

Tragedy of the Commons

{Human Population



Tragedy of the Commons: Go Fishing Game

- Everyone copy this chart onto a piece of paper

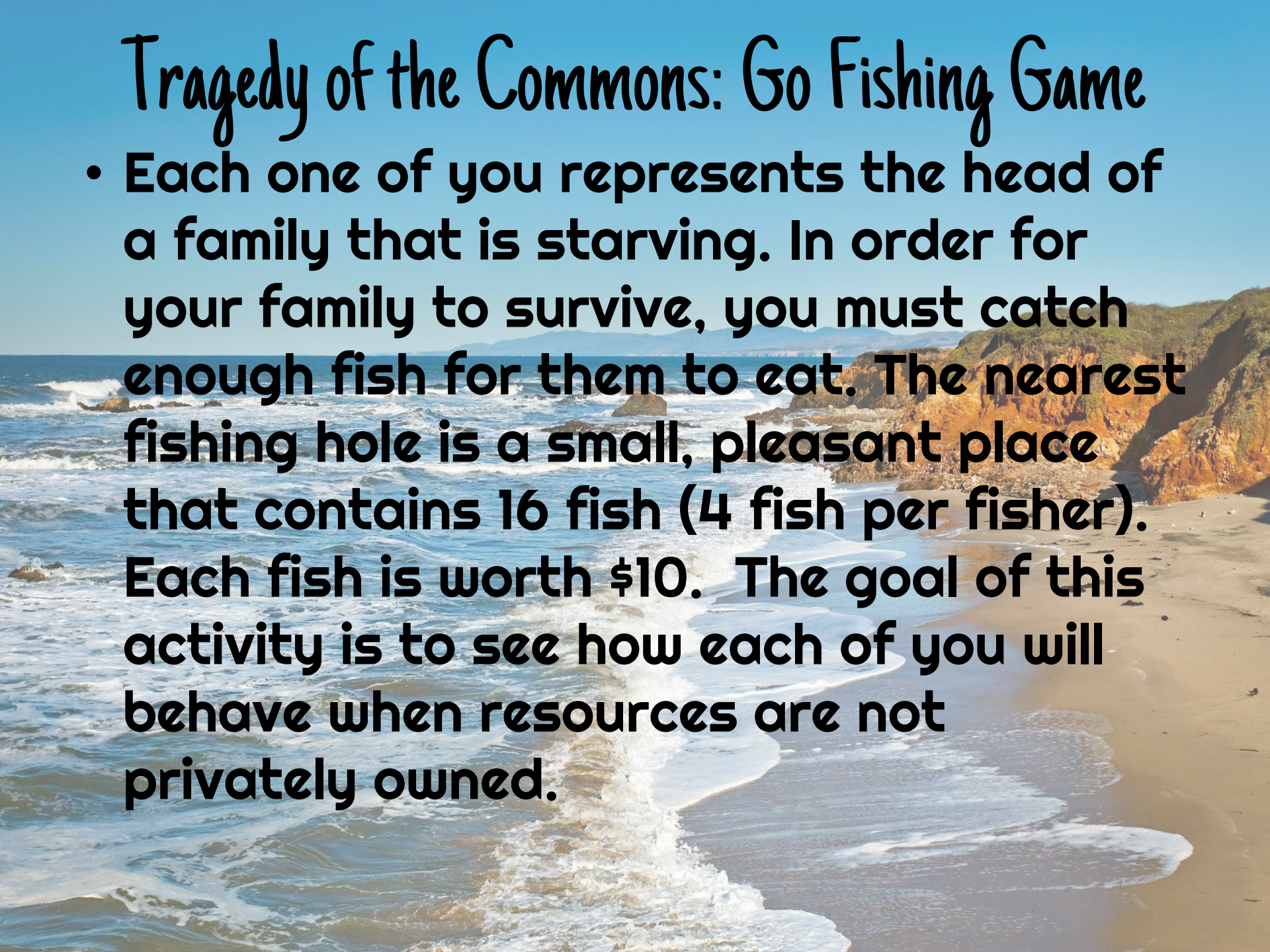
Round 1

Morning	# of fish at start	# of fish taken by 1 st fisher	# of fish taken by 2 nd fisher	# of fish taken by 3 rd fisher	# of fish taken by 4 th fisher	# of fish left at end of day
1						
2						
3						
4						
Total Money Made						



Tragedy of the Commons: Go Fishing Game

- Each one of you represents the head of a family that is starving. In order for your family to survive, you must catch enough fish for them to eat. The nearest fishing hole is a small, pleasant place that contains 16 fish (4 fish per fisher). Each fish is worth \$10. The goal of this activity is to see how each of you will behave when resources are not privately owned.



