Chem 1.1

Goals:

\*Discuss syllabus and goals for this class

\*Review class procedures and resources

\*Define chemistry and its scope

Plan:

Bellwork: take syllabus, put cell phone in holder. Under the course outline, put a star next to any sections that look familiar and a question mark next to any new concepts (5 min)

Set up remind and navigate to teacher page (15 min)

Review class procedures (10 min)

Cornell notes: What is the scope and goals of chemistry?

* Compare and contrast the 5 traditional areas of chemistry
* Investigate the questions that might be asked in each area of chemistry
* What are the goals of pure and applied chemistry

HW: Cornell notes conclusion, signed syllabus

Chem 1.2

Goals

\* Think about how science works in an experimental and observational circumstance

\* Consider several possible justifications for statements of fact

\* Contrast facts with policy

Plan

“The” scientific method is, at the very least, incomplete. How can we do science if experiments can't be done at the scale we're interested in? (10 min introduction)

Discussion questions: (25 min)

Why do we hypothesize first, and do we need to?

Is an experiment always possible or necessary?

When does correlation suggest causation? And why do people say it is not always true?

When is it permissible to generalize from a few instances?

Adding fertilizer to a lake causes an algae bloom—is this a general principle?

We all share a reality, but we may have differing opinions. Why? Where does it come from?

Is there always one scientifically best policy?

Is science universal in the sense that people researching the same question will always,

eventually reach the same conclusion?

Activity: Simpsons scientific method (Remainder)

HW: Prelab: read lab and find any instructions that leave you with questions, any unclear vocabulary