Jenga Ecosystem Game

Equipment:

1.) Multiple “Jumbling Towers” sets with colored blocks (if they are not colored, color them yourself so that there are the same amount of blocks for each color)
2.) A three sided color die to representing three color blocks
3.) Note cards

Instructions:

Write good and bad scenarios for an ecosystem on notecards, using very few good scenarios. For bad scenarios, write down how many blocks to remove based on the severity of the scenario (for example, “lake is opened to regulated fishing” could result in removal of one block, “forest is cleared for paved road” could result in removal of three blocks, and “extinction of a keystone species” could result in removal of five blocks). For good scenarios no blocks would be removed. The situations on your cards will represent our real world situations where we as humans do good things to help our environment and other times do negative damage to it. Split students into groups giving them their own set of Jumbling towers. The idea is for the groups to compete against each other and have the last set of towers standing. The towers will represent an ecosystem. Have a group role the die to determine the color of blocks to remove, and then pull a card randomly from the pile and read it. If it is a bad scenario instruct all groups to remove the set number of blocks. After everyone has removed the number of blocks, pass the die to another group and let them roll. Read another scenario from a card again and have the groups remove a set number of blocks of the designated color again. The game can be sped up or down by changing the number of blocks to remove per round. You can use as many sets of towers as needed for the size of the group. Always alternate the three color blocks while stacking the towers to insure even removal (i.e. if your colors are red, blue, and yellow, there should be a red, blue, and yellow block on each level in varying positions). When stacking the towers leave small gaps between each block to make for easier removal.

Background:

Give a good description of ecosystems and food webs. Explain how fragile things are and how all things have an effect on others. When finished ask questions about food chains, and ecosystems and see what the participants took from it. Also try to engage discussion on what they have learned.