Compass Mapping Project

1. INDOOR MAP: STUDENT DESK or TABLE

* You will need a compass, metric ruler, and protractor to complete this project

1. Use an area where there are NO electrical outlets or anything that could be magnetic (metals like STOOLS, etc.).
2. Use your student desk/table as the object that you will map. You need to assume that there are NO rounded edges on the desk/table.
3. Measure the compass bearing and the corresponding distance for EACH side of the student desk/table you chose. You may use feet or centimeters for you distance measurements. Just be consistent and LABEL all measurements with units.
4. Copy the following chart in your notebook to record your bearings and distances as shown:

start

2

3

4

5

6

|  |  |
| --- | --- |
| Compass Bearing | **Distance** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

1. Once you have recorded the 6 compass bearings and the 6 corresponding distances of the student desk, you can begin your map.
2. You will use the backside of a piece of scrap paper to draw your map. For the indoor map, it must fit on ONE piece of scrap paper.
3. Place your mapping paper lengthwise (*the longer side should be horizontal*). **Try** your starting position 2 centimeters from the SOUTH (*bottom of the page*) and 5 centimeters EAST from the left side of the page [*your starting position will be in the lower left corner of the sheet.]*. Place an “X” there for your starting position. *You may need to adjust this starting position depending on your compass bearings*.
4. Use your notes on “making a simple map” and draw a map of the “rectangular block” of floor tiles, starting with the side that goes from the *SE (southeast corner of the rectangular block*) and travels towards the *NE (northeast corner of the rectangular block*). Then, proceed counterclockwise to complete the map.
5. Be sure to include all of the following on your map:

a) The symbol of cardinal directions (at the upper right corner)

b) The scale of the map: use centimeters (cm) for your map drawing

c) Draw the “North Reference Lines” for each line you draw

d) Label all actual distances on the OUTSIDE of the rectangle

e) Label all map scale distances on the INSIDE of the rectangle

f) Label all compass bearings at the appropriate angle points

1. OUTDOOR PROJECT: MAKE A MAP OF YOUR PROPERTY:
2. Completed PART A of this project before beginning PART B.
3. You can choose one of the following places to make your map:
4. Map your house.

* Start at one corner of the house.
* Continue towards the next corner and so forth for all four corners.

1. Map your property line.

NE

NW

SE

SW

1. Complete the chart below according to which point your started at.

|  |  |  |
| --- | --- | --- |
| **Side of the** | Compass Bearing | **Distance** |
| SW towards NW |  |  |
| NW towards NE |  |  |
| NE towards SE |  |  |
| SE towards SW |  |  |

1. Pace off all distances and obtain compass bearings. Be sure to record these on your chart. Measure the distance of one average “pace” step to determine the distance of each side of the building.
2. Follow all of the same instructions given in PART A-10. Draw the map on scrap paper. You may need to connect more than one piece together with tape.