

Ultraviolet Solar Radiation: Friend or Foe Synopsis

Ultraviolet Solar Radiation: Friend or Foe is a three to four week unit designed to help students develop a better understanding of what is meant by safe sun exposure. The unit is applicable for grades seven through eleven based on readiness and available teacher support. Students will use the eight science and engineering practices of the Next Generation Science Standards as they investigate how different materials, lotions, sunglasses, and surfaces, reflect and/or block the sun's radiation. They look at the possible negative effects of the sun on both skin and eyes but also consider its beneficial effects on mental health and vitamin D production. As part of building background knowledge, they learn about the Earth's atmosphere and its role in scattering light waves as well as how the Earth's tilt affects sun exposure depending on geography and time of year.