of the canyon and slowly began to climb down the steep cliff toward the canyon floor below. Just as he reached the bottom, the silence was suddenly pierced by the same sound of shrieking wind that he had heard in his dream. The Evil Spirit, red-faced and shaking with rage, stepped between Wise Heart and the Sun, Moon, and Stars and demanded to know why the boy had intruded in his canyon. Before Wise Heart could answer, the Evil Spirit noticed the boy's water skin and demanded that he be given some water to quench his thirst and to cool his sun-scorched body. In reply, Wise Heart said, "Powerful spirit, I am happy to give you all my water, but first let me add some special herbs that will quench your thirst and cool your sun-scorched body better than plain water." The Evil Spirit agreed, and after Wise Heart had added the herbs, which were really sleeping herbs, he drank the water greedily. Soon after, the Evil Spirit fell asleep.

Immediately, as if on cue, the family of mice began gnawing through the thick ropes that held the Sun, Moon, and Stars captive. When they had almost completed their task, the Evil Spirit, feeling the heat of the Sun's rays as it slowly began to ascend into the sky, awoke from his slumber. With a piercing shriek, the Evil Spirit rushed to recapture the Sun. Just before he could do so Wise Heart cut through the remaining fragments of rope with his knife. With the ends of the rope held tightly in his hands, Wise Heart and the mice sailed into the sky. A short time later, as the Sun passed over Wise Heart's village, they all jumped safely into the soft boughs of the tallest fir trees. From there, Wise Heart looked up to see the first and most beautiful sunrise that he would ever see.

Wise Heart returned to his tribe as a hero. The people hailed him as the Sun Guard and thanked him for returning light and warmth to the day and light to the night. Almost immediately, the trees and plants began to grow larger, and the people danced and celebrated in the warmth and brightness of the Sun. After several hours, however, the people began to complain. They said, "It's too hot! I'm thirsty!" Others complained of feeling tired and of their skin feeling red and sore. Wise Heart was amazed that his gift that had at first caused so much joy was now causing so much pain and discomfort. He thought for a moment and then quickly led his tribe to the river's edge. There he told his people to drink deeply and to coat their skin with mud from the riverbank. He told them, "The mud will soothe your skin and protect it from the powerful rays of the Sun," and they found that he was right. Now Wise Heart was truly a hero. His tribe could now enjoy the Sun and all the beauty it gave to the world, without being hurt by its powerful rays. Even today, Wise Heart is a hero, for though he did not know it, he had developed the first sunscreen with an SPF of 45!

The legend is available with illustrations at the Children's Melanoma Prevention Foundation website, *www.melanomaprevention.org*.

[1] This story has been adapted from traditional tales by Jane Shanny and Mary Ellen Maguire-Eisen of the Children's Melanoma Prevention Foundation.

A SunWise Legend

Estimated Time
15–20 minutes

Supplies
Large paper
Markers
Paper for drawing
Crayons

Learning Objective
The students will learn that people from all over the world have different stories about the sun. Before the story is read, ask the students about the power of the sun, both good and bad. Write their ideas on the paper and then cover it up. After reading the story assess what they have learned by asking them to write a story about the sun and why it is important to people around the world.

Directions
Read to your class "Wise Heart Saves the Day," a legend about the origin of the sun inspired by the Native American Cahto Tribe of California (on the Student Page of this activity). Discuss with them the location of California in relation to where you are located. While doing this, explain to them that people from all over the world have different ideas and beliefs about the sun. Discuss what they remember from the story. Ask students to make up a story about the sun. Ask them why the sun is so important that people from all over the world tell stories about it (e.g., it makes plants grow, provides light). Suggest checking out a book about the sun the next time they go to the library.

Hot Potato with the Sun

Estimated Time
Teacher's discretion

Supplies
Ball (preferably yellow)
Music

Directions
Have the students make a large circle and pretend the ball is the sun. Students pass the ball to each other as music plays. When the music stops, the student with the ball should say one way to protect themselves from the sun. For more sun safety tips, please see the *SunWisdom* section of the Tool Kit.

