

Covering and Surrounding Unit Project- Plan a Park

The City Council of Evanston is planning to build a park for families in the community. Your job is to design a park to submit to the City Council for consideration. You will need to make an argument for why your design should be chosen. Use what you know about parks and what you learned from this unit to prepare your final design. **This project is due on February 13th.**

Part 1: The Design

Your design should satisfy the following constraints:

- The park is rectangular with dimensions 120 feet by 80 feet. You must name your park.
- About half of the park consists of a picnic area and a playground. These sections need not be located together.
- The picnic area contains a triangular garden. There also is a garden in at least one other place in the park.
- There are trees in several places in the park. Young trees will be planted, so your design should show room for the trees to grow.
- The park must appeal to families. There should be more than just a picnic area and a playground.
- You must have two sections that have the same fixed area with different perimeters.
- You must have two sections that have the same fixed perimeter with different areas.
- Include a feature in your park that is the shape of a non-rectangular parallelogram.

Make Sure You Include:

- **rectangular (120 feet by 80 feet)**
- **picnic area and playground**
- **triangular garden in picnic area**
- **another garden**
- **trees**
- **family interest**
- **two sections with fixed area and changing perimeters**
- **two sections with fixed perimeter and changing areas**
- **non-rectangular parallelogram**

Part 2: Write a Report

Your design package should be a **table** (see below) that is neat, clear, and easy to follow. In addition to a scale drawing of your design for the park, your project should include a report that gives:

1. The size (dimensions) of each item (include gardens, trees, picnic tables, playground equipment, and any other item in your design).
2. The amount of land needed for each item and the calculations you used to determine the amount of land needed.

Example of table:

Object	Dimensions	Perimeter	Perimeter Calculations	Area	Area Calculations

Part 3: Letter

Write a letter to the City Council. Explain why they should choose your design for the park. Justify the choices you made about the size and quantity of the items in your park.

Part 4: Presentation

Give a short presentation to the class about your park. Make sure you include all of the unique ideas you used and how your park fits the given requirements. Presentations of your final project will be on February 13th and February 14th.

Executive Functioning Check Points

January 25- Rough draft sketch of project

February 10- Letter

February 2- Drawing of park

February 13- Project due

February 8- Report

Plan A Park

Name _____

	Points	Score
Executive Functioning Check Points		
1/25- Rough draft sketch of project	5	
2/2- Drawing of park	5	
2/8- Report	5	
2/10- Letter	5	
Scale Drawing		
<i>Dimensions and Measurements</i>		
Dimensions labeled	3	
Name for park	3	
Scale included	4	
<i>Complete Design</i>		
Triangular garden	2	
Trees	2	
Half park is playground & picnic area	2	
Fixed perimeter, changing area (2)	4	
Fixed area, changing perimeter (2)	4	
Non-rectangular parallelogram	2	
Design is neat	2	
Report		
<i>Mathematics</i>		
Report in table form	5	
Dimensions are correct	5	
Calculations are correct	5	
<i>Organization</i>		
Work is neat	2	
Letter		
<i>Composition</i>		
Letter is easy to read	3	
Justifications (reasons)	5	
<i>Structure</i>		
Letter is neat	2	
Presentation		
Presentation to class	10	

Total points _____/85

