How Do Sunglasses Work?

You've been told your entire life that sunglasses are important. You know that they protect your eyes, block out the sun's ray and prolong good vision. But have you ever wondered how these miracle shades do all of that? Of course not, but you should learn. Sunglasses basically do four things for you, aside from completing a killer outfit. It is important to know what these things are and how they are done to ensure your sunglasses are doing their job.

As you probably already know, sunglasses provide protection from ultraviolet rays in sunlight. UV rays can cause serious damage to the corneas, and a good pair will shield 100% of these rays. A protective coating on the outside of sunglasses acts as a kind of filter. While it allows light through, it helps to filter out the radioactive light waves that can lead to so many dangers to your eyes.

Possibly the most prevalent purpose sunglasses serve is to provide protection from intense light. Intense sunlight can cause you to squint, a natural reaction to too much light entering the eyes. If squinting does not provide enough protection, damage to the cornea can occur next. This is especially common when outside in the snow without your sunglasses. The white of the snow reflects and magnifies the intensity of the light.

The tinting of your sunglasses will help determine the amount of light your eyes will be exposed to. As there are different types of light, all the colors of the rainbow, different shades of lenses will protect in their own ways. Gray and almost black tinted lenses will offer the greatest amount of protection from intense lights while avoiding distortion of most colors that you see.

Another quality sunglasses carry is something we are all most likely thankful for. They can provide protection from glare. Water and other shiny looking surfaces can produce a glare. These glares can block out other objects, like a car turning out of a parking lot just ahead of you. Good sunglasses can completely eliminate this kind of glare using polarization.

Light waves vibrate just like sound waves do. When a group of light waves come together but are traveling in different directions, a glare occurs. When you are blinded by a glare off of the water or another vehicle's windshield, what you are seeing is a traffic jam of light waves. Polarization filters built into sunglasses are made up of molecules that realign the light waves with each other and eliminate the glare.

As noted before, Sunglasses can eliminate specific frequencies of light. Certain

light frequencies can cause blurred vision, while other frequencies enhance contrast between colors. Choosing the right color for your sunglasses lets them work better in specific situations.

Yellow, gold, amber and brown tinted sunglasses are especially good for blocking out blue light. Blue light is the color of light in the spectrum that scatters and causes blurred perception. While the yellow shades can make the rest of the world look a different color, you will see most clearly and detailed through them.

Green tinted sunglasses are better for filtering some blue light and reducing the occurrence of glares. They also offer the highest contrast and greatest visual sharpness of any other colored lens. For this reason, green sunglasses are very popular. Rose colored shades and purple tints offer the best contrast of objects against a green or blue background and make great sunglasses for hunting or water skiing.

Now that you know how sunglasses work you can be a responsible consumer. Know what to look for when choosing your sunglasses. It is not a bad idea to have more than one pair around for different reasons. This is especially true if you spend a lot of time outdoors on a variety of activities. Be responsible about your eyes and learn to protect your vision while it's still yours to protect!