## Separation of mixtures lab

You will receive a mixture of sand, salt, and iron filings OR pepper. You should design a procedure to separate this mixture into its components.

Once you have designed your procedure, get it approved before you begin. (You might want to work out your procedure on scrap paper before writing the final version into your lab notebook.) I will sign off on your procedure in your lab notebook. Let me know what materials and equipment you will need.

Your lab report should include the following sections:

- Header and title
- Brainstorming
- Purpose
- Materials
- Procedure
- Data and observations
  - Initial observations of mixture
  - Give qualitative observations during and after each step
  - Final observations of each component
- Conclusion
  - Restate your purpose/summarize what you did.
  - Was your lab successful? Do you think you were able to completely separate the components or is there some contamination?
  - What are some sources of error?
  - Now that you've performed your experiment once, what improvements could you make if you repeated this lab?