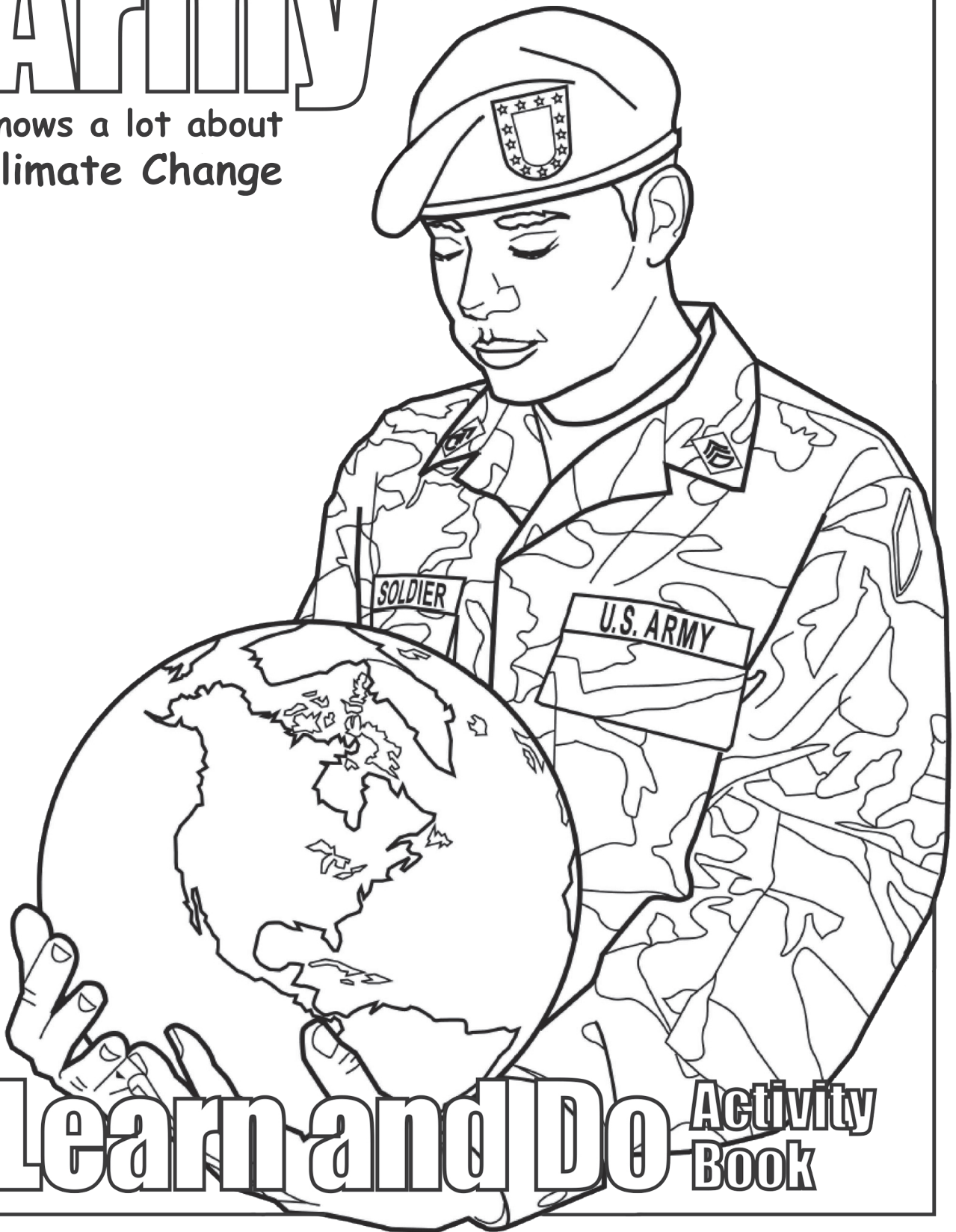


The
Army

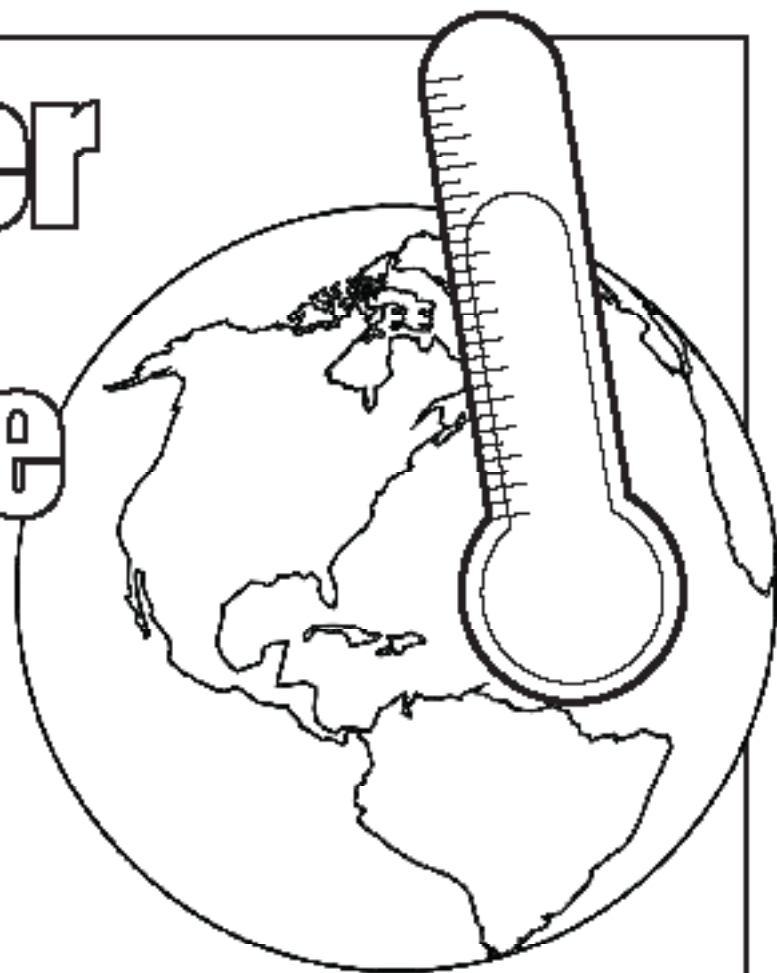
knows a lot about
Climate Change

 **U.S. ARMY**

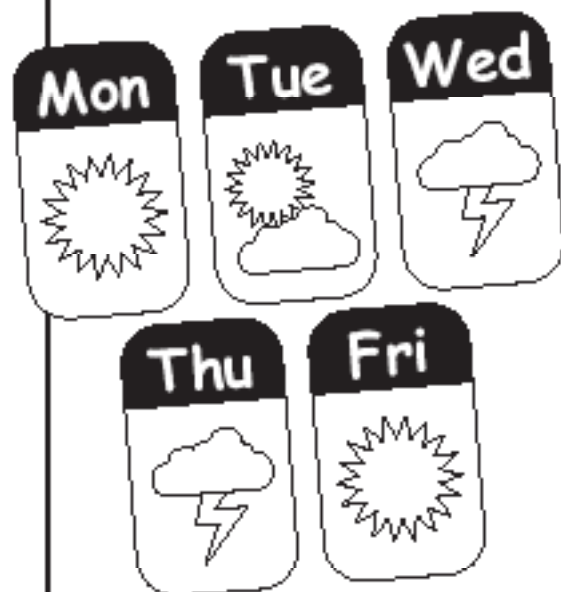


Learn and Do Activity Book

Weather VS. Climate



Climate is more than just one or two rainy days. Climate describes the weather conditions that are expected in a region at a particular time of year.

