

Chem 1B - Directions for Lab 16

Part 1 will be done in pairs. Test the 1 M solutions only. You will not test the 0.1 M solutions, and you will not test any unknown solutions.

Part 2 will be done individually. Each person should analyze 12 unknown solids. Do not use the same solids as your usual lab partner(s).

We'll be doing things differently than usual. You will write a prelab, but **keep it in your notebook and turn it in at the end of lab just before you leave, so that your data/observations are on the prelab.**

The prelab questions will be different from the ones in the book, and will be on a separate handout. **Turn in the worksheet with the prelab questions before the lab period.**

On the second day of the lab, start your observations/data for that day on a new page in your lab notebook. Turn in the data pages from Thursday at the end of the lab period.

When doing the prelab questions for part 2, make sure to think your answers through carefully and make sure to follow the directions correctly. Some of them require more thought than others. You will want to refer to pp. 87-89 to figure some of them out. **Make sure to read pp. 88 and 89 to fully understand the interpretation of the chart on p. 87.**

Pick up a report sheet at the end of the lab period on Thursday. I will keep your observations and staple them to your report sheet when I return the labs.

To be clear: Do NOT turn in your prelab at the beginning of the lab period.

Notes:

- Usually, the first step in identifying unknown solids is to dissolve the unknown in water before trying to react it with anything else. However, not all of the compounds dissolve in water.
- Keep in mind that if you add something to see if a precipitate is formed, you must first start with a clear solution. If you start with a solid and add something to see if it precipitates, you will probably not be able to tell the difference between the original solid and the new solid.
- Anything that dissolves in water will also be soluble in acid.