



Contents



TEACHER GUIDE

- Assessment Rubric 4
- How Is Our Resource Organized? 5
- Bloom's Taxonomy for Reading Comprehension 6
- Vocabulary 6



STUDENT HANDOUTS READING COMPREHENSION

- How Warm Will Earth Get? 7
- Alternative Fuels..... 7
- Transportation 7
- Industry 7
- Urban Planning 7
- Green Buildings..... 7
- Masdar City 7
- Lowering Your Greenhouse Gas Emissions 7
- Hands-on Activities, Writing Tasks 12
- Crossword 16
- Word Search 17
- Comprehension Quiz 18



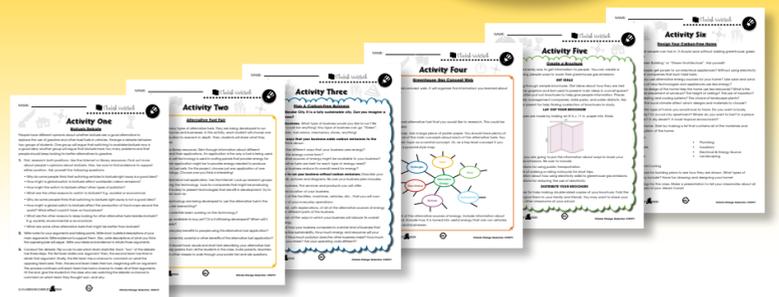
EASY MARKING™ ANSWER KEY 20

MINI POSTERS 22

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Lowering Your Greenhouse Gas Emissions

1. Describe **two** of the main sources of greenhouse gas emissions.

2. Think of activities you do every day. List 5 that add to greenhouse gas emissions.

3. Use the words in the box to answer each question. You may use a dictionary to help you.

appliances **fossil fuels** **transportation** **packaging**

- a) What are oil, coal, natural gas, and gasoline?
- b) What word means the movement of people and goods from one area to another?
- c) What word describes wrappers and boxes that products come in?
- d) What are refrigerators, clothes dryers, and ovens?



Lowering Your Greenhouse Gas Emissions

It is important for all people to lower their greenhouse gas emissions. This will lessen the effects of climate change. This means finding ways to cut down on fossil fuel use in everyday life. Remember that in many areas, electricity is produced by burning fossil fuels. Most vehicles still use fossil fuels as a source of energy. People in developed countries, such as the United States, use much more energy than people in developing countries. So it is especially important for these people to work at lowering greenhouse gas emissions.

STOP Which countries have the highest greenhouse gas emissions?

You can lower your own greenhouse gas emissions. Using less electricity is one way. Be sure to turn off lights when you leave a room. Replace burned out light bulbs with compact fluorescent bulbs, like the one shown in the picture. These bulbs use much less electricity than the old kind. Turn off your electric devices as soon as you are finished using them. These include the television or game players. Hang clothes to dry instead of using the electric clothes dryer. Be sure appliances in your home are running efficiently. Old appliances will break or wear out. Look carefully at the energy ratings of appliances before choosing replacements. Appliances that use less energy also cost less money to run.



Compact fluorescent light bulb

Lowering Your Greenhouse Gas Emissions

1. Put a checkmark (✓) next to the answer that is most correct.

- a) Which means of transportation has **no** carbon emissions?
- A bus
- B bicycle
- C carpool van
- D commuter train
- b) Where are you **most likely** to find fruits and vegetables that were grown close to where you live?
- A A mall.
- B A grocery store.
- C A farmer's market.
- D A large chain store.
- c) Which country has the **highest** greenhouse gas emissions?
- A Japan
- B Mexico
- C South Africa
- D the United States
- d) Which light bulbs use **less** energy?
- A incandescent
- B compact fluorescent
- C halogen
- D natural gas
- e) Imagine that you are buying a notebook for school. To help lower greenhouse gas emissions, the **best** choice is a notebook...
- A wrapped in plastic.
- B with recycled paper.
- C shipped from overseas.
- D made from raw materials.

Lowering Your Greenhouse Gas Emissions

2. Answer each question with a complete sentence.

- a) Explain why developed countries have higher greenhouse gas emissions than developing countries.

- b) How do you get from your home to school every day? Are there other choices you could make to lower greenhouse gas emissions? Explain.

