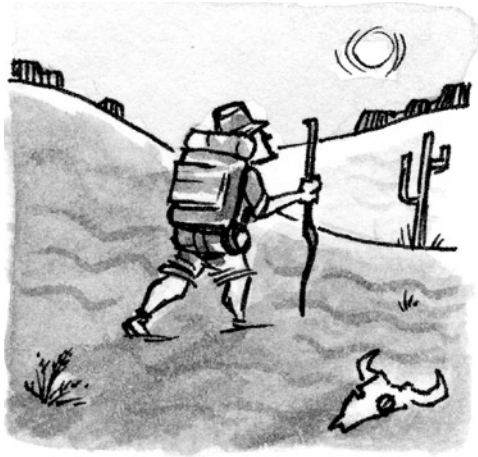


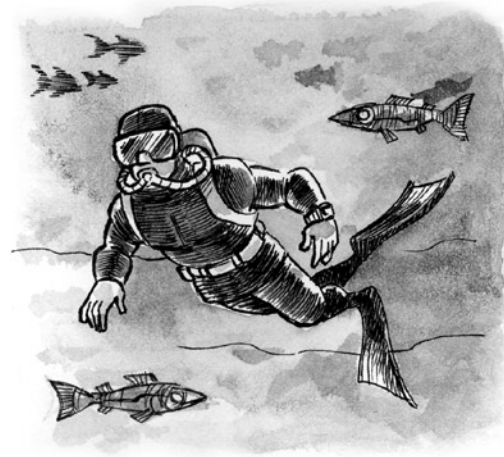
Going to Extremes

The world offers many exciting places to travel. But some of the world's most beautiful places—rainforests, deserts, deep ocean environments, and mountaintops—are also the most remote. Many of these environments require extreme caution. In this activity learn about some of the extreme places you can go on Earth, some of the dangers you can encounter, and some of the ways you can deal with those dangers.



Grand Canyon National Park Arizona, United States

Get your hat out, because if it's summer, it's going to be hot. In July, maximum temperatures range from 25° to 41° C, depending where you are in the canyon. Despite the heat, the park is home to a diverse range of species, including 50 species of reptiles. You should watch out for some of those creatures, particularly the rattlesnakes. If you are one of the unfortunate few people to get bitten by the most common rattlesnake, the western diamondback, you will likely have a rubbery taste in your mouth, and feel weak and nauseous when the poison enters your bloodstream. Dehydration is one of the biggest threats here. Drink plenty of water to replenish what you lose due to sweating but watch out for hyponatremia. Be careful when you hike as well; don't hike the inner gorge in the summer when you may get hyperthermia. If you're hiking during the winter months, make sure you bring cold weather gear, for night temperatures are cold enough to cause your core body temperature to drop below 35° C. During the day, you will surely want to get pictures of the unique variety of rocks and geological features. But be careful of those rocks; they can form rock landslides. And if there is a storm, watch out for lightning strikes or flash floods.



Pacific Ocean

The Pacific Ocean covers more than one-third of the Earth's surface. It is filled with interesting geological features, including plateaus, ridges, trenches, and seamounts. If you decide you want to go scuba diving to see some of those, remember that water conducts body heat much faster than air of the same temperature. If you dive too deep for too long, your body temperature will drop below 35° C. You're also subject to other dangers while you're down there, including nitrogen narcosis if you stay down too long, and Caisson's disease if you ascend too rapidly. If you decide to do some deep-sea fishing, better make sure you have some protection from the sun. If you get caught adrift and experience extended exposure, your body temperatures can rise above 41° C. If night falls and you don't have warm clothes or blankets, you face a different problem—cold temperatures that put you at risk for hypothermia. And at any time of the day, you are subject to hazards that include typhoons and tidal waves. Even under normal weather conditions, ocean wave heights can easily reach eight meters, so take care or you may get *mal de mer*, where your brain and inner ear have a different take on just how stable the world is.