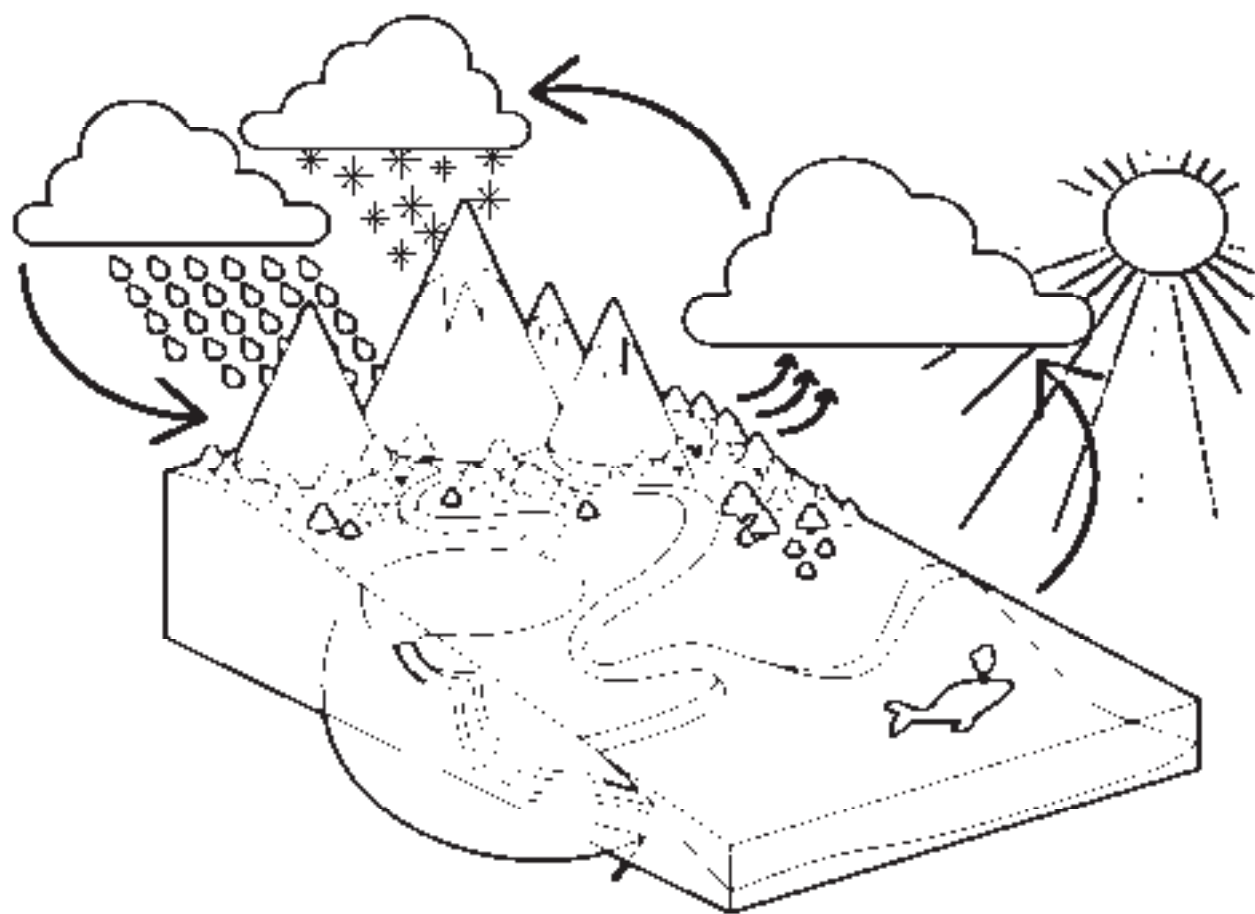


Weather describes the conditions outside right now in a specific place. For example, if you see that it's raining outside right now, that's a way to describe today's weather. Rain, snow, wind, hurricanes, tornadoes — these are all weather events.

Is it usually rainy or usually dry? Is it typically hot or typically cold? A region's climate is determined by observing its weather over a period of many years—generally 30 years or more.

One or two weeks of rainy weather wouldn't change the fact that San Antonio typically has a dry hot summer and short cool winter. Even though it might be rainy in June, we still expect San Antonio summers to be dry because that's what is usually the case.

What is climate change?



