



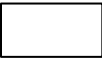
Engage

Tragedy of the Commons

What To Do:

- 1. Make a list of natural resources that we learned about in the last lesson in the chart below.
- 2. Next to each determine what types of things would be found in the ocean. The first one is done for you.

Natural Resource	What is Found in the Ocean?
Fossil Fuels	Oil and gas



Explore

Materials: paper plate for each group, plastic spoons for each student, large bag of Goldfish Crackers, paper towels

What To Do:

- 1. Your group will be given a paper plate, 4 plastic spoons, 4 paper towels, and 16 Goldfish crackers.
- 2. Each person will take turns fishing in the “ocean” paper plate.

Rules to be aware of

- 1. There will be four rounds and each person in the group gets to go first one time.
 - 2. You may not talk to the other students while the rounds are happening.
 - 3. If 0-1 fish is taken, you will go hungry.
 - 4. If 2 fish are taken, you will have enough to eat.
 - 5. If more than two fish are taken, they can be sold to earn money.
3. Your teacher will start and end each round.
4. At the end of each round record how many fish you took in the data table below.
5. Your teacher will place more Goldfish in your ocean after each round. (1 fish for every two in the ocean)

Round	Number of fish to start	Number of fish you caught	Number of people with not enough to eat	Number of people with just enough to eat	Number of people with a profit
1					
2					
3					
4					

6. When all the fish in the ocean are gone or after Round 4 the activity ends.

Natural Resources Ideas

Explain

Natural Resource

Commons

Sustainability

Elaborate

What To Do:

1. Read through the Word Bank and the statements below
2. Watch and listen to the video found at https://www.youtube.com/watch?v=HZ2c_jHZ3eU
Don't try to fill in the blanks.
3. Read over the statements again.
4. Watch the video again and use the Word Bank to fill in the blanks below

WORD BANK

Sustainably shared commons limits
Gain live farmer loss
One overgrazed sheep

1. A common is a _____ resource freely available to all who _____ nearby.
2. Each _____ thinks, just _____ more sheep.
3. The meadow is now trampled and _____.
4. Soon there is not enough grass for any of the _____.
5. Individual short-term _____ leads to collective _____.
6. Everyone suffers when a shared resources is used without _____.
7. By working together and setting rules the _____ can be managed _____.



Go back to your data sheet for the fish in the ocean game.

1. How did the game start?

2. Did anything change along the way? _____

3. What happened? _____

4. Did you group have any fish left at the end of the game? _____

5. Would there be enough fish for another round? _____

6. Were the strategies your group used sustainable? _____

7. If you were to play the game again, what rules would you change?

8. How is the ocean a commons? _____

9. What rules should countries make to make sure there are enough fish for everyone?



Evaluate

Name _____ period _____

EXIT TICKET

Tragedy of the Commons

1. A natural resources is –

- A. Anything made by humans
- B. Anything found in nature that is useful to humans.
- C. Anything that is NOT found in nature
- D. Anything that is found in nature that is NOT useful to humans

2. A commons is –

- A. A resource that is kept by one farmer.
- B. A resource that has been used up.
- C. A resource that can't be used by anyone.
- D. A resource that is shared and available to all.

3. Sustainability is-

- A. The depletion of natural resources.
- B. The use of natural resources until they are used up.
- C. The avoidance of the depletion of natural resources in order to maintain an ecological balance.
- D. Keeping certain groups from using natural resources.

4. A natural resource found in the ocean is –

- A. Birds
- B. Fish
- C. Cattle
- D. Sheep

5. One way of helping a commons survive is –

- A. Set rules for everyone to follow.
- B. Set rules for only certain people to follow
- C. Set rules that no one has to follow.
- D. Set rules for half the year.