Fill the Cartesian Plane

**Geometry**

**Unit 1 Line Master 4a**

* On the grid, draw and shade a rectangle made of two   
  grid squares. Label the vertices of the rectangle ABCD.  
  Record the coordinates of the vertices in the table.
* Take turns. Roll two number cubes. Use the numbers   
  on the cubes to translate rectangle ABCD. You decide   
  the directions of the translation. Translate and shade   
  the image rectangle.
* Record coordinates for each vertex of the image in the table using prime notation.
* Continue until rectangle ABCD can no longer be translated to unshaded squares. The person who makes the final translation wins.

A graphing graph on a graph paper

Description automatically generated

Fill the Cartesian Plane (cont’d)

**Geometry**

**Unit 1 Line Master 4b**

|  |  |  |  |
| --- | --- | --- | --- |
| **Coordinates of the vertices of rectangle ABCD** | **Translations** | | **Coordinates of the vertices of image rectangle A’B’C’D’** |
|  | **Horizontal**  **Left/right** | **Vertical**  **Up/down** |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
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Fill the Cartesian Plane (cont’d)

**Geometry**

**Unit 1 Line Master 4c**

|  |  |  |  |
| --- | --- | --- | --- |
| **Coordinates of the vertices of rectangle ABCD** | **Translations** | | **Coordinates of the vertices of image rectangle A’B’C’D’** |
|  | **Horizontal**  **Left/right** | **Vertical**  **Up/down** |  |
|  |  |  |  |
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Fill the Cartesian Plane (cont’d)

**Geometry**

**Unit 1 Line Master 4d**

|  |  |  |  |
| --- | --- | --- | --- |
| **Coordinates of the vertices of rectangle ABCD** | **Translations** | | **Coordinates of the vertices of image rectangle A’B’C’D’** |
|  | **Horizontal**  **Left/right** | **Vertical**  **Up/down** |  |
|  |  |  |  |
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