**MARS ROVER ROBOT: DATA SPECIFICATIONS SHEET**

Team Information

Members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Section: \_\_\_\_ Recitation TA: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Samples Traveled To:

* Water
* pH Soil Sample
* Fuel Soil Sample

Questions and Answers:

Salinity Test

* What are the salinities of the three samples?
  1. \_\_\_ ppt
  2. \_\_\_ ppt
  3. \_\_\_ ppt
* Based off of the samples’ salinities and specific gravities, which, if any, of the water samples are habitable for freshwater fish? Saltwater fish?
* Would euryhalines survive? How about halophiles?

pH Test

* What is the number on the sample’s beaker?
  + \_\_\_
* What is the pH of the sample?
  + \_\_\_
* Can plants survive in this pH? If so, name three plants that could potentially be planted

Fuel Test

* What is the number on the sample’s beaker?
  + \_\_\_
* How much Fe3O4 (in grams) was found in the sample?
  + \_\_\_ g
* How much fuel (H2) can be produced (in grams) by the Fe3O4 found in the sample? Show calculations.
* How much Fe3O4 (in kilograms) is needed to produce 5kg of H2? Show calculations.