Students should do the SunWise Word Search supplemental activity located in the back of the K–2 section of the Tool Kit as a follow-up to this activity.

Hippos secrete their own oily pink sunscreen.

A SunWise Beach Party

Directions

You and some of your classmates are having a SunWise Beach Party. What will you bring? Look out because some of your classmates might not be 100 percent SunWise! Answer the questions.

Questions

How many students bring  ?

3 6 2 4

How many students bring  ?

7 4 3 5

How many students bring  ?

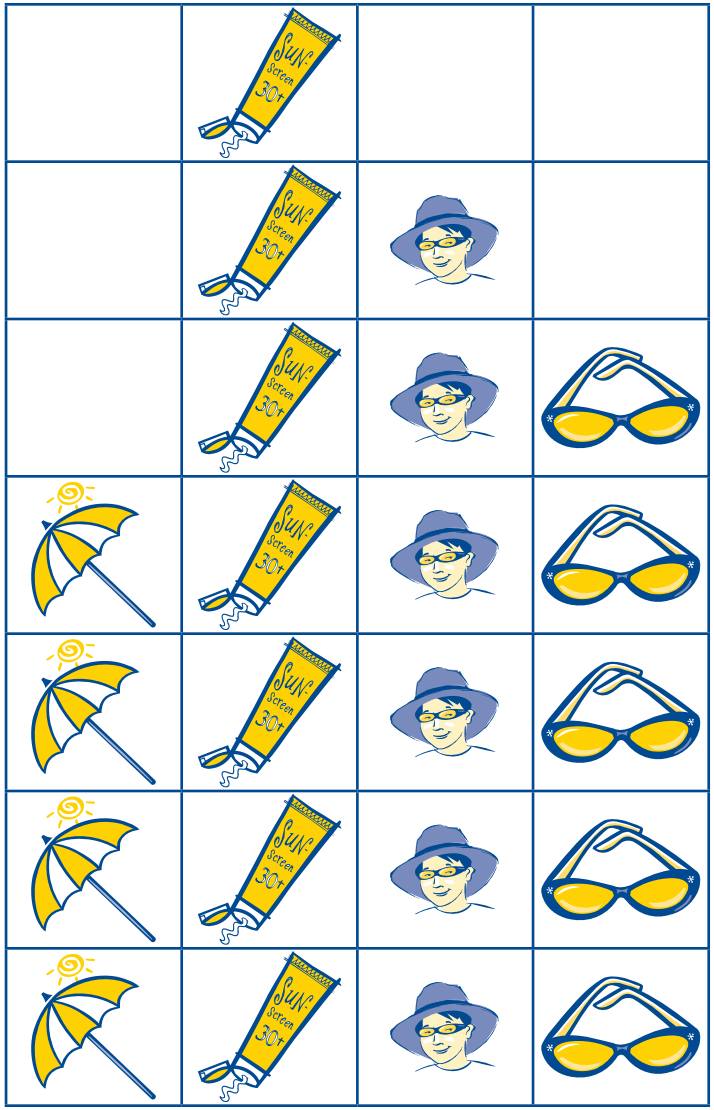
6 3 5 7

How many students bring  ?

4 6 2 5

How many students bring all SunWise items?

7 1 5 4



A SunWise Beach Party

Estimated Time
15 minutes

Supplies
Crayons or pencils

Learning Objective
The objective of this activity is to have students answer questions and interpret data about the variety of ways they can protect themselves from the sun's harmful UV rays. After completing this activity, students should understand that using sunscreen, hats, sunglasses, and umbrellas are examples of SunWise behavior. Assess whether the students understand they must protect themselves from the sun's harmful UV rays by asking them to draw a picture of their SunWise family on a visit to the beach or park.

Directions
In preparation for this activity, discuss with your students the importance of being SunWise. Stress the prevention steps as listed in the *SunWisdom* section of the Tool Kit.

Questions and Answers
How many students bring beach umbrellas?
3 6 2 **4**

How many students bring sunscreen?
7 4 3 5

How many students bring hats?
6 3 5 7

How many students bring sunglasses?
4 6 2 **5**

How many students bring all SunWise items?
7 1 5 **4**

Camels have bumps over their eyes that act as built-in sun hats to help keep out bright sunlight.