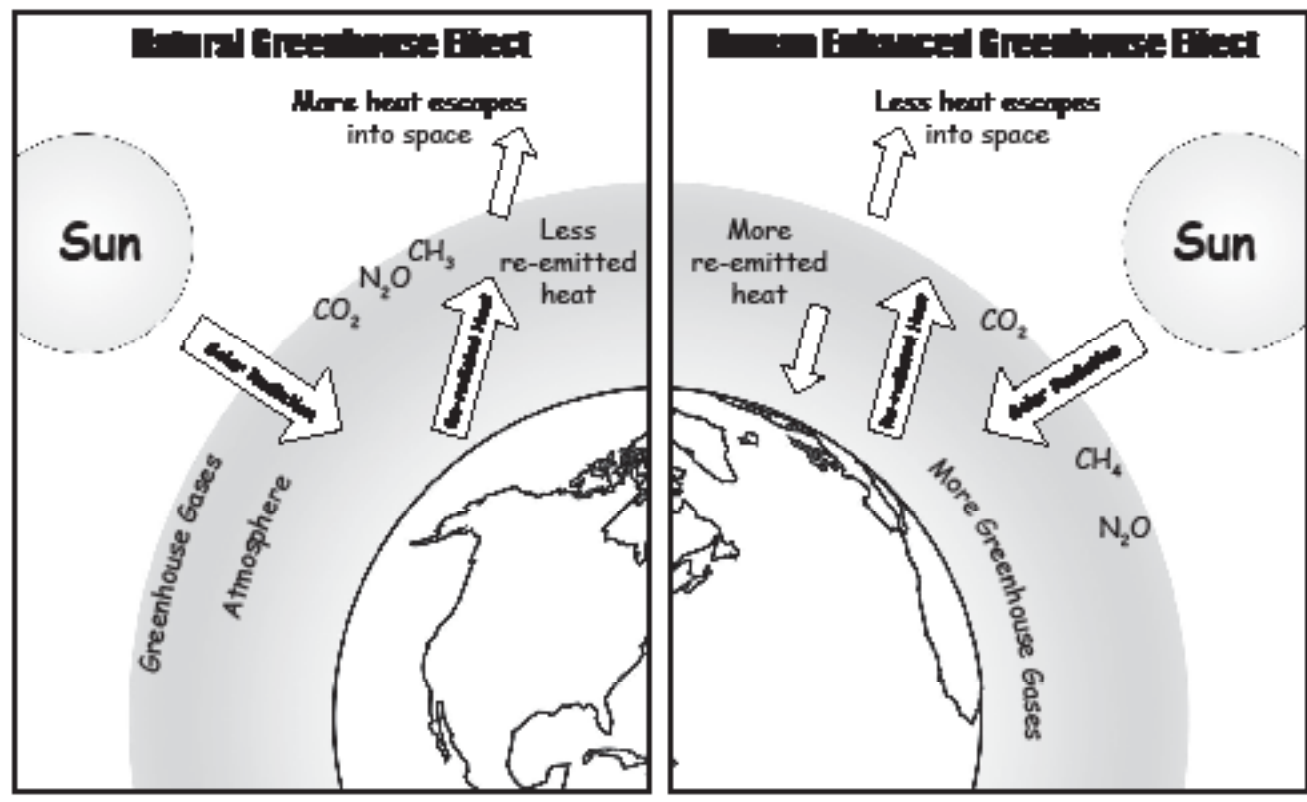
Climate change describes a change in the typical weather for a region — such as high and low temperatures and amount of rainfall — over a long period of time. Scientists have observed that, overall, Earth is warming. In fact, many of the warmest years on record have happened in the past 20 years. This rise in global temperature is sometimes called global warming.

What causes climate change?



Human activities like driving cars, creating electricity and cutting down forests are making climate change happen quicker than normal. These activities are increasing the amount of greenhouse gases in our atmosphere. One type of greenhouse gas, carbon dioxide, has reached a level in our atmosphere that the Earth hasn't seen for more than 400,000 years! Plants, soils, and the ocean can absorb carbon dioxide, but they can't keep up with all the extra greenhouse gases that we have been releasing. And some greenhouse gases stay in the atmosphere for a long time, from hundreds to even thousands of years. All these gases are making things hotter than natural.

