

**Ordered Pairs Initials** Patterns in Ordered Pairs

**Math 5**

Today we're going to be graffiti artists, but depending on where we are tagging our initials, we need to be able to make the letters bigger or smaller. To keep the proportion of our letters the same, we can use a graph!

**Directions:**

- 1. Write one of your initials in each space under the column titled "Letter".
- 2. Transfer those letters onto a piece of graph paper using block style letters.
- 3. Put a dot at each vertex of each letter.
- 4. Record the ordered pairs of each letter in the space under the column titled "Ordered pairs".
- 5. Have a partner check your work.
- 6. Decide on a number to multiply your X and Y coordinates.
- 7. Find the new values of your X and Y coordinates and write them in the space under the column titled "New ordered pairs".
- 8. Have a partner check your work.
- 9. Draw your new initials on a new piece of graph paper using the values in the "New ordered pairs" column.
- 10. Have your teacher check your work.
- 11. Write your written explanation of your process(on the back of this sheet).
- 12. Color your letters.

Letter	Ordered pairs	Multiply by	New ordered pairs

**Ordered Pairs Initials** Patterns in Ordered Pairs

**Math 5**

**Write a paragraph explaining your process of creating your tag. Be sure to include your responses to the following prompts:**

- What did you need to do to make the letters larger?
- What happened to each coordinate?
- Why did it happen?
- How does it change the look of your tag?

---

---

---

---

---

---

---

---

---

---