Buy SunWise

Directions

Your class is taking a trip to the store to buy sun-safe products. Working in your small group, select the items you want to purchase to be sun safe. Record your selections on the chart.

Figure out how much all of your items will cost together. You may use calculators.

What coins and bills would you use to purchase all of the items? Show the coins and bills your group selected by marking your chart or cutting and pasting the coins and bills on to paper.

dollar $1.00

quarter	dime	nickel	penny
$.25	$.10	$.05	$.01

Product	Cost	Bills and Coins
	$7.79	
	$8.34	
	$9.27	
	$12.67	
	$12.89	

Buy SunWise

Estimated Time
30–60 minutes

Materials:

Chart of items and prices for possible purchase
Charts of various coins and bills
A page of dollars and coins for students to cut out and glue/paste (optional)
Calculators (optional)

Learning Objective
The objective of this activity is to help students: 1) understand that there are many products that can be used to protect their skin from the sun's harmful UV rays; 2) understand that various coins have different values and can be used in multiple combinations to make the same amount; and 3) become familiar with the process of making purchases.

Directions
Engage the class in a large group discussion to assess students' understanding of the importance of having and using sun-safe items to protect their skin from the sun's harmful UV rays. After determining that human skin can be harmed from the sun and that we should use products to protect ourselves, divide the students into small groups to complete the tasks. Select activities that are appropriate for your class.

- Assign students to small groups and instruct them to select the items they would purchase to be safe from the sun. Have each group record their selections on the provided chart.
- Once selections are made, ask the group to determine how much money they would need to purchase the items and what coins they would use to make the purchase. Have each group record what coins and bills they will use on the provided chart, or cut and paste their coins and bills on to paper.
- Have each group of students share their selection of products and the bills/coins they chose with the class.
- Help the students make conclusions about sun safety and the use of money. Instruct the students to draw themselves using the products they selected to protect themselves from the sun.

The skin is the largest, most visible organ of the body and is the fastest growing part of the body. It makes up 16 percent of the body's weight.

Speedy Sun Relay Race

Directions

One student in your group will be the "model." The model's job is to dress in sun-safe clothes as fast as possible with the help of the team. Across the field will be a pile of clothes. Each team member, besides the model, will take turns running to the pile, selecting one sun-safe item, and running it back to the model. The first team to have a completely SunWise model is the winner!

Polar bears have special eyelids that act like sunglasses and shield their eyes from the blinding glare from the sun's rays reflecting off of the snow.

Rhinos use mud as a natural sunblock. They roll over in the mud to make sure they have a thick coating on their skin to protect themselves from the sun.

Speedy Sun Relay Race

Estimated Time
30 minutes

Supplies
One set of the following SunWise and non-SunWise clothes and items for each team:

Long-sleeved shirt (preferably with collar)
Long pants (optional)
Hats (wide-brimmed, cowboy)
Sunglasses
Empty bottles of sunscreen, some with SPFs of 30 and higher, some with lower SPFs.
Shoes (optional)
Various other articles of clothing that are not sun safe, like tank tops, t-shirts, shorts, baseball caps, visors, etc.

Note: Make sure that the clothes are large enough for each student to put on and take off easily.

Learning Objective
This activity will challenge students to think quickly about sun-safe behavior by selecting correct sun-safe clothes when presented with several options. Assess whether the students learned how these clothes will help protect them from the sun's harmful UV rays by asking them the following questions:

- What are three items that the model is wearing that you would pick to protect yourself? Explain why you chose these three items.
- How many of you dress like the model when you play outside? Why do you think dressing like this is safer for you?
- What will you remember to put on before you leave your house to protect yourself from UV rays? Explain why you would take these actions.

Directions
Organize the class into teams of five or more and line them up at the start of the racecourse. Place the pile of clothes at the other end of the racecourse.

Have each team select one student to be the SunWise model. This student will stay at the starting point of the race, donning sun-safe clothes. The other team members should each take turns running to the pile of clothes, selecting one item, and bringing it back to the model.

