

CLIMATE CHANGE AND CARBON FOOTPRINT



Answer all the questions below then check your answers

1. Which of the following activities has the largest carbon footprint?
 - a) Walking
 - b) Driving a petrol car
 - c) Riding a bicycle
 - d) Using public transport
2. Which of the following is a way to reduce your carbon footprint at home?
 - a) Using incandescent light bulbs
 - b) Taking long showers
 - c) Installing energy-efficient appliances
 - d) Keeping the heating on all day
3. Which of the following dietary choices can help reduce your carbon footprint?
 - a) Eating more beef
 - b) Eating more plant-based foods
 - c) Eating more processed foods
 - d) Eating more packaged foods

4. Fill in the gap to complete the sentence below:

Reducing, reusing, and _____ waste are key strategies to lower your carbon footprint.

b. One way to reduce your carbon footprint is to use _____ sources of energy, such as solar or wind power.

5. Match the action in the table to its impact on carbon footprint reduction:

Action	Impact
Carpooling	Reduces energy consumption at home
Planting trees	Reduces emissions from individual cars
Using a programmable thermostat	Reduces transportation emissions
Eating local produce	Absorbs carbon dioxide from the air

6. What is a carbon footprint?

7. List three actions individuals can take to reduce their carbon footprint.

8. Explain why eating a plant-based diet can help reduce an individual's carbon footprint.

9. Describe how using renewable energy sources can reduce your carbon footprint.

Answers

1. Which of the following activities has the largest carbon footprint?

- a) Walking
- b) Driving a petrol car
- c) Riding a bicycle
- d) Using public transport

Answer: b) Driving a petrol car

2. Which of the following is a way to reduce your carbon footprint at home?

- a) Using incandescent light bulbs
- b) Taking long showers
- c) Installing energy-efficient appliances
- d) Keeping the heating on all day

Answer: c) Installing energy-efficient appliances

3. Which of the following dietary choices can help reduce your carbon footprint?

- a) Eating more beef
- b) Eating more plant-based foods
- c) Eating more processed foods
- d) Eating more packaged foods

Answer: b) Eating more plant-based foods

4. Fill in the gap to complete the sentence below:

Reducing, reusing, and _____ waste are key strategies to lower your carbon footprint.

Answer: recycling

b. One way to reduce your carbon footprint is to use _____ sources of energy, such as solar or wind power.

Answer: renewable

5. Match the action in the table to its impact on carbon footprint reduction:

Action	Impact
Carpooling	Reduces energy consumption at home
Planting trees	Reduces emissions from individual cars
Using a programmable thermostat	Reduces transportation emissions
Eating local produce	Absorbs carbon dioxide from the air

6. What is a carbon footprint?

Answer: A carbon footprint is the total amount of greenhouse gases, primarily carbon dioxide, that are emitted directly or indirectly by human activities, typically expressed in equivalent tons of CO₂.

7. List three actions individuals can take to reduce their carbon footprint.

Answer:

Use public transportation, carpool, bike, or walk instead of driving a personal vehicle.

Reduce energy consumption at home by using energy-efficient appliances and light bulbs, and by insulating homes properly.

Adopt a more plant-based diet and reduce meat consumption, particularly beef and lamb, which have high carbon footprints.

8. Explain why eating a plant-based diet can help reduce an individual's carbon footprint.

Answer: Eating a plant-based diet can help reduce an individual's carbon footprint because the production of plant-based foods generally requires less energy, land, and water compared to animal-based foods. Livestock farming, particularly for beef and lamb, produces significant amounts of methane, a potent greenhouse gas. Additionally, the resources needed to grow feed for animals and the deforestation associated with livestock farming contribute to higher greenhouse gas emissions. Therefore, reducing meat consumption lowers the overall demand for these resources and the associated emissions.

9. Describe how using renewable energy sources can reduce your carbon footprint.

Answer: Using renewable energy sources, such as solar, wind, hydro, and geothermal power, can significantly reduce your carbon footprint because these sources produce little to no greenhouse gas emissions during operation. Unlike fossil fuels, which release carbon dioxide and other harmful pollutants when burned, renewable energy sources harness natural processes that are replenished constantly. By switching to renewable energy for electricity and heating, individuals can decrease their reliance on fossil fuels, thereby reducing the overall amount of

carbon dioxide and other greenhouse gases released into the atmosphere. This transition helps mitigate climate change and promotes a cleaner, more sustainable environment.