YOUNG EXPL®RERS BEAT the HEAT

Summer is heating up, and that means everybody's looking for ways to cool down. But it's not just people that need to let off some steam during the hottest part of the year—nature needs to cool off, too! How do plants and animals keep cool, anyway? Can we pick up any tricks from them? And why is it so hot in the first place?

True or false? In the summer, it gets hot because Earth is closer to the sun.

False! Earth is actually farthest from the sun in July and is closest to the sun in January! What matters is Earth's tilt. In summer, the Earth sits in such a way that the North Pole is tilted toward the sun. Since the sun is more directly overhead, its rays land at a steeper angle, which means more heat and longer daylight hours.

Be Cool Like Animals

On a super-hot day, have you ever noticed how much cooler you feel when sitting under a shady tree? When it comes to beating the heat, finding shade is the name of the game. Many wildlife species such as snakes spend the hottest part of the day resting in humid, shady, cool places. Some will even remain dormant through the hottest, driest season.

Drink Up Like Plants

For plants, it's all about water. Some will rotate or roll up their leaves to reduce evaporation (the loss of water through the leaf surfaces). Trees and other plants will draw more water through their roots to make up for all the water evaporating out of their leaves. Some plants even have small hairs on their leaves to protect them from heat and wind.

BE A CLIMATE ACTION HERO

When the temperature rises and the days get hotter, we humans tend to use a lot more energy from electricity to stay cool. Unfortunately, using too much energy can lead to our planet getting even warmer. You can be a climate action hero and help your family "shave the peak." The "peak" is the part of the day when it's hottest and everyone is cranking their air conditioners. But if everyone does a little to reduce their energy use, together we can have a big impact. Some easy ways to shave the peak include:



Turning off lights when you leave a room

Unplugging electronics when you're not using them (check with your parents first!)

Using air conditioners only when absolutely necessary, and in energy-saver mode



Be a Summer Scientist

For some fun experiments you can do using the sun (including instructions for making your own solar cooker!), grab a parent and head over to **massaudubon.org/youngexplorers**.



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