The first team to have a completely SunWise model is the winner. The SunWise models should be wearing a protective hat, long-sleeved shirt, and sunglasses, and be carrying a bottle of sunscreen with SPF of 30 or higher. Incorrectly dressed models must decide what they are missing, and the other team members must continue bringing back items until the model is sun safe.

Sunny Says

Estimated Time
20 minutes

Learning Objective
This activity will teach children to distinguish between the helpful and harmful effects of the sun. Assess the students by asking them to tell you the effects of overexposure to the sun and not wearing sunscreen and proper clothing. They should also list some positive effects of the sun.

Discussion Point
Discuss with the class the importance of protecting themselves from the sun. Too much sun can hurt the skin and eyes. On the other hand, the sun is beneficial because it helps our bodies make vitamins and helps things grow, such as fruits, vegetables, flowers, and trees (which provide protective shade).

Physical Education Variation:
Have children line up side-by-side or in small groups/teams of two to three students. Children take three big jumps (giant steps, or other appropriate movement) forward after every correct response. Those who respond incorrectly remain still but advance the next time they respond correctly. The goal is to reach the other side of the field as either an individual or team. The first individual or team at the finish can share with others what they know to be correct "Sunny Says" actions and why it is important to know and practice this behavior.

Directions
The format follows "Simon Says."

For example:

Sunny Says grow like a tree.

Sunny Says put your hat on.

Take your hat off.

Sunny Says protect your nose.

Sunny Says sprout like a flower.

Sunny Says put your shades on.

Take your shades off.

Sunny Says look at your watch.

Sunny Says find your shadow.

Sunny Says put sunscreen on your nose.

Sunny Says put sunscreen on your arms.

Sunny Says read the SPF number on the sunscreen container.

Students responding to a non-"Sunny Says" command will be eliminated from play. Continue the game until there is a winner.

Watch Your Shadow

Directions

Using the sun as your light, you are going to trace your shadow. Choose a partner and stand in the sun on the sidewalk or blacktop. With a piece of chalk, your partner will trace your shadow starting from your feet. Write your name in your shadow.

Later in the day, trace your shadow again. Remember to position your feet in the same spot.

Questions

1 Is your shadow always the same size?

2 Can the moon make shadows?

3 What is the shadow rule?

Watch Your Shadow

Estimated Time
At least two 15-minute intervals during one day

Supplies
Chalk (use different color chalk for each time of day you trace your shadow)
School yard with dark cement or blacktop
Clear, sunny day
Watch or clock

Learning Objective
The objective of this activity is to demonstrate to students what causes a shadow, how shadows change from morning to evening, and how they can tell by the length of their shadows what times of day they should seek protection from the sun's harmful UV rays. Ask the students to guess how their shadow will change during the day. Once the day is over, ask them to compare their prediction to the actual shape and size of their shadow. Have students explain why the movement of the Earth over the course of the day causes shadows to change.

Directions
Take the students outside in the morning and again around noon. Have students choose a partner. Instruct the students to trace their partner's shadow using a piece of chalk on the cement surface of the schoolyard. They should begin tracing the shadow from the feet. Write the time students traced their shadows so later they can see how the different positions of their shadows correlate to the time of day.

Go outside later in the day and have each student stand on the feet of their first shadow tracing. Instruct them to have their partner retrace their new shadow on top of the original.

Discussion
Discuss how shadows are formed. A shadow is a dark figure or image cast onto the ground by our bodies blocking the light of the sun. Both the sun and the moon can create shadows. We have noticeable shadows throughout the day; however, our shadows are much shorter closer to noon when the sun is overhead. Explain to the students that when their shadows are long (during the early and late parts of the day) the sun is not as intense. When their shadows are short (during the middle part of the day) the sun is more intense, and they are at a greater risk from the sun's damaging UV rays. Also mention that visible light causes shadows, not UV rays. UV rays are present even on cloudy days. Nevertheless, the shadow rule is a good indication of UV intensity. Teach the students the shadow rule, "Watch your shadow. Short shadow, seek shade!"