Tragedy of the Commons: Go Fishing Game

- You must fish by sucking up the "fish" from the "pond" with straws. You will get a chance to fish once a day (which lasts 30 seconds) and each time you fish you can take as little or as many fish from the lake as you want. Everyone can fish at the same time, but you cannot talk. It is your choice of how many fish you take, however, you have to take at least one fish, or your family will starve. Remember each fish is worth \$10.

Tragedy of the Commons: Go Fishing Game

- **The fish in your lake will reproduce once a year. [See your teacher at the end of each year - each remaining fish is able to spontaneously reproduce and make one new fish (4 fish become 8, i.e., to a maximum of 16)]. Keep the fish that you "catch" in front of you.**
- **When your group runs out of fish, the game is over for you. We will fish for 4 days.**
- **Do not talk or communicate while fishing!!**

Tragedy of the Commons: Go Fishing Game

Answer these questions:

- 1. How many people in your group died? Why?**
- 2. What could you have done differently to make more money?**



Tragedy of the Commons: Go Fishing Game

- Everyone copy this chart onto a piece of paper

Round 2

Morning	# of fish at start	# of fish taken by 1 st fisher	# of fish taken by 2 nd fisher	# of fish taken by 3 rd fisher	# of fish taken by 4 th fisher	# of fish left at end of day
1						
2						
3						
4						
Total Money Made						

Tragedy of the Commons: Go Fishing Game

Talk with your group, and decide on some rules to help make your group more successful and make the most money. You have 3 minutes to decide on your rules and write them down.

3. What are your groups new rules?



Tragedy of the Commons: Go Fishing Game

We will fish again, 4 rounds, 30 seconds per round.



Tragedy of the Commons: Go Fishing Game



What group made the most money?!?

Answer these last questions.

4. What was your rationale for your new fishing technique in each part of this activity? Explain.
5. Did you cooperate in part 2? Why or why not? Did it make a difference?
6. Common use of a shared resource can sometimes lead to exploitation. What does this mean? Did you see it in your activity?
7. How should a common resource such as a community fishing pond be managed? What problems might you encounter?
8. Can you think of other examples of common resources that have been exploited by people?
9. Renewable resources are no longer renewable if we overuse the resource. What strategies can be used to prevent “the tragedy of the commons”?
10. Why might more commons be destroyed as the human population gets bigger?

Tragedy of the Commons

- An essay written by Garrett Hardin in 1968
- Primarily about population increase, but our focus will be on understanding the commons, in general.



Tragedy of the Commons

The Tragedy of the Commons is a phrase used to refer to the conflict for resources between individual interests and the common good (i.e., society).

The term was made popular by Hardin in his 1968 essay *The Tragedy of the Commons*.



