



Body Graphs

CONTENT Standard:

**CCSS.MATH.CONTENT.HSA.
REI.D.10**

ARTS Standard

DA.Cr.1.1.I

Pacing

60-75 minutes

21st Century Skills

- Critical Thinking
- Creative thinking
- Communication

Materials List

- Open space
- Masking Tape
- Graph Paper
- Pencils
- Video Recording Device
- Bulletin board paper (optional)

Assessment: Documentation

Take pictures of the students' shapes on the life size graph and include the pictures on a written assessment where students need to develop the possible equations necessary in order to create the presented shape.

Lesson Sequence

Step 1: Students review proper steps for graphing equations.

Step 2: Students graph multiple equations in small groups.

Step 3: Have students break into groups to work on multiple equations, and graph them on paper.

Step 4: Build a life size graph by using masking tape on the floor to create the x and y axis with smaller hash marks to determine the sequential positive and negative numerals.

Step 5: While students are graphing their equations on paper, invite each group to the life-size graph to plot their answers using their bodies. Take video of the graphing (preferable on one of the students devices so they can continue to use the video in their group.

Step 6: Once each group has plotted their points on the life-size graph have them return to their workspace to determine how to transition between each of the equations. Practice the *body graph* and prepare for performance.

Step 7: Have students combine groups and recreate their equations with transitions to generate continuous movement. Perform the *Body Graph* for the class.

Extension: Reverse the process by having students plot their bodies on the life size graph and have the audience generate a possible equation being graphed. Present particular shapes and have the students make the shape on the life size graph, then determine the sequence of equations needed to plot the points of the shape.

TEACHER NOTES