

Ecosystems & Habitats

Name:

Date:

INQUIRY

Xuanwu Lake sits in central Nanjing, surrounded by millions of people. Is it still an ecosystem?

Discuss with your partner. Write your initial ideas below:

Key Vocabulary

Term	Definition
Ecosystem	Living things + non-living environment interacting.
Biotic	Living factors.
Abiotic	Non-living factors.
Habitat	The place where an organism lives.
Population	All of ONE species in an area.
Community	All DIFFERENT species in an area.

Part A — Knowledge

1. Define 'ecosystem' and explain how it differs from a 'habitat'. [3 marks]

2. List three biotic and three abiotic factors in Xuanwu Lake. [3 marks]

3. Put in order from smallest to largest: ecosystem, population, community, biosphere, individual, biome. [2 marks]

Part B — Application

4. The Korean DMZ has been untouched for 70+ years and now hosts rare species including Asiatic black bears. Explain how removing human activity allowed an ecosystem to develop. [4 marks]
5. Germany's Black Forest was damaged by acid rain in the 1980s, which changed soil pH. Explain how changing ONE abiotic factor can affect an entire ecosystem. [3 marks]

Part C — Inquiry Extension

6. Compare Xuanwu Lake (Nanjing) and the Han River (Seoul) as ecosystems. Consider biotic factors, abiotic factors, and human impact. Which do you think is healthier? Justify your answer. [5 marks]