Mini-Lesson: Geometry- Rotations, Reflections, and Translations

1) Grade Level: 8th Grade Mathematics

2) Curriculum Topic: Geometry- Rotations, Reflections, and Translations

AR.Math.Content.8.G.A.1 Verify experimentally the properties of rotations, reflections, and translations:

• Lines are taken to lines, and line segments to line segments of the same length

• Angles are taken to angles of the same measure

• Parallel lines are taken to parallel lines

3) Tools: 1) Cue

2) Clips App

4) Synopsis:

The goal of this lesson is to get students engaged over applying their knowledge of rotations, reflections, and translations. Students will have just completed a lesson over these terms. Students will work as a whole class. I will have Cue on the floor whiteboard that is drawn as a coordinate plane. Each student will be assigned a task that I will randomly provide. The task of every student will be to move Cue on the coordinate plane correctly. I will present each student with either rotate, reflect, or translate. I will then follow with the directions. For example, I may present student one with "Rotate Cue 90 degrees," " Reflect Cue over the x-axis," or "translate Cue up 3 and left 4." These instructions will help students know what to do with Cue. Each student will take their turn in operating Cue to show their understanding of the topic.

While other students are taking their turn, other students will be armed with iPads that have the Clips App. Each student will be responsible for recording at least one example of a rotation, reflection, and translation. This video will be editing and completed with title slides that describe each action. Students will be able to refer back to these videos for review of this topic. Hopefully, students will use this engaging activity to recall and apply their knowledge of these terms.