

## **ENVIRONMENTAL INTERACTIONS, WORLD**

## **Discussion Guide**

The following questions are designed to spark discussion and engagement with the map. The questions can be modified or adapted in any way to suit your class.

## Questions

- 1. Find your country on each of the inset maps. Is any part of your daily life contributing to or being affected by the topic on each of these maps? If so, how?
- **2.** Note the location of the countries on the main map of the world. Now study the Sea Level Change inset map, which charts sea level change over the past 50 years. If similar trends continue, which countries of the world should be most concerned about sea level change? Which major cities?
- **3.** Do you see any connections between the vegetation zones (for example, desert, cropland, forest) and the areas where large populations live? Do you see any connections between large population centers and the quality of the air?
- **4.** Look at the main map and note where the equator is. Then look at the Temperature Change inset map. Is the Northern or Southern Hemisphere experiencing more rapid temperature change? What geographic features might explain this?
- **5.** Why do you think the creators of the map represented the ocean trash in the way that they did? How would you choose to represent ocean trash on a map?
- **6.** Examine the Urbanization inset map and note that the phenomenon of urbanization is often associated with economic development. What does the distribution of large cities and megacities tell us about economic trends in today's world?
- **7.** If you could live anywhere in the world, where would you live? Use information from the main map and inset maps to support your choice.



## Answers

- **1.** Answers will vary.
- 2. Answers may vary, but countries may include Mexico, United States, Georgia, India, China, and the Philippines; cities may include New Orleans, U.S.; Manila, Philippines; Diamond Harbour, India (near Kolkata).
- **3.** Students should note that large population centers often form near croplands and grasslands. Large populations for the most part do not live in regions of desert or tundra. Some of the areas where we see megacities (especially in China and India) are also the areas where the air quality is unhealthy to hazardous.
- **4.** The Northern Hemisphere is experiencing more rapid temperature change. Students should cite the greater amount of land in the Northern Hemisphere compared to the greater area of water in the Southern Hemisphere. Land masses gain and lose heat more quickly than oceans do.
- **5.** Answers will vary. This design was inspired by a description of ocean trash as "a soup of confetti-sized plastic bits." Since the trash is amorphous, fluid, and floating in the ocean, an exact location and size is not available, so a rough representation was required.
- **6.** Answers may touch on the idea that the countries we consider most developed are also the countries that have been most urbanized. The areas where urban populations are exploding (India and China, in particular) are countries that have less than 50% of their population living in urban areas. If urbanization is associated with economic development, then these countries are on the verge of major economic development.
- 7. Answers will vary.