**Parking Lot Proposal**

As many of you know, Sammamish High School is about to get rebuilt! For this project, you will be creating a proposal for Mr. Hagan (a landscape architect from Weisman Design Group in Seattle) for the design of the new parking lot of SHS. Your final product should be a visual display of your proposal that includes all details and explanations.

**Poster Design**

Your poster should include the following:

* Picture of your final design
* Color
* Zoomed in portion of the parking lot that includes parallel and perpendicular lines and geometric vocabulary
* Your poster should be well organized and incorporate creative elements
* Mr. Hagan should be able to decipher from your poster all the information about your proposal without any explanation

**Mathematical Content**

Poster should demonstrate:

* Two examples of parallel lines
* One example of perpendicular lines
* Proofs and geometric theorems demonstrating how you know the lines are parallel or perpendicular
* Examples of alternate interior, alternate exterior, same side interior angles and corresponding angles postulate

**Extra Content**

There are many constraints to parking lots! We will give you these as the unit goes on, however your poster needs to explain how your design fits these constraints. (For example, does your parking lot have the required fire lanes?)

**Justification**

On your poster, it is important that you explain to Mr. Hagan why you made the choices for your parking lot that you did. Why is your design the best design for SHS?

**Peer Critique**

You will be assessing the proposals of the rest of the class. It is important to be fair and take this seriously! As a class, we will choose which proposal we think is the best, and send that to Mr. Hagan for his professional and expert feedback!

**Good luck! Have fun! And be creative!**

**Geometry Parking Lot Poster Rubric**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | 4 | 3 | 2 | 1 |
| Poster Design | Poster uses color, includes picture of final design, a close-up of a set of parallel and perpendicular lines, is well organized, uses mathematical vocabulary, and incorporates creative elements. | Poster includes picture of final design, a close-up of a set of parallel and perpendicular lines is organized, uses some math vocabulary, but is not creative or colorful. | Poster includes picture of final design, but lacks a close-up of parallel and perpendicular lines, is disorganized, and uses little math vocabulary. | Poster has no picture of final design, is missing information, and shows significant lack of effort. |
| Math content | Poster shows two examples of parallel lines and one example of perpendicular lines using proof and geometric theorems. | Poster shows one example of parallel and one example of perpendicular lines using proof and geometric theorems. | Poster mentions parallel or perpendicular lines, but contains no theorems or proofs. | Poster does not mention parallel or perpendicular lines. |
| Extra content | Parking lot design clearly fits all constraints provided and lists costs and sources for any research. | Parking lot design fits most constraints, lists costs and sources for any research. | Parking lot design fits some constraints, lists either costs or resources. | Parking lot design fits none of the constraints, does not list cost or sources for research. |
| Justification | Poster includes mathematical, aesthetic, and legal justification for design choices. | Poster includes some justification for design choices, using math at least. | Poster includes little justification for design choices, not including math. | Poster includes no justification for design choices. |
| Peer critique | Peers give high marks for your poster. | Peers give mixed results for your poster. | Peers give generally low marks for your poster. | Peers give consistently low marks for your poster. |