



# Formative Assessment in the Classroom

## Sharon Pernisi, SCSD

**1. Math Learning Goal**

**2. Success Criteria**

Understand the structure of a coordinate grid	I can talk and write about plotting points on a coordinate grid using correct vocabulary
Relate the procedure of plotting points to the structure of a coordinate grid	I can plot and label points in each quadrant on a coordinate grid
	I can create a rule about coordinates for each quadrant.

Post March PI 6.G.10- Identify and plot points in all four quadrants.

**3. What are key misconceptions that you expect students may have about this topic?**

- Students may have a procedural graphing misconception – (y, x)
- Plot points in spaces rather than intersections
- Count intervals on lines rather than x or y axes

**4. How I will gather evidence of learning in this lesson:** (These should align with criteria in RH column above.)

Start of lesson:	Middle of lesson:	End of lesson:
Vocab check: Whip Around What comes to mind when you think of coordinate graphing? Look for target vocab_ - Origin, x-axis, y-axis, coordinates, quadrant	Walk coordinates to label each location on large graph. Large group (SC2) Describe process verbally using vocabulary (SC1) Plot and label points in 4 quadrants individually- "Design Robertsville" (SC1,2)	Generalize quadrant location for set of coordinates verbally and in writing- Cooperative groups (SC 3) Chart created rules for each quadrant & gallery walk(SC 3) Reflection- self assessment of SC

**5. Key discussion questions that I will pose to students:**

- *Start of Lesson:* Are we in agreement with these definitions? How might we make definitions more clear? Are any big ideas missing? How might some of these terms go together?
- *Middle of Lesson:* Where should you start? How would you label this point? Are we in agreement? Tell me your thinking. How do you know you've plotted this point correctly?
- *End of Lesson:* What are you noticing about all the coordinates in this quadrant? How are they alike? How might you develop a rule for all the coordinates in this quadrant? How might you organize the coordinates in quadrant I so you can analyze them? (a list, chart, table...)

**6. When in the lesson will I offer feedback to students?**

- Opportunities for feedback: during vocabulary check (Accuracy?) graphing procedure while walking graph, during individual graphing, feedback from peers on post-its during gallery walk.

**7. How will I encourage students to assess their own learning?**

- Students will match points that are "walked" on coordinate grid with the points they plot on their individual graphs.
- Questioning while individually plotting points.
- Students will complete a reflection exit-ticket that assigns a rubric to the lesson SC.

**Additional Notes**

- LG & SC will be shared after initial vocab activity. Exit ticket will involve students in self-assessment against SC.
- Whip around – watch for target vocabulary – if it does not come out of the whip around more direct vocab instruction may be needed before moving on.
- Some students may not be conceptually ready to make generalization – they may need more experience with the structure (concrete) of the grid.