Questions reflecting on the activity and comparing it to the work of real scientists

1. “What makes you suspect that there is something wrong with the way that you collected and interpreted your data?”
   1. “Some of you want me to tell you if there really is a problem with your data, and what that problem is. **If I did, how would that be very different from what real scientists must do?”**
   2. How was your experience of encountering a problem with your data **much like doing real science?**
2. “Before I gave you the task of planning a procedure, what did I do at the beginning of this laboratory activity? **How was that different than doing real science?**
3. “When scientists run an experiment and collect data, what sorts of errors might they make?”
   1. “What can scientists do to avoid making those errors?”
   2. “How certain can scientists ever be that they haven’t made an error?”
4. “In this activity, you had multiple groups investigating the same thing, but with some slightly different procedures. How did this help you figure out that there were problems with your data?”
   1. What are some of the ways that scientists work together with other scientists?
   2. “Scientists write up and publish their results in journals. In doing this, their procedures and results are reviewed by other scientists in their field – a process called *peer review*. What are some of the benefits of peer review?”