Title: Mitigating an Empty Lot
Name_____

Introduction: Empty lots are found in cities and suburban areas. The landowner may be saving it for a future building project or holding it for a variety of other reasons. The ⅓ acre lot (about the size of a large residential lot) pictured below is in West Jordan, UT and is an example of what empty lots look like. Imagine that your school got permission to manage and "mitigate" (repair the damage or neglect) at the lot. In this activity you will evaluate design solutions that each 5th grade class developed and decide which solution meets the criteria and constraints. Appropriate amounts and types of work can be done on the lot by 5th graders.

Top view/Side view

https://www.redfin.com/UT/West-Jordan/2200-W-7800-S-84088/unit-2/home/174958579

Criteria: The mitigation should include features that improve the environment for living things (plants and animals) and should preserve the soil. Other uses for the area can be added in the design.

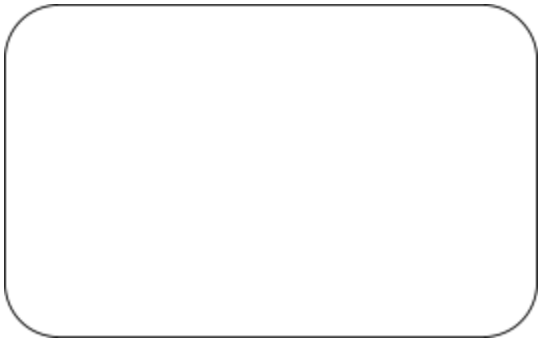
Constraints: The school PTA and city of West Jordan have provided $5,000 for the project. The landowner wants the lot to look better and be more useful.

Three 5th grade classes worked to present designs for the lot. The designs are explained below the table. Your task is to analyze the designs and summarize them in the table. Read all the solutions before you fill out the table. For each category, give each class a number between 1-3. Give the best design a 3, a 2 for the next best and a 1 for the design least able to fit this category.

Mitigation	Ms. Gentry's class	Ms. Monson's class	Mr. Gove's class
Improves the environment for living things.			
Uses land for a purpose (food, recreation etc)			
Improves the appearance of the lot			
Protects the soil and uses water responsibly.			
Cost (Give a 3 to the lowest cost, a 1 to the highest.			

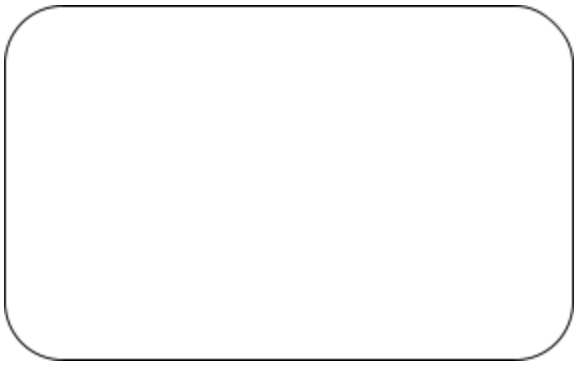
Ms. Gentry's class design solution:

The students wish to rake the weeds and prepare the soil for a lawn and exercise area. The sprinklers needed to water the lawn will cost $4,000 and the students will spend the $5000 on outdoor exercise equipment on a dirt running track. They will add wooden bark around the base of the exercise equipment and under the trees on the edge of the lot.
Draw what you think this might look like:

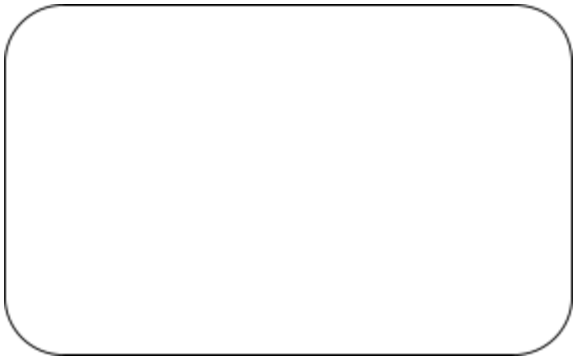


Ms. Monson's class design solution:

The students wish to scatter wild seeds on the property and plant drought tolerant shrubs and trees in clumps around the property. Near each planting the students will add a bench to sit on and signs to explain what types of plants are planted there. They will place bird feeders and bird houses in the trees on the edge of the property. The shrubs, trees, benches, and feeders will cost $2,000. A small pond will be created with water from a pipe that comes from the main line which will cost $3000. The pond will be lined with plastic that costs $300. Draw what you think this might look like:



Mr. Gove's class design solution:
The students wish to create a neighborhood garden on the lot. They measure 3 meter x 3 meters plots in the soil and fence them with stakes and string. There are pathways between the plots. They add an irrigation system with a pump and hoses in four places. The cost of the irrigation is $4,000. The students advertise to the community for people to claim a plot and take care of the vegetables they grow. The students will help the gardeners by pulling weeds.



Summary:

1. Which mitigation method received your highest score?
   Lowest?

2. Which method would you most like to see in the lot if your class was going to participate? Why?

3. Mitigating a small lot can help us understand how hard it might be to conserve a big site like a mine. What are other factors that would need to be studied to clean up the Kennecott mine?

Use this website to answer this question:
https://www.ksl.com/article/1280814
https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.cleanup&id=0800601#Done