Interior Topographies

Duration: 30 minutes

Ages: 10–18 (Grades 4–12)

Materials needed:
- Paper
- Pencil
- Optional: ruler, yardstick, or tape measure

Introduction:
In this activity, you will experiment with contour line maps, depicting the different objects, furniture, and other three-dimensional features of your interior landscape. A contour map is used by cartographers to share the three-dimensionality of landforms on a flat paper surface. Hills and mountains are common land elevations; sinkholes and valleys are examples of landform depressions. Each line on a contour map indicates a specific elevation above or depression below sea level. Different colors can be used to indicate a specific elevation, and labels help make the information clear to map users.

Procedure:
1. Choose an interior space or room in your home, apartment, or current location where you have been spending time during social distancing.
2. Begin by sketching out the features of this space.
   - Can you determine or estimate the height of the ceiling or walls?
   - Can you determine or estimate the square footage of the floor space?
   - What furniture is present? What piece of furniture or collection of objects has the highest elevation in this space? What is closest to the ground?
   - What objects are in this space? What objects are about the same height, relative to the height of the ceiling in this space?
3. Using a compass or a compass app on a smartphone, determine north in your space. Add a compass rose to your contour map. North points toward the top of your map. Anything you draw will be from this viewpoint.
4. Experiment with transforming the interior you have observed and sketched into the form of a contour map. Instead of sea level, the floor is measurement 0. Add as many contour lines representing different elevations as you like.
5. Experiment with using directional commands to describe moving an object from one part of the space to another. For example, “Move the book three feet northeast, from an elevation of 2 feet above floor level to an elevation of 4 feet above floor level.” Try communicating in directionals only with someone else at home to complete a simple task.

**Share your work:**

Take a photo of your picture and post it to Instagram using the hashtags #MuseumFromHome and #RiverMapping, and tag @HudsonRiverMuseum.