NAME



DATE

Blue Impact: Introduction Student Sheet

DIRECTIONS

Answer the following questions while watching the New England Aquarium's **Blue Impact** *Introduction* video. It is a good idea to read all the questions before you start the video. You may also need to pause or replay sections to help you answer the questions.

QUESTIONS

- 1. Climate change is mostly due to ______.
 - a. thicker blankets covering the planet.
 - b. an increase in greenhouse gases in the atmosphere.
 - c. more heat energy coming from the sun.

2. Is the following statement true or false? You will need to explain your answer after the video.

Scientists have just recently discovered that more carbon dioxide in the atmosphere is increasing the temperature of the planet.

For Question #3, pause at minute 2:52.

3. Draw and describe how a car engine releases CO₂.

4. Using words and/or drawings, explain how carbon dioxide in the atmosphere is like a blanket.

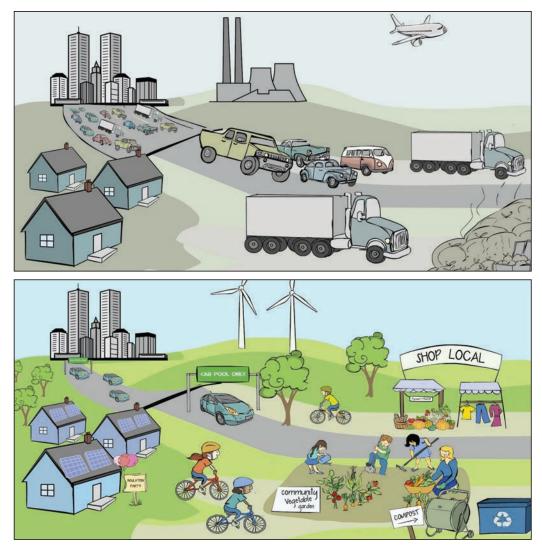
- 5. What percentage of the atmosphere is made up of CO₂?
 - a. less than 1%
 - b. 30%
 - c. 60%
- 6. How much has the carbon dioxide level in the atmosphere risen in the last 60 years?
 - a. less than 1%
 - b. 30%
 - c. 60%

POST FILM QUESTIONS

1. Explain your answer to #2.

True or False? Scientists have just recently discovered that more carbon dioxide in the atmosphere is increasing the temperature of the planet.

2. Compare the two images from the video. Circle all the ways the community in the second picture has reduced their carbon footprint.



3. Pick one of the improvements that you circled in the second picture. Describe what has improved and how it helps reduce greenhouse gasses. An example has been done for you.

Describe what you see	What actions are they taking?	How does this help decrease the CO ₂ blanket?
Wind turbines instead of power plants	Making electricity from wind	Turbines do not need fossil fuels (stored carbon) to create electricity. They use natural windpower to create electricity. It does not add CO ₂ to atmosphere like coal-power plants.

CHALLENGE QUESTION

1. Feedback Loops

Using the definition of positive feedback loop and the example from the video, explain how melting sea ice can lead to an even warmer atmosphere.

