Environmental Systems and Societies

*Environmental Impact Poster*

**Learning Goal**: You will gain an understanding of the impact humans have on our planet. You will also brainstorm possible small scale solutions to the problems, which will help you understand that the problems are solvable.

**Success Criteria:** You will create a poster that defines your personal overuse of a resource and presents a solution that will help to replenish the resource.

**Here is the idea:** We all know water is being used too fast. The big question is why. My hypothesis is we all use too much and more importantly we all waste too much water. What I want you to do is brainstorm and determine a way that you use too much water (and electricity, and paper) I want you to write a paragraph or two explaining how you use (and waste) the resource this explanation should include why you do this, then I want you to come up with a way to use less water while still satisfying the why. Here is an example:

Problem: I want to flush my toilet, but it takes 1.6 gallons to flush the toilet. I find that gross if I just let it sit until two or three people go potty. But if my whole family goes 5 times a day and there are four of us then the toilet gets flushed 20 times and that equals 32 gallons of water flushed a day!

Solution: If everyone in my family takes a 10 minute shower and the average rate for a showerhead is 2.5 gallons per minute means each shower uses 25 gallons. Times that by each family member and we use 100 gallons a day for showers. That means 100 gallons of water goes down the drain every day. But I decided to leave the water in tub and not let it drain. I also put a bucket by the tub and every time I need to flush my toilet I use the bucket to scoop some water out of the tub and put it in the toilet which causes it to flush (without any additional water). That means my family will save 32 gallons of water per day. If my block did this (there are 16 houses on it) we would save 512 gallons of water per day!

**What to do:** In addition to writing the solutions I want you to diagram or illustrate them on a poster (The explanation can be written on the poster). In addition to water I want you to do it for electricity and paper. So your poster should have 3 sections to it.

**Points:** I will give you 10 points for each problem and 10 points for each solution. 5 of the points will be for the explanation and 5 will be for the illustration. The total project will be worth 60 points. We will share our posters and ideas with the class when we have all finished.