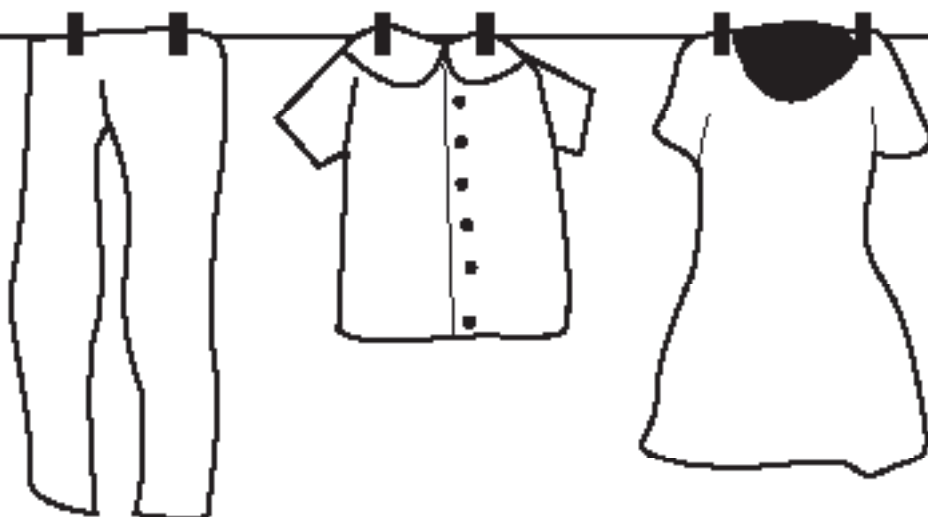
Imagine a greenhouse made of glass used to grow plants, like flowers and vegetables. The greenhouse keeps the plants inside warm even when it's cold outside because it traps heat from the sun. The earth's atmosphere acts like a greenhouse: When light from the sun passes through the atmosphere, some of it is absorbed by the Earth's surface to heat it, but some heat is also trapped in our atmosphere by certain gases. These heat-trapping gases are called greenhouse gases, and they act like a blanket, keeping the earth warm. This greenhouse effect is a natural process that makes the planet comfortable to live.



What Can I Do?

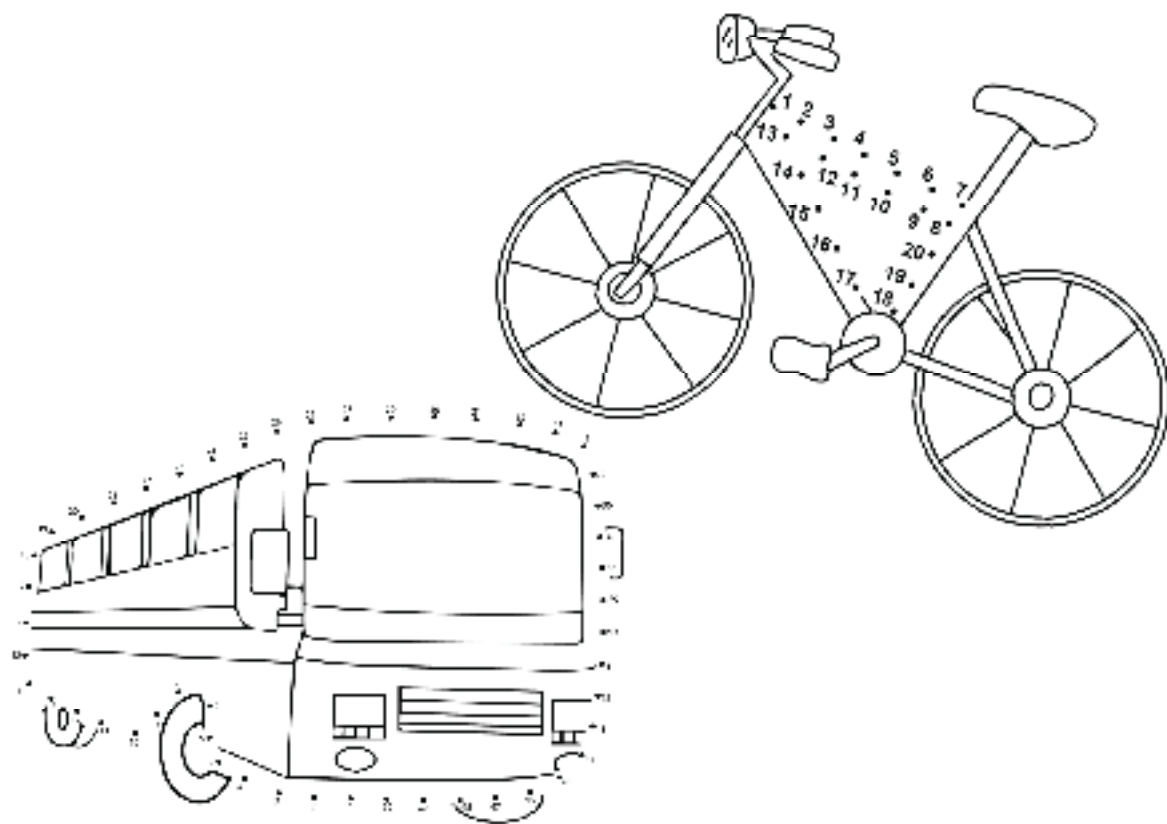
Save energy at home.

