

A background image featuring a complex molecular structure with blue spheres representing atoms and lines representing bonds. The structure is set against a light blue gradient with faint, larger-scale molecular patterns.

# Grade 7 Science

## Unit 3: Pure Substances and Mixtures

A background image featuring a molecular structure with blue spheres and lines, similar to the one in the top section, but with a slightly different perspective and lighting.

