

## SunSAFE - Why do you need to wear sun block?



### Fact

- You need to wear sun block to protect your skin from the harsh Ultra Violet rays of the sun. These rays are known as UV rays.
- The sun is a star and a star is a glowing ball of nuclear fusion. It radiates UVA, UVB, and UVC rays as well as X-rays and gamma rays.
- Luckily the deadliest rays, X-rays and gamma rays, UVC rays and some UVB rays never reach the earth's surface because they're absorbed in space or the ozone layer.
- But some UVB rays do reach earth and they are the ones that affect your skin – making it all red and making it blister and peel.
- UVA rays reach earth too and they're the ones that age your skin and make it look all wrinkly.
- A sun block with a high SPF (sun protection factor) and a broad spectrum protection will help to protect your skin. Look for one that also has a registered stamp of approval on it.
- But wearing a sunhat, sun smart clothing and keeping out of the sun during the hottest parts of the day are recommended too.

### Do you know

- Our bodies need a certain amount of sunlight to help produce vitamin D which helps make our bones strong and keep us healthy.
- You should never ever look directly at the sun because it is so bright it can damage your eyes.
- We have a pigment in our skin called melanin which gives our skin its colour. People with dark brown skin have more melanin than fair skinned people.
- The sun causes a chemical reaction in your skin which makes more melanin which gives you a tanned look.
- Your body makes melanin to protect your skin by catching the ultraviolet photons.
- The ozone layer is getting thinner which lets more of the harmful UV rays through.

### Experiments you can do

Test the drying effects of the sun.

What you need:

Two paper towels

Two large dinner plates.

Water

### What you do:

Wet both the paper towels and lay one out on each plate.

Put one plate near a window so the sunlight can reach it. And put the other plate away in a cupboard with the door shut – out of the light. Check the time and then leave the plates for an hour then compare the two. Is one paper towel dryer than the other? If so what else is different about the paper? Is it warmer? Has the colour changed? Is the paper towel as smooth as it was when it was wet?

How long does it take for the paper towel in the sun to dry completely? How about the paper towel in the cupboard?

### **Other Investigations**

Next time you have a plaster on your finger for a couple of days have a close look at the skin under the plaster and compare it with the rest of the skin on your finger. You'll probably find that the skin is paler and softer than the skin on the rest of your finger. That's because the melanin in that part of your skin haven't absorbed any sunlight.

Compare your hands to the hands of an elderly person – maybe a grandparent. How is their skin different from yours?

See if the elderly person has any dark spots on the backs of their hands. Because hands are uncovered most of our lives you can see melanin freckles that have developed (some people call them sun spots).

### **Joke**

Why did the Banana put sunscreen on? So he doesn't peel  
From Ben