**Geometry: City Designer Project**

You will be creating your own city with a very specific set of directions.

1. Your city name and population are neatly written at the top of the paper provided.
2. Your city must have the following streets that are named and fit the given description. ***All names must be school appropriate.***
   1. Five streets that are parallel to each other
   2. Two streets that are transversals
   3. Three streets that are perpendicular to the parallel streets (cannot be the same as your transversal)

There are a total of **ten** streets that must appear in your city. All streets must be present, named and must be correct in order to receive full credit.

1. Your city must have the following buildings that are named and fit the given description. Use the given colors to mark the angle pairs on the map.
   1. A gas station and a restaurant (alternate exterior angles) - green
   2. Your house and a school (same side interior angles) – yellow
   3. A courthouse and a bank (vertical angles) – blue
   4. A hospital and a movie theater (corresponding angles) – red
   5. A library and a park (alternate interior) – orange
   6. A post office and a 7-11 (linear pair) – purple

There are a total of **twelve** buildings that must appear in your city. All buildings must be present, named and correctly color-coded in order to receive full credit.

1. Your map must have a legend (key) in the lower right corner. The legend will identify which streets are parallel, which streets are the transversals and which streets are perpendicular to the parallel streets. The legend should be a neatly written list.

Your project should look neat, clean and professional. Rulers and yardsticks should be used to draw lines, markers/colored pencil should be used to label the angle pairs and draw the streets, clip art, magazine cutouts or neatly drawn pictures should represent the buildings.

Use the rubric on the backside of this sheet as a check-off list to ensure you have everything completed.

**Rubric**

|  |  |  |
| --- | --- | --- |
| City is named and at the top of the map | 1 |  |
| Population is stated at the top of the map | 1 |  |
| 10 total streets drawn | 5 |  |
| 5 parallel streets are drawn and labeled | 5 |  |
| 2 transversal streets are drawn and labeled | 2 |  |
| 3 perpendicular streets are drawn and labeled | 3 |  |
| 12 buildings are drawn/glued and labeled | 6 |  |
| A gas station and a restaurant are correctly located (alternate exterior angles) | 5 |  |
| Your house and a school are correctly located (same side interior angles) | 5 |  |
| A courthouse and a bank are correctly located (vertical angles) | 5 |  |
| A hospital and a movie theater are correctly located (corresponding angles) | 5 |  |
| A library and a park are correctly located (alternate interior) | 5 |  |
| A post office and a 7-11 are correctly located (linear pair) | 5 |  |
| Angle pairs are color coded appropriately | 1 |  |
| Legend is neat, accurate and complete | 1 |  |

**Total\_\_\_\_\_\_\_/55**