

Name: _____ Date: _____

Answer Key: Beat the Heat: Greenhouse Gas and Weather Wonders for Grade 4

Identify the invisible gases trapping heat and spot the difference between daily weather and long-term patterns in this climate mission.

1. Which of these is an example of 'climate' rather than 'weather'?

Answer: C) The desert usually gets very little rain each year.

Weather describes what is happening outside right now, while climate describes the average patterns in a place over many years.

2. True or False: The 'Greenhouse Effect' works a bit like a blanket that keeps the Earth warm enough for us to live.

Answer: A) True

Greenhouse gases trap heat in the atmosphere, just like a blanket traps body heat to keep you warm.

3. When we drive cars that use gasoline, we release a gas called _____ dioxide into the air.

Answer: B) Carbon

Burning fossil fuels like gasoline releases Carbon Dioxide (CO₂), which is a major greenhouse gas.

4. Why are some animals, like pikas or polar bears, struggling because of climate change?

Answer: B) Their homes are changing or melting as the Earth warms.

As temperatures rise, ice melts and mountain homes become too hot, making it hard for these animals to survive.

5. True or False: Planting new trees can help fight climate change because trees soak up carbon dioxide.

Answer: A) True

Trees act like lungs for the planet; they take in carbon dioxide and release oxygen.

6. Energy that comes from the sun is called _____ energy and does not pollute the air.

Answer: C) Solar

Name: _____ **Date:** _____

Solar energy uses panels to turn sunlight into electricity without releasing greenhouse gases.

7. What happens to the ocean when the Earth's temperature gets warmer?

Answer: C) The sea level rises because of melting glaciers.

Warmer temperatures cause land-based ice to melt and flow into the ocean, raising the sea level.

8. Instead of throwing everything away, we can _____ paper, plastic, and metal to save energy.

Answer: A) Recycle

Recycling uses less energy than making brand-new products, which helps reduce the amount of carbon dioxide we create.

9. True or False: Using a bicycle instead of a car for short trips can help the environment.

Answer: A) True

Bicycles do not have tailpipes and do not release any greenhouse gases into the atmosphere.

10. Which of these is a way to save electricity at home to help the planet?

Answer: B) Turning off the lights when you leave a room.

Using less electricity means power plants don't have to burn as much coal or gas to produce it.