

# Tragedy of the Commons Simulation



## ROUND 1: COMMON POND

- You are the head of your household and must supply food for your starving family.
- You share a fishing hole along with three other families.
- This fishing hole can only hold a certain amount of fish. (You do not know that number at this time.)
- You will do 4 rounds of fishing.
- After each round of fishing, you will trade who "fishes" first so that each person has a chance to go first.

### Please follow these instructions.

- 1) The pond is the cup, the fish are the goldfish, and chopsticks serve as your high tech fishing pole. You will fish by plucking goldfish from the cup to your napkin (boat)
- 2) You may not look in the pond or talk with other fishers while you fish at any time.
- 3) You have **30 seconds** to fish. You may catch as many fish as you want. You have to catch at least 2 fish for your family to survive. If you catch more than 2 fish...you may sell them for a profit.
- 4) After your 30 seconds, allow each member of the group to record the number of fish you caught.
- 5) The next person fishes. After 30 seconds, record the number of fish caught.
- 6) At the end of the round (all 4 people have fished or pond is out of fish) return pond to teacher to allow fish to reproduce.



## ROUND 2: COMMON POND AND PRIVATE POND

- In this round you will have two ponds, one common and one private. The rules for the common pond are the same as in the last round.
- This time you will be allowed to talk and strategize. You will also be able to look in the pond while you are fishing and while others are fishing.
- The common pond can only hold 16 fish. The private pond can only hold 4 fish.
- You **must** remove at least one fish from each pond each round.
- You **may** remove as many fish as you wish from each pond each round.
- After each round, return the common pond and the private pond to the teacher for "reproduction". Record your results for both the private and common pond.

Analysis questions for inquiring students to ponder:

- 1) What happened to the common resource in Part 1? Why?
- 2) Did you get different results for the common pond in Part 2? Why?
- 3) Compare and contrast the way you fished in parts 1 and 2.
- 4) How did your thinking change from part 1 to part 2?
- 5) If you cooperated with other fishers, what was the result?
- 6) Did you fish differently in the common pond and in the private pond? Explain.
- 7) Why does common usage lead to exploitation (overuse)?
- 8) What would be the ideal way to manage the common pond?
- 9) This activity is a simulation of what is known as the "tragedy of the commons." In your own words, explain what this means.
- 10.) What strategies help prevent a tragedy in the commons?
- 11) If a new student had joined your group, how would it have changed your strategy?
- 12) Think of a situation in the world today that is "tragedy of the commons". What is that problem, how do you think it could be solved?

**Final Summary:**

Briefly describe the simulation (what you did) and the results (what you saw). What lessons were learned that need to be remembered?

Reflect upon this quote by John C. Sawhill, "In the end, our society will be defined not only by what we create, but by what we refuse to destroy."