Science Time

Program Content for April 12, 2017

Read the article 'Rising China waters imperil world of progress' on page A6 of the Sunday, April 9, 2017 edition of The Seattle Times.

Objective

• I can explain how climate change is impacting China's environment and the health of its citizens.

Next Generation Science Standards (NGSS) connection

Disciplinary Core Ideas - Global Climate Change

 Human activities, such as the release of greenhouse gases from burning fossil fuels, are major factors in the current rise in Earth's mean surface temperature (global warming). Reducing the level of climate change and reducing human vulnerability to whatever climate changes do occur depend on the understanding of climate science, engineering capabilities, and other kinds of knowledge, such as understanding of human behavior and on applying that knowledge wisely in decisions and activities.

<u>Pre-reading and Vocabulary</u>: Define each term and then use it in a sentence to demonstrate your understanding.

- 1. tributary
- 2. topography
- 3. emission
- 4. pandemic

Comprehension Questions

- 1. What is the name of the city in this article that suffered a large flood in 2014?
- 2. How has the region around southern China's Pearl River Delta changed over the last generation?
- 3. What are some effects of climate change that researchers say can already be seen?
- 4. How might climate change and the rising South China Sea impact the world's economy?
- 5. What is the cause of China's high levels of air pollution?
- 6. What negative effects can temperature spikes have on people?
- 7. What challenges does the city of Shenzhen face due to the removal of its mangroves?
- 8. What is landfill vulnerable to?
- 9. Why is dealing with climate change very challenging?
- 10. What opportunity has been provided to China by the businesses that have left Guangdong province?

Prompts and Extensions

1. View the interactive map (as well as other images) within this <u>article</u> that shows how the Guangzhou region in China has rapidly changed over time.

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- 2. Teachers can sign up to bring ACE (The Alliance for Climate Education) to their school and gain access to the youth-centered climate change video 'Our Climate Our Future' <u>here</u>.
- 3. Visit this <u>website</u> to learn how some of our nation's youth are taking legal action in their pursuit of climate action.
- 4. Learn how Seattle is preparing for climate change and how you can get involved at the Office of Sustainability & Environment's <u>website</u>. This climate action <u>song</u> is particularly catchy.

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