Questions and Answers

1. Is your shadow always the same size? *No. Your shadow is long in the early morning and late afternoon, and short during the midday.*
2. Can the moon make shadows? *Yes. When there is a full moon, the light is bright enough to create a shadow, but no UV rays are emitted from the moon.*
3. What is the shadow rule? *"Short shadow, seek shade!"*

The Sun Shines Around the World

Estimated Time
20–45 minutes

Supplies
Map of the world (for display)
Magazines and photos of foreign places and people

Learning Objective
This activity teaches students about a variety of ways people all over the world protect themselves from the sun's harmful UV rays, as well as to understand that all organisms have external parts that are used in different ways to survive, and that all organisms have body parts that capture and convey different kinds of information. After completing this activity, students should be able to describe at least two different ways individuals from the country investigated practice sun safety.

Directions
Assign students to work in small groups. Each group should choose a country to research. Perhaps you have been on an exciting trip and would like to share your photos or postcards with your students. If necessary, provide a list of countries that have different climates than the United States to help students with their selections. Discuss the chosen locale, its people, and customs, especially pertaining to sun protection. Use the questions to stimulate discussion and to reinforce sun safety lessons.

If students are not able to do short research projects, provide them with pictures from four different countries, including pictures of people, houses, clothing, and landscapes from each country. Have students take one set of pictures and work in groups to discuss the questions.

Vocabulary Words
Custom—A habit or an established way of doing something.

Questions and Answers
1. What is the name of the country researched? *Students should be able to name the country.*
2. Where is the country? *Students should be able to point to the location of the region on the map.*
3. What types of houses do the people live in? *Answers should match according to the country researched.*
4. What kinds of clothes do the people wear? *Answers should match according to the country researched.*
5. What are three differences between your home state or town and the place researched? *Answers should match according to the student's home state or town and the country researched.*

6 Describe the climate of the country. *Students should compare the climate of the country to the United States.*

7 What are the average temperatures in the summer and winter? *Answers should match according to the country researched.*

8 Based on the climate of the country, would you predict that people who live there need to protect themselves from the sun? Describe how people who live in the country protect themselves from the weather, including the sun. *Students should be able to describe at least two different ways individuals from the country researched practice sun safety.*

9 Why is it important to protect your body from the weather, including the sun? Which of your body parts are most important to protect from the weather/sun? *Answers should reflect students' understanding and the country researched.*

10 If your eyes were damaged, how would your life be different? *Answers should reflect students' understanding.*

Additional Resource

www.nationalgeographic.com/maps/index.html
Offers a variety of interactive map tools and a brief summary of each country of the world, such as goods produced, literacy rates, or GDP.

Meerkats have black rings around their eyes that absorb the sun's rays and protect their eyes from sun damage.

Keep an Eye on Sun Safety

Estimated Time

15–20 minutes

Supplies

Paper
Pens or Pencils
Who Am I? Animal Quiz, available on the SunWise website (www.*epa.gov/sunwise/doc/Animal_WhoAmI.pdf*)

Learning Objective

The aim of this activity is for students to learn the importance of protecting their eyes from overexposure to the sun's harmful UV rays. By understanding animal adaptations for sun protection and drawing a sun-safe habitat for zoo animals, students will draw connections to the ways they can protect themselves from overexposure to the sun. Assess if they have learned how to protect their eyes from UV radiation by asking what they should do when they play outside.

Directions

Describe to the students the situation of Sammy the sea lion, who is living at the zoo without any shade in his habitat. Explain to the students that the sun can damage Sammy's eyes if he doesn't have any shade, especially since the sun can reflect off the water of his swimming pool. Have the students draw an improved habitat that will help keep Sammy's eyes healthy.

Teach the students about animals that have specialized body parts or behaviors to protect them from the sun. Use the "Who Am I? Animal Quiz" as a guide. You may also refer to the "SunWise Animals" on the SunWise website. Have students learn about the animals and where they live, and then make associations about how all animals, including humans, need to protect themselves from the sun.

