

SETTLEMENTS and THE ENVIRONMENT

Looking outside the window at this grey December day, it's hard to imagine that just two years ago the city was covered in icy white.

The ice storm of 2013 brought Toronto, which is usually sheltered from the harsh conditions common in the Maritimes and Montreal, to its knees. Two squalls on Dec. 20 and Dec. 22 covered the city in 20 to 30 mm of a slick layer of freezing rain, coating everything in ice. Trees toppled like candy canes, crushing power lines and leaving almost 70,000 residents in the cold and dark on Christmas Eve.



It was horrible, yes. People suffered; some died.

But there was an eerie beauty to the cityscape, as though Toronto was frozen in time.

A year on and Torontonians are stewing like a tepid pot of tea as they trudge through the acrid brown slime that has

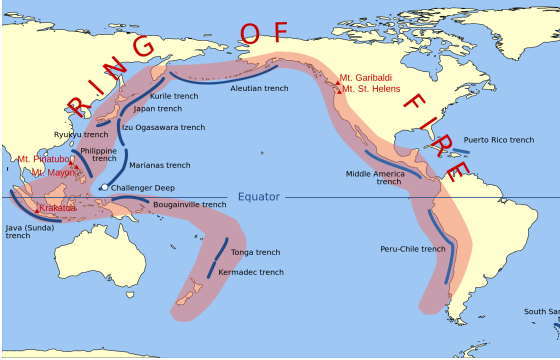
accumulated on the

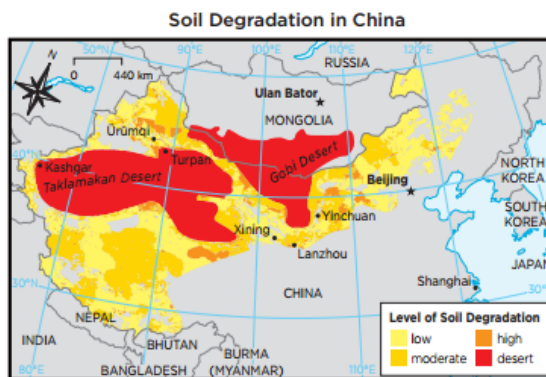
city streets after a few days of mild drizzles. People sweat underneath their overcoats, freshly dry-cleaned in anticipation of December chills that never chilled. There is no cold. There is no warmth . . . only a light fog on window panes.

When the ice storm hit, it uprooted 50,000 tonnes of debris, turning tree branches into weapons of mother nature capable of taking out windows, cars and power lines.

https://www.youtube.com/results?search_query=hurricane+katrina

How Can Physical Processes Affect Settlements?

IMAGE	PROCESS
 VOLCANO	
 EARTH QUAKE	





LAND SLIDE

QUIZ REVIEW

CONCEPTS

ITEMS TO STUDY

CASE STUDY: SAUDI ARABIA

Saudi Arabia, in the Middle East, is located between the Red Sea and the Persian Gulf. Approximately 95 percent of the country is desert, with no lakes or rivers and no significant rainfall. In the past, settlements were often located in *wadis*, or valleys, where there was access to underground water. Settlements were small, and people were able to grow crops and tend herds of camels or goats. The nomadic lives of the settlers ensured a balance between the physical and human environments.

Today, the population of Saudi Arabia is growing, and the relationship between the physical and human environments has changed. Most people live in urban areas. Access to food is an ongoing challenge in the desert, because water is needed to grow crops. Their solution is to create arable land in the desert through irrigation projects to grow their own crops and reduce food imports.

Figure 2.11 shows how the landscape of Saudi Arabia has changed from 1987 to 2012.

The water used for agriculture in Saudi Arabia comes from an underground source. However, once the underground water runs out, it is gone forever. Less moisture in the soil leads to increased desertification. Less moisture also leads to higher-than-normal levels of different salts, which can harm the crops.