Much of our electricity and heat are powered by coal, oil and gas. Use less energy by lowering your heating and cooling, switching to LED light bulbs and energy-efficient electric appliances, washing your laundry with cold water, or hanging things to dry instead of using a dryer.



What Can I Do?

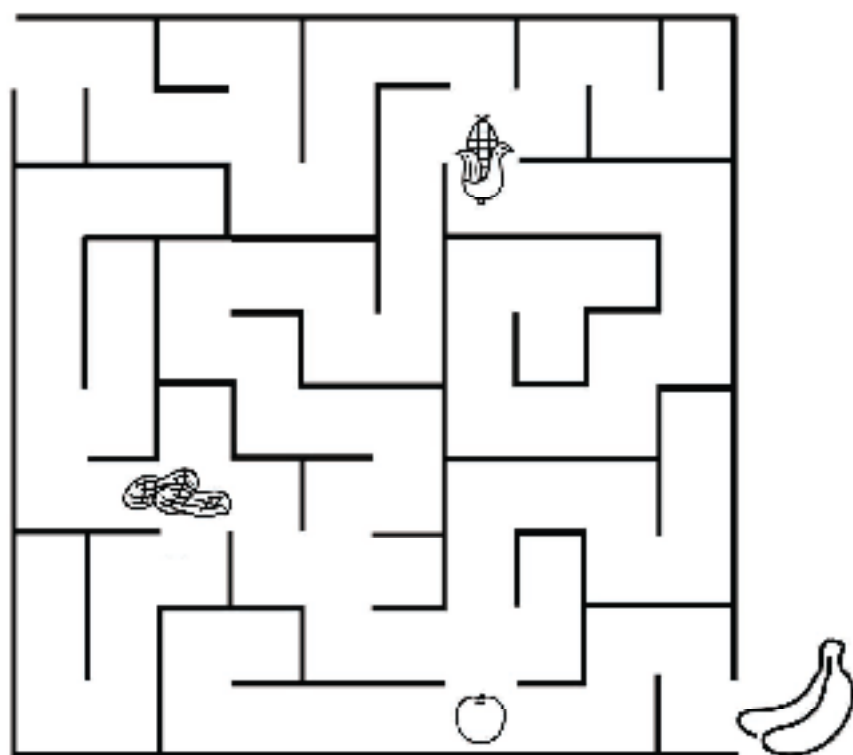
Walk, bike or take public transportation. Walking or riding a bike instead of driving will reduce greenhouse gas emissions — and help your health and fitness. For longer distances, consider taking a train or bus. And carpool whenever possible.



Consider traveling less. Airplanes burn large amounts of fossil fuels, producing significant greenhouse gas emissions. That makes taking fewer flights one of the fastest ways to reduce your environmental impact. When you can, meet virtually, take a train, or skip that long-distance trip altogether.

What Can I Do?

Eat more vegetables. Eating more vegetables, fruits, whole grains, legumes, nuts, and seeds. Producing plant-based foods generally results in fewer greenhouse gas emissions and requires less energy, land, and water.



Throw away less food. When you throw food away, you're also wasting the resources and energy that were used to grow, produce, package, and transport it. And when food rots in a landfill, it produces methane, a powerful greenhouse gas. Use what you buy and compost any leftovers.

W C J L G R E T A M I L C K Y
 E F Z N A G Y N E I Z E V V N
 A P O B U K U A W F E L P E T
 T R I R G S M E W V S C E N D
 H Q E G E U S A S N U Y R V Z
 E Y D H L S T X T W O C E I H
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 K O R C H O O P A E N E R G Y
 A O Y W T D S C N N U P L U J

Word Bank

- | | | | |
|-----------|------------|--------------|-----------------|
| 1. sun | 5. weather | 9. solar | 13. atmosphere |
| 2. water | 6. climate | 10. energy | 14. greenhouse |
| 3. plants | 7. forest | 11. recycle | 15. environment |
| 4. nature | 8. oceans | 12. conserve | |



Courtesy of U.S. Army Environmental Command: <https://aec.army.mil>