

Literacy Year 9 – Week 8

STUDENT ACTIVITIES

Without reading any of the text (see page2), look at the layout of the text and note some of its features. What type of text do you think this is? Where might it have come from?

Before reading the text, look at questions 1, 2, 3 and 4.

Question 1

According to the text, Angkor's water system at its peak was

- able to adapt to changing conditions.
- based on weak design principles.
- over-engineered and costly.
- complex and efficient.

Shade one
bubble.



Question 2

According to the Greater Angkor Project research, why did Angkor's rice growing economy fail?

- Irrigation canals clogged up.
- Rice crops became diseased.
- Monsoonal floods increased.
- Destructive rock falls occurred.

Question 3

The title of the text is *Water warning in Angkor ruins*.

What warning is provided by the Angkor experience?

- Too much water can lead to the decline of a city.
- Water supply systems can spread disease in cities.
- Controlled water supply is essential for a city's survival.
- Water management systems can be sabotaged by invasions.

Question 4

The main purpose of this text is to

- announce the launch of the Greater Angkor Project.
 - report research findings about the decline of Angkor.
 - examine several theories about why Angkor was abandoned.
 - Explain how Angkor engineers constructed water supply structures.
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STUDENT ACTIVITIES

Read the text, *Water warning in Angkor ruins*.

Water warning in Angkor ruins



Dying city: Part of the spillway

Leigh Dayton
Science writer

TWO enormous masonry structures discovered near Cambodia's fabled Angkor Wat provide rock-hard evidence that the once-powerful Khmer kingdom vanished because of over-building, environmental damage and climate change.

One of the new-found structures was a 40 m by 80 m spillway. The other was a 100 m by 40 m outlet channel that, like the spillway, was part of the elaborate water system that served the sprawling ancient agricultural city of Angkor.

'These two structures demonstrate very high levels of hydraulic engineering,' said Sydney University archaeologist Roland Fletcher, director of the Greater Angkor Project (GAP), a five-year collaboration between the university, French researchers and the Cambodian agency managing the Angkor site.

'The Khmer engineers used their expertise in masonry construction to build these structures that managed water flows for the entire city. There are considerable implications for our understanding of our own water management systems.'

Angkor is the largest known city from the pre-industrial world. It existed from the 9th to the 15th centuries.

Using satellite images, aerial photographs and field surveys, the GAP team estimated that the low-density city covered about 1000 sq km, spreading outwards from the central complex of Angkor Wat.

The intricate network of channels and reservoirs sustained a population of about 750,000.

Then, about 500 years ago, the Khmer capital was abandoned. This has baffled modern scholars. Theories ranged from invasions and decline of the controlling religion to major geological shifts.

But Professor Fletcher's group suspects the city died when it could no longer support the rice-growing economy that fed it.

That happened because of Angkor's success. As it grew, more land was cleared for rice paddies, increasing soil erosion into the irrigation canals. Silt built up, choking the water system and taking time and resources to keep it flowing.

The final kick came from an abrupt decrease in the monsoon rains that filled the great lake east of Angkor.



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After reading, work with a partner or in a small group (as directed by your teacher), and choose the correct answer for questions 1 – 4. Fill in the box below. Your group must reach agreement on an answer for each question. Support your choice by looking for evidence in the text.

Question	Correct Answer	Evidence from the text
1		
2		
3		
4		