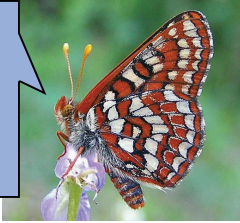


## What if...

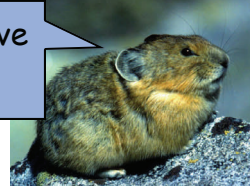
Too bad I don't migrate — I'd find a cooler place to lay my eggs!



...the plants that Edith's checkerspot butterfly larvae rely on for survival dry up before the caterpillars are grown.

## What if...

Maybe I shouldn't have worn my fur coat...



...only those pikas living on the cool, isolated mountaintops are able to survive. The lower slopes of the mountains have become too warm for these relatives of rabbits.

## What if...

Heat, drought, and bugs...it's too much!



...piñon pine trees are weakened by pine bark beetles and drought.

## What if...

Water! Water!



...drought causes wildfires in the region to burn larger areas and occur more frequently. Wildfire season lasts longer.

## What if...



...the snow pack melts earlier in the spring, leaving alpine areas short on water in the summer.

## What if...

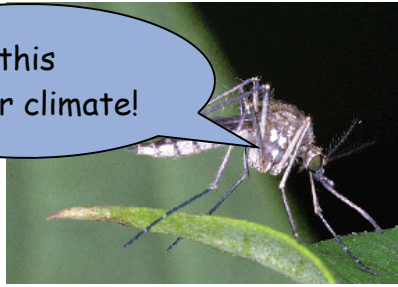


...sea levels have risen in California as glaciers and ice shelves melted. Severe storms occur more often.

<p>Will the amount of habitat available for pikas increase or decrease?</p> <p>What does it mean for an animal when it has fewer places to live?</p>	<p>Butterflies feed on nectar from flowers, but how do they help the plants in return?</p> <p>Fewer larvae mean fewer _____s, and could mean fewer p_____ts.</p>
<p>What will happen to the local lumber industry when grasses grow back in the burned areas instead of trees?</p> <p>What will that mean for the forest animals?</p>	<p>What will fewer piñon pine trees mean for birds and other wildlife that depend on them for food and shelter?</p>
<p>What will higher sea levels mean for buildings, houses, and roads along the coast? For plants, animals, and birds living in low wetlands?</p>	<p>What will less summer water mean for the plants and animals living in alpine areas?</p> <p>What will happen to mountain streams in the summer?</p>

## What if...

I love this warmer climate!



...there are fewer frosts to kill off mosquitos and other pests. There are a lot of bugs!

## What if...

We're sour grapes! It's too hot!



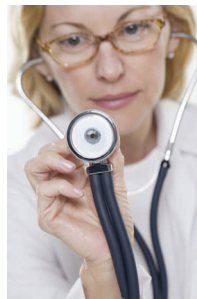
...wine grapes are no longer able to thrive under California's hot sunshine.

## What if...



...skiers no longer spend their money at ski resorts — the winters are too warm and there has been less snow.

## What if...



...people are visiting the doctor's office because diseases, pests, and pollution brought about by the warmer climate are making them sick. There are fewer cold-related injuries and illnesses in the winter, though.

## What if...



...spring comes earlier so there are more days when it's warm enough to play, picnic, and hike outside.

## What if...



...average temperatures rise by 7°-12°F (3.9°-6.7°C) by 2090 and water evaporates more quickly.

<p>What will that mean for grape growers? For the wineries who turn the grapes into wine to sell across the country?</p>	<p>Can you think of some bugs you would rather <i>not</i> see more of?</p>
<p>What will the more frequent summer heat waves mean for people who already have health issues?</p>	<p>What will that mean for ski resorts and shops that rent ski equipment?</p> <p>Will the people living in the higher elevations of the Southwest have more or less snow gear, like boots and coats, in their closets than they do now?</p>
<p>What will higher evaporation rates mean for the water sources in arid regions?</p> <p>What will that mean for farmers and ranchers in the area? For the fish, plants, and animals?</p>	<p>How would you use the extra time to play outside? Hiking? Building sand castles at the beach? Picnicking?</p> <p>Would the extra time outside help people stay healthy? How?</p>

# Image Credits

Edith's checkerspot butterfly. Credit: USDA Forest Service/Tom Kogut.

Pika. Credit: National Park Service.

Piñon pine. Credit: National Park Service/Stella Carroll.

Smoke billows from a wildfire viewed from above. Credit: U.S. Fish and Wildlife Service.

Alpine tundra. Credit: National Park Service.

Roiling ocean. Credit: U.S. Global Change Research Program.

Mosquito. Credit: National Park Service.

Grapes. Credit: Microsoft Office Software.

Ski boot. Credit: Microsoft Office Software.

Doctor checkup. Credit: Microsoft Office Software.

Hiker's legs and boots. Credit: Microsoft Office Software.

Arid landscape. Credit: U.S. Global Change Research Project.