**Welcome to Sloping Green**

**Situation:** 15 years ago, the town Sloping Green was founded. The city developers wanted to merge farming with luxurious community living. To create the town, city planners leveled 15 square miles of forest adjacent to a large lake. The planners envisioned acres of beautiful farm land that could be looked down upon residents living in gated community built on a steep hill. The planners of the town hoped that the farmers choosing to raise crops in the town would live in the community, creating a town of vegetable farmers who helped each other with their farms and also lived in close proximity to each other. Excited about Sloping Green and the communal lifestyle it offered, all of the homes in the community sold almost immediately and the townspeople began working towards developing their community.

At the first town meeting they decided on a few things:

1. No trees would be planted in Sloping Green so that the farms could be easily seen from the neighborhood.
2. Everyone in the community would have "grassless" yards so that the majority of water would go to irrigating the farms, not watering grass.
3. Residents would be permitted to cover their yards with rocks.
4. Farmers would be allowed to plow and fertilize their fields whenever necessary with no restriction.
5. Residents would be encouraged to share extra crops with their neighbors.

**Problem:** After a couple of years, Sloping Green was full of some pretty unhappy residents. Few crops had grown and the town had major problems with erosion, both in the neighborhood and in the fields. A town meeting was called to try to fix the problem. Some residents proposed abandoning the town all together. Others thought about calling in a team of experts to fix the problem.

*Task 1*

1. Draw a picture of what they think Sloping Green looks like.
2. On the drawing, students will identify all of the potential sources of erosion in the town.

*The Challenge (Only move on after your teacher has given the okay)*

You have been hired as a team of experts to help the residents of Sloping Green solve their erosion problems. Now that you have analyzed the problem, it is now time to come up with some solutions. Please give the residents a minimum of five things that they can do to begin to reduce erosion in their community. You may adjust the town rules, build additional structures and add things you think the town needs. You may not remove the steep hill (though you can add structures or change the hill in any way you choose) and remember, the lake stays put also. After presenting your five solutions written neatly on your paper, you should re-draw the town with your changes.