TRY IT

1. How has the physical environment impacted the people of Saudi Arabia? How have the people of Saudi Arabia impacted the physical environment?
2. Research farming in Saudi Arabia. Are there other ways to access water?
3. Do you think that Saudi Arabia should continue to farm? Why or why not? Show your ideas in graphic organizer.
4. Research another area where desert is being turned into farmland. What characteristics does this area share with Saudi Arabia?

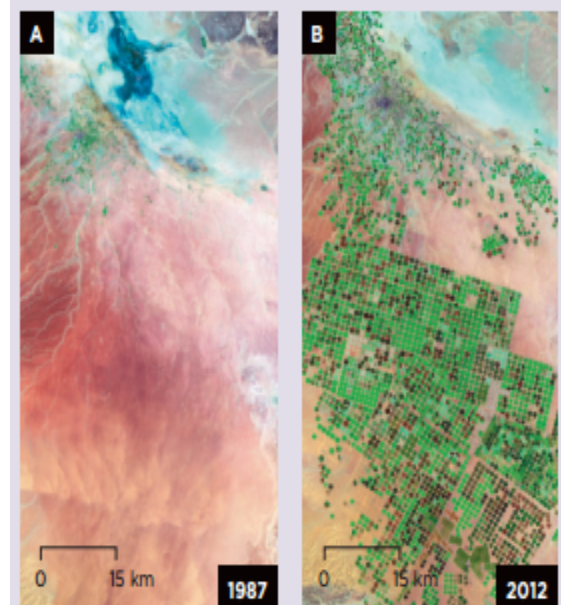


FIGURE 2.11 Satellite images of Saudi Arabia show a changing landscape between 1987 (A) and 2012 (B). The bright-green areas are vegetation.

Minus Question 2

Marking Scheme

Complete: Question 1,3,4

Short Answer Test Assessment Rubric					
	Unacceptable 0 pts	Needs Improvement 1 pts	Satisfactory 2 pts	Meets Expectations 3 pts	Exceptional 4 pts
Content 4 pts	Unacceptable Did not answer question.	Needs Improvement Answers are partial or incomplete. Key points are not clear. Question not adequately answered.	Satisfactory Answers are not comprehensive or completely stated. Key points are addressed, but not well supported.	Meets Expectations Answers are accurate and complete. Key points are stated and supported.	Exceptional Answers are comprehensive, accurate and complete. Key ideas are clearly stated, explained, and well supported.
Organization 4 pts (Answers are clearly thought out and articulated.)	Unacceptable Did not answer question.	Needs Improvement Organization and structure detract from the answer.	Satisfactory Inadequate organization or development. Structure of the answer is not easy to follow.	Meets Expectations Organization is mostly clear and easy to follow.	Exceptional Well organized, coherently developed, and easy to follow.
Writing Conventions 4 pts (Spelling, punctuation, grammar, and complete sentences.)	Unacceptable Did not answer question.	Needs Improvement Displays over five errors in spelling, punctuation, grammar, and sentence structure.	Satisfactory Displays three to five errors in spelling, punctuation, grammar, and sentence structure.	Meets Expectations Displays one to three errors in spelling, punctuation, grammar, and sentence structure.	Exceptional Displays no errors in spelling, punctuation, grammar, and sentence structure.

QUESTIONS SHOULD INCLUDE

- FULL SENTENCES**
- EXAMPLES FROM CASE STUDY**

COASTAL EROSION VS RISING SEA LEVELS

<u>COASTAL EROSION</u>	<u>RISING SEA LEVELS</u>

<u>EXAMPLES</u>	<u>EXAMPLES</u>

Bangladesh: https://www.youtube.com/watch?v=MAkz1AVZY_Y

Follow Up Questions **Date:** _____

1. How does the video display either coastal erosion or rising sea levels?
How is this harming the population and environment?
2. What is the difference between coastal erosion and rising sea levels?
3. Is Canada at risk of experiencing any of these geographical occurrences?