Getting Warmer
by Jessica Fries-Gaither

At the center of our solar system is the Sun. The Sun’s light shines on Earth.

The light’s energy makes Earth’s air, land, and water warm. But some things get warmer than others.

Have you ever worn a black shirt outside on a sunny day? If you have, you probably got very hot. If you wore a white shirt, though, you wouldn’t have felt as hot. That’s because dark colors absorb more of the Sun’s energy. That makes them hotter.

Light colors reflect more of the Sun’s energy. They stay cooler than dark colors.

You can try this yourself! You’ll need construction paper, thermometers, and a lamp. First, fold a piece of white construction paper to make a pocket. Do the same with the black construction paper. Next, place a thermometer in each pocket. Place the pockets under a lamp. Wait for 10 minutes, and then check the thermometers. Which pocket got hotter?

Right! The black pocket got hotter. It absorbed more of the light’s energy. The white pocket reflected more light and didn’t get as hot.

The same thing happens with Earth’s land and water. Some parts absorb a lot of the Sun’s light. This raises the temperature. The oceans are a good example. Ocean water can absorb a lot of energy!

Other parts reflect a lot of the Sun’s energy. Ice and snow are a good example of this. They reflect most of the Sun’s light. Have you ever been outside on a sunny, snowy day? If you have, you know that sunglasses are a good idea. That’s because the snow is reflecting most of the Sun’s light back into space.

Flesch-Kincaid RL = 3.6
The Arctic and Antarctica are covered with snow and ice. Ice reflects a lot of light, which keeps the temperature low. As our world gets warmer, the ice in the Arctic and Antarctica is melting faster and faster. What do you think might happen as the ice melts?

Glossary

absorb – to take in

reflect – to bounce back