

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Answer Key: Tiny Guardians, Big Choices: Climate Analysis for Kindergarteners

Evidence evaluation, predictive modeling, and ethical reasoning regarding habitat protection. Students analyze complex environmental scenarios and propose sustainable solutions.

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**1. If a city gets much hotter every summer, which change would help keep the city cool for the birds and people living there?**

**Answer:** B) Planting trees with big leaves for shade

Plants provide shade and release moisture, which helps lower the temperature of a neighborhood compared to hard surfaces like brick or pavement.

**2. True or False: If the ocean gets too warm, it becomes harder for some sea animals to grow their homes.**

**Answer:** A) True

Warmer water changes the environment and makes it difficult for animals like shell-builders and coral to maintain their homes.

**3. When we drive cars that use a lot of gas, we are adding more \_\_\_\_\_ to the air that acts like a warm blanket.**

**Answer:** C) Carbon dioxide

Burning gasoline releases carbon dioxide, a gas that traps heat in our atmosphere, similar to how a blanket keeps us warm.

**4. Imagine a polar bear's ice is melting. Which of these is a 'smart plan' to help the bear's home in the future?**

**Answer:** B) Using sun and wind to make our electricity

Using clean energy from the sun and wind doesn't release the gases that cause the Earth to warm up and melt the ice.

**5. True or False: Scientists use special tools to look at the Earth and can tell if it is getting warmer over a long time.**

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**Answer:** A) True

Scientists use satellites and thermometers to track temperature changes over many years to understand climate patterns.

**6. If we want to help the Earth, we should try to \_\_\_\_\_ things like paper and plastic so we don't need to make as much new stuff.**

**Answer:** D) Recycle

Recycling saves energy and resources, which helps reduce the amount of heat-trapping gases released during manufacturing.

**7. Look at these four children. Who is helping the climate the most?**

**Answer:** A) Sam, who rides a bike to school

Biking doesn't require fuel that releases greenhouse gases, making it a very climate-friendly way to travel.

**8. Rainforests are important because they act like 'Earth's Lungs.' They take in bad air and give us \_\_\_\_\_ to breathe.**

**Answer:** B) Oxygen

Trees clean our air by absorbing carbon dioxide and producing oxygen, which helps regulate the global climate.

**9. True or False: Every small choice we make, like turning off a light, can help protect the planet.**

**Answer:** A) True

Saving energy reduces the need for power plants to burn fuel, which collectively helps slow down climate change.

**10. If a beach starts to disappear because the water is rising, what is the best way to help long-term?**

**Answer:** B) Stop the Earth from getting too warm

Rising sea levels are caused by melting ice and warming water; addressing the root cause of warming is the most effective long-term solution.