Research

3. What changes could you make in your life to help lower greenhouse gas emissions?

First, make a list of all the ways you use fossil fuels. Remember that fossil fuels are used to power most vehicles. They are also used to provide electricity in most areas. Carry a notebook with you for one day. List all of the ways you use electricity. List all the times you ride in gas-powered vehicles.

Then, go through your list. Think about things you could change to lower your greenhouse gas emissions. Create a T-chart. List your daily uses of fossil fuels in the left column. In the right column, write ways to lower your use of fossil fuels.



Investigate Product Choices

How to lower greenhouse gas emissions while shopping? What choices could you and your family make?

First, make a list of 5 products you or your family members purchase regularly. Consider items like foods, clothes, school supplies, and cleaning products.

If possible, go shopping with your family when they purchase these products. Bring a notebook. At the store, look at all of the choices for each product. Look at the packaging. Read the labels. Find out where each product is made. Find out whether it contains recycled materials. Write a description of each product.

Now, study your list of product descriptions. Figure out which product choices use fewer fossil fuels to manufacture or grow, to package, and to transport. Create a 4-column chart with columns labeled as below. In the product description column, write a brief, general description of the product category, such as "dish detergent." In the other columns, write the names or descriptions of the brands or choices that are good, better, and best for lowering greenhouse gas emissions. Display your chart in class. Talk about why you classified the products in the different categories.

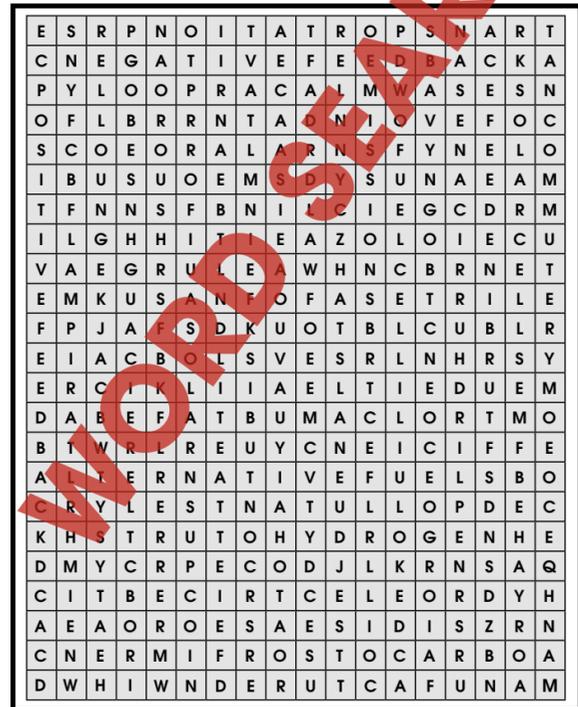
Product Description	Good	Better	Best



Word Search

Find all of the words in the Word Search. Words are written horizontally, vertically, diagonally, and some are even written backwards.

alternative fuels	emissions	manufactured	solar
biofuel	fossil fuel	Masdar	solar cells
carpool	fuel cell	negative feedback	transportation
commuter	hybrid	pollutants	turbine
dam	hydroelectric	positive feedback	urban
efficiency	hydrogen	renewable	wind



Comprehension Quiz

Part C

Answer each question in complete sentences.

1. Explain how changes in **greenhouse gas emissions** will affect Earth's average temperature. 4

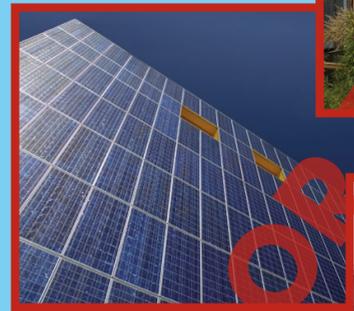
2. Describe two alternative fuels that can be used to power vehicles. Be sure to explain the source of energy in each fuel. 4

3. Describe two alternative sources of energy that can be used to produce electricity for homes and other buildings. 4

4. Explain how urban planning can affect climate change. 5

SUBTOTAL: /17

Alternative "Green" Homes and Businesses





Lowering Your Greenhouse Gas Emissions

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1.

a) B

b) C

c) D

d) B

e) B

2.

a) People who live in developed countries use more energy for lights, appliances, vehicles, etc.

b) Answers will vary.



EASY MARKING ANSWER KEY



Lowering Your Greenhouse Gas Emissions

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Product Description	Good	Better	Best

Alternative "Green" Homes and Businesses

