**Appendix C**

**Unit 3 POE Student Instructions**

**Before Class**

* Only work on the first page of the POE (Do not work ahead)
* Read the “Introduction to the Scenario” & Underline important facts and information
* Read the driving question(s)
* In the hypotheses/predictions box write down potential answers to the driving questions
* Generate a hypothesis or a few hypotheses for the driving questions
* Be prepared to share some of your thoughts and ideas in class next week
* Read through the rest of these instructions so you know what to expect for next week

**In-Class**

Whole class introduction: (15 minutes)

* Brief introduction to the topic and scenario of interest making sure everyone has read the introduction and the driving questions.
* Student questions about the POE (confusions or concerns)

Breakout Groups: (20-25 minutes)

* You will be divided into small breakout rooms to complete the next two sections of the POE activity
* For the data and analysis questions section you will:
  + Read through all of the data (Including descriptions, tables, charts, and graphics)
  + Answer all of the analysis questions that accompany each piece of data
  + Make sure you answer the analysis questions as you move along (i.e. read and analyze a section of data then respond to the corresponding question(s))
  + Complete any tasks that require you to interact with the data
* For the observation section:
  + Include either written observations, visual observations, or a combination of both in the observation box
  + Make sure you have at least 10 observations
  + Create observations that are related to the data and analysis questions
  + Your observations should be the evidence you use to support your claims in the final explanation
  + All observations should include information you analyzed from the data/analysis questions section and the scenario introduction
  + Observations should be scientific and supported by the data
* During the breakout groups session, the instructors and teaching assistants will be going around from group to group to answer questions and help with any issues you are experiencing as you work through the activity

Whole Class Discussion & Explanations: (10-15 minutes)

* After the breakout group session, we will come together one last time as a whole class, and have a brief open conversation about the scenario and possible explanations for the driving questions. (random group selection)
* Students can also ask more questions during this time to get clarification on any parts of the POE activity.
* Students can then spend the last portion of class planning and starting to write their explanations. Students will be able to complete their individual explanations by the end of the day (outside of class) and submit them via bblearn