## Formative Assessment in the Classroom
### Sharon Pernisi, SCSD

<table>
<thead>
<tr>
<th>1. Math Learning Goal</th>
<th>2. Success Criteria</th>
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<tbody>
<tr>
<td>Understand the structure of a coordinate grid</td>
<td>I can talk and write about plotting points on a coordinate grid using correct vocabulary</td>
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<tr>
<td>Relate the procedure of plotting points to the structure of a coordinate grid</td>
<td>I can plot and label points in each quadrant on a coordinate grid</td>
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<tr>
<td>I can create a rule about coordinates for each quadrant.</td>
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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.)

<table>
<thead>
<tr>
<th>Start of lesson:</th>
<th>Middle of lesson:</th>
<th>End of lesson:</th>
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<tbody>
<tr>
<td>Vocab check: Whip Around</td>
<td>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)</td>
<td>Generalize quadrant location for set of coordinates verbally and in writing- Cooperative groups (SC 3) Chart created rules for each quadrant &amp; gallery walk(SC 3) Reflection- self assessment of SC</td>
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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.