

Energy and the Environment – The Driving Game

Instructions

We are going to play a game. In this game, every person is a college student who has a driver's license, a car they can use whenever they want to, and lives in an apartment off campus on the bus line. Every round of this game is a day of class and we will play a number of rounds. You need to decide each day whether you want to drive to school or take the school bus. Pretend that there are no other options (your parents can't drive you, you can't walk or ride a bike, etc.) Both decisions – driving or taking the bus – have benefits and costs associated to you that we will talk about in “game points.” Your goal is to earn as many points as you can by the end of the game. All decisions that people make have costs and benefits. It usually makes sense to do the thing where the net benefit (benefit minus the cost) is the largest. In the first part of this game, Driving has a benefit of 7 game points and a cost of 4 game points, so $7-4$ is 3. Riding the school bus has a benefit of 2 game points and a cost of 0 game points, so $2-0$ is 2. That means that driving will earn you 3 points and riding the bus earns you 2. If this is the only consideration in the game what is the best thing to do?

There is one more consideration in this game: driving to school creates pollution that makes people sick. People who get sick lose all of their points for that day. To start the game, we are going to say that for every two people who drive to school, one person is going to get sick. The person who gets sick will be chosen randomly from the names of everyone in the room and may be someone who drove or someone who rode the school bus.

Everyone please indicate whether you are riding the bus or driving this round by marking it on your record sheet. Helpers will come around and note your decisions and we'll write them up on this board and then see what happens.

Record Keeping Sheet

Please fill in your Benefits and Costs from your Blue or Green Card Each Period

Day	Drive or Bus (Circle one)	Benefit	Cost	Points Earned	Total Game Points
1	D or B				
2	D or B				
3	D or B				
4	D or B				
5	D or B				
6	D or B				
7	D or B				
8	D or B				
9	D or B				
10	D or B				
11	D or B				
12	D or B				
13	D or B				
14	D or B				