

# Population Dynamics

Name:

Date:

**INQUIRY**

**China's 10-year Yangtze fishing ban affects both fish AND human populations. How do populations change?**

Discuss with your partner. Write your initial ideas below:

## Key Vocabulary

---

Term	Definition
<b>Population</b>	Number of one species in an area.
<b>Carrying capacity</b>	Maximum population an environment can sustain.
<b>Predator-prey cycle</b>	Populations rise and fall in linked cycles.

## Part A — Growth Curves

---

1. Describe the typical population growth curve: lag phase, exponential growth, carrying capacity. Sketch it. [4 marks]

## Part B — Predator-Prey

---

2. When wolves returned to Yellowstone: deer population fell, then vegetation recovered, then rivers changed.  
Explain each link. [4 marks]

### **Part C — Application**

---

3. Predict what will happen to fish populations in the Yangtze during the 10-year fishing ban. Draw a population graph for years 2021-2031. [4 marks]