Ask the students to think of ways that they can keep their eyes safe in the sun. Explain that the most important ways are avoiding overexposure to the sun by wearing sunglasses (appropriate sunglasses block 99-100% of UV rays), wearing a wide-brimmed hat, seeking shade when UV rays are most intense (between 10 a.m. and 4 p.m.), paying attention to the UV Index when planning outdoor activities, and watching out for reflective surfaces, such as water, snow, and sand.

Activity Enrichment

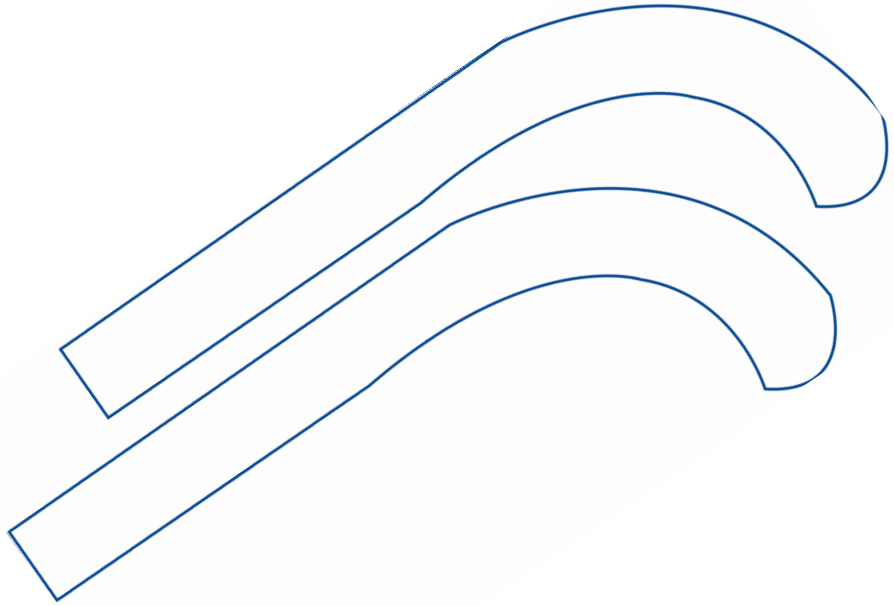
- Connect this activity with the UV-sensitive Frisbee activity. Have the students bring their sunglasses to class and test their effectiveness using the Frisbee. Place the sunglasses on the inner surface of the Frisbee and then carry it outside. Once the Frisbee has changed color, carry it back indoors and remove the sunglasses. If there is a white area in the shape of the sunglasses, then the sunglasses are effective at blocking UV radiation.
- Connect this activity with a visit to your local zoo or aquarium. Plan a sun-safe animal tour using the "SunWise Animals" resource on the SunWise website.

