Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Snow Density Protocol**

**\*\*\* Adapt this document to your students’ level \*\*\***

1. **Measure the dimensions of the sampling instrument and determine the volume. For more precision, measure the inside of the instrument.**



 Diameter:\_\_\_\_\_\_\_\_\_ cm.

 Radius: (Diameter ÷ 2) = \_\_\_\_\_\_\_\_\_ cm.

 Height:\_\_\_\_\_\_\_\_\_ cm.

 Volume: (πr2 x h) = \_\_\_\_\_\_\_\_\_ cm3.

 *The inside volume of the sampling instrument is \_\_\_\_\_\_\_\_\_\_\_\_ cm3.*

1. **Weight the empty sampling instr****ument and note the weight.**

 *The weight of the empty instrument is \_\_\_\_\_\_\_\_\_\_\_\_ g.*

1. **Take a snow sample by pushing the tube into snow and pulling it out.**
2. **Weight the full sampling instrument and note the weight.**

 *The weight of the full instrument is \_\_\_\_\_\_\_\_\_\_\_\_ g.*

1. **Calculate the net weight of the sample.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **-** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_=\_\_\_\_\_\_\_\_\_

Weight of the full instrument Weight of the empty instrument Net weight

1. **Use the formula to calculate the snow sample’s density.**

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ÷ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_

Net weight of the sample Volume of the instrument Density (ρ)

1. **Repeat steps 3 to 6 for each type of snow and note the results in a table.**

|  | *Aqilluqaq* | *Sitilluqaq* | *Pukajaq* |
| --- | --- | --- | --- |
| Sample and instrument weight |  |  |  |
| Sample net weight |  |  |  |
| Sample density |  |  |  |