

# SUN PROTECTION

**Subtopic:** Freckles and Sunburn **Age Group:** 8-10 **Time:** 45 min

## OBJECTIVE: SWBAT

- State that freckles and suntan develop to help protect our skin from getting damaged from the sun
- Recognize that our skin will eventually burn because our skin will make all the melanin it can
- State that sunscreen is like an added shield to help protect us from the sun's rays

## MATERIALS

- *Number These* worksheet (enough for class)
- Coloring utensils

## ASSESSMENT

1. At the end of the Introduction to New Material, Facilitator will check for questions and/or clarifications.
2. During the Guided Practice, Facilitator will be able to see whether students have grasped the material by checking their work after they have completed it.
3. During Closing, Facilitator will go over worksheet as a class and ask review questions to check for understanding.

## OPENING

### **8 min**

1. Facilitator says they are going to be reading part of a book called Freckle Juice by Judy Blume. S/he asks if anyone has ever read it before.
2. Facilitator hands out Freckle Juice handout to students.
3. Facilitator reads story animatedly to students as they follow along.
4. After reading is done, Facilitator asks students if they know where freckles come from.
  - a. If students respond, Facilitator listens to responses but does not correct them.
  - b. If students are unresponsive, Facilitator can say, "No one? Well, I understand. It is kind of like a mystery," or something along those lines and then move to Step 5.
5. Facilitator explains that today they will be learning about why we get freckles and sunburn.

## INTRODUCTION TO NEW MATERIAL

### **15-20 min; Materials: None**

1. Facilitator asks students if they remember what Nicky Lane says when Andrew asks how he got his freckles.
  - a. If students don't remember, Facilitator can go back and reread that short passage, emphasizing when Nicky says you are born with it, and then ask the question again.
2. Facilitator then says, "Nicky is right! Having freckles is something you can get from your parents, but why do we have freckles?"
3. Facilitator explains:
  - a. We all have different color skin because of something called melanin. Melanin gives our skin color.
  - b. Some of us have more melanin than others, which is why some of us have darker skin. And some of us have less melanin, which is why some of us have lighter skin.
  - c. We get freckles and a suntan to, believe it or not, help protect our skin from the sun! Some people get freckles that go away and some have them all the time.

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- d. What happens then? Firstly, the sun has rays that can damage our skin. When the sun's rays start to damage our skin, our skin makes more melanin (the stuff that gives skin color) to absorb and deflect (or bounce off) the sun rays.
    - i. Some people make melanin in patches, or freckles, and others all-over, suntan.
    - ii. This is our body basically making a shield for our skin. That is why freckles and suntan are darker than our regular skin color—it's extra melanin in our skin to protect us, and melanin is what gives our skin color!
  - e. It's important to remember that when we start seeing freckles and/or a suntan, that means our skin is getting damaged, and we have to put more shields up. It's like having an army that is losing so you send more soldiers out.
  - f. The problem is, our skin can only make so much melanin. After we can't make anymore, our skin burns. So that is like after our skin sends out the extra soldiers, the whole army still gets defeated.
  - g. So what we do to protect our skin from getting damaged is use sunscreen. Sunscreen is like a big, extra-strong shield to help protect our skin.
4. Facilitator checks for questions/clarifications.
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## GUIDED PRACTICE

None.

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## INDEPENDENT PRACTICE

**10-15 min; Materials: Number These worksheet, Coloring utensils**

1. Facilitator hands out Number These worksheet to students.
  2. S/he explains that they have to put them in order from 1 to 4. The order should be the steps of getting freckles or a suntan. They should put the number in the blank space in the upper left-hand corner of each box.
  3. After they are finished numbering, they should raise their hand and the Facilitator will come around and check to make sure they did it correctly.
  4. After Facilitator checks, the students can draw pictures to match the description in each box.
  5. Facilitator then goes over and reads each sentence in each box out loud.
  6. Students then do the exercise while Facilitator walks around to assist students when needed.
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## CLOSING

**5-7 min; Materials: None**

1. Facilitator goes over handout with class then asks students, "So Andrew Marcus wanted freckles. He was going to drink freckle juice. Can you get freckles from freckle juice?"
2. Facilitator then asks, "If you can't get freckles from freckle juice—what do you get them from?"
  - a. If students are unresponsive, Facilitator can give them hints like they get it from something hot in the sky.
3. Facilitator then asks, "What else can you get besides freckles from the sun? It's almost the same thing, but instead of patches of freckles, you get an all-over color of this."
4. Facilitator can also ask, "What does melanin do?"