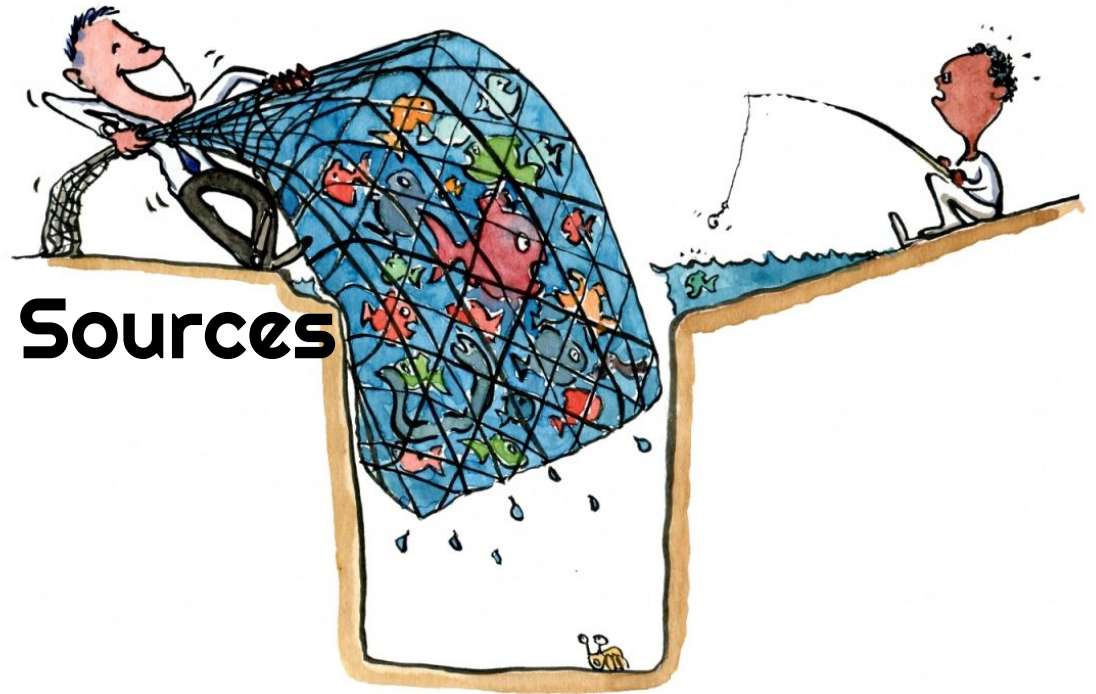
Definition

Individuals use a commonly available but limited resource solely on the basis of individual need. At first they are rewarded for using it; eventually, they get diminished returns, which causes them to intensify their efforts. Eventually, the resource is either significantly depleted, eroded, or entirely used up.



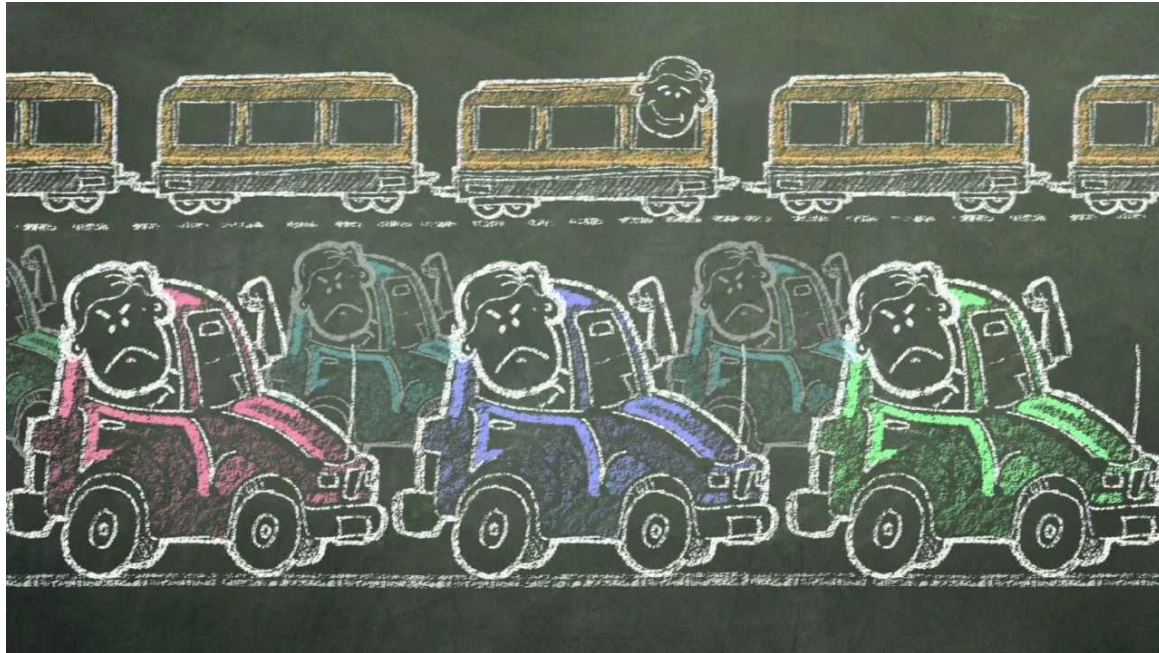
Commons of Interest

- Land
- Atmosphere
- Oceans
- Water
- **Stored Energy Sources**
- **Minerals**



Management Principle

Manage the “commons,” either through educating everyone and creating forms of self-regulation and peer pressure, or through an official regulating mechanism, ideally designed by participants.





Early Warning Symptom

“There used to be plenty for everyone. Now things are getting tough. If I’m going to get any profit out of it this year, I’ll have to work harder.”



Tragedy of the Commons: Go Fishing Game

- **Now that you have seen this video answer these questions:**
 - **How does this relate to the Tragedy of the Commons?**
 - **What can be done to prevent this tragedy from happening?**