

Scale Drawing Project

The scale drawing project is the culminating activity for this unit, and it will allow you to put into action what we have discussed over the past two weeks. For this project, the main objective is to create a scale drawing of your nation and its landscapes. From the drawing, you will be able to determine the areas of the nation and its landscapes. Lastly, you will put convert these measurements from the U.S. system to the metric system, so that anyone could interpret the drawing.

Requirements:

- Drawing of nation should be made to scale
- Drawing contains the nation itself, waterways, mountain ranges and areas of forestry
- The area of each object is given in the U.S. measurement system and the metric system

Procedure:

1. Choose the **shapes** of your nation and its waterways, mountain ranges and areas of forestry. (These objects can be squares, rectangles, triangles, and/or circles.)
2. Based on your own ideas, state the **distances** (miles) of your nation and its waterways, mountain ranges and areas of forestry.
 - Square objects: state the side
 - Rectangular objects: state the length and width
 - Triangular objects: state the base and height
 - Circular objects: state the radius
3. Based on these distances, choose a scale for your scale drawing (i.e. 1 in. = 50 miles). Your scale **must** be based on the U. S. measuring system.
4. Using this scale and the distances of your nation and its landscapes, setup proportions to determine their equivalent distances on your scale drawing.
5. Using a ruler and markers, draw these distances on the poster board to create your scale drawing. **Only** use one marker for each type of object, though. (For example, red = nation, blue = waterway, brown = mountain range and green = area of forestry.)
6. On a separate sheet of paper, compute the areas of your designed objects—the nation itself, waterways, mountain ranges and areas of forestry. Be sure to show **all** work and write these computed areas inside their designated objects.
7. On the same sheet of paper, convert these areas to their equivalent areas in the metric system. Again, show all work and write these converted areas inside their designated objects.
8. Title your drawing and create a key—in the lower right-hand corner of the poster—that contains the scale for your drawing and coloring code. Hand in this finished project and also the **sheet of paper** in which you used to show your computations and conversions.