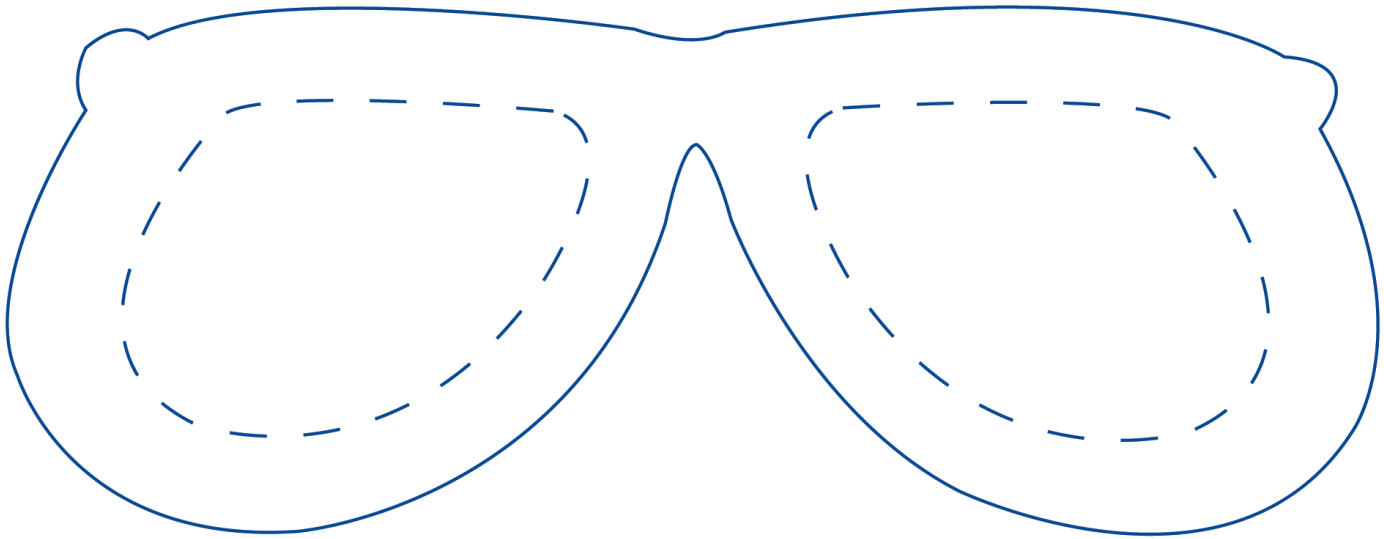
Wacky Paper Sunglasses

Supplemental

Directions

1. Cut the sunglasses out of your paper.
2. Cut out the eyepieces of your sunglasses.
3. Choose a color of cellophane for your eyepieces.
4. Glue the pieces of the sunglasses together. Spread glue on the eyepiece frame and glue the cellophane paper onto your sunglasses. Now, make your sunglasses wacky by decorating them!





Wacky Paper Sunglasses

Supplemental

Estimated time
20 minutes

Supplies
Scissors
Glue
Pencil
Cellophane sheets in various colors
Crayons or other decorations
Colorful construction paper (optional)

Learning Objective
The objective of this activity is to demonstrate the importance of wearing sunglasses to protect your eyes from the sun's harmful ultraviolet (UV) rays. Assess the students by asking them what they know about sunglasses and eye protection before starting the activity. Afterwards, ask what they learned from this lesson. Did it teach them anything new about cataracts and the importance of wearing sunglasses? What will they do differently now when outside?

Discussion
Discuss with students the importance of wearing sunglasses. Explain that appropriate sunglasses provide 99 –100 percent UV protection, which will reduce sun exposure to your eyes. Demonstrate the UV blocking power of sunglasses by using the UV-sensitive Frisbee®. Place sunglasses on the Frisbee, expose the Frisbee to UV (take outside) and watch the Frisbee change color in a few seconds. Explain to the students that the sunglasses block the UV rays, thus keeping the area beneath the sunglasses from changing color. UV rays can cause cataracts and other eye damage.

Cataracts are a form of eye damage in which a loss of transparency in the lens of the eye clouds vision. Discuss with students what it would be like if their eyes were damaged or if they were blind. Ask them how their lives would be different. Next, discuss with students how their eyes help them. Ask them what they would have trouble doing or knowing if they couldn't see.

Directions
If time permits, create your own pair of wacky sunglasses to show your class. You may also want to copy the sunglasses template and alter it to become a "connect the number dots" activity.

Instruct students to either cut out the sunglasses provided on the Student Page or draw and cut their own out of a colorful piece of construction paper. Next, students should cut out the eyepieces. You should have some of the cellophane pieces cut out in squares to fit the frame of the sunglasses. Instruct the students to spread the glue around the edges of the eyepiece and place each cellophane piece within the eyepiece frame area. After the glue is dry, students can decorate the rest of the glasses. Instruct students that the cellophane they are using for the lenses in the sunglasses does NOT protect against UV rays. Explain to students how to look for and read the tag found on sunglasses in the store so that they will select glasses that offer adequate protection.

SunWise Word Search

Supplemental

Directions
Find and circle
the SunWise words.

HAT
LIP BALM
LONG SHORTS
SHIRT
PANTS
SUNGLASSES
SUNSCREEN
TREE
SHADE

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

SunWise Word Search

Supplemental

Word Search Words

HAT
LIP BALM
LONG SHORTS
SHIRT
PANTS
SUNGLASSES
SUNSCREEN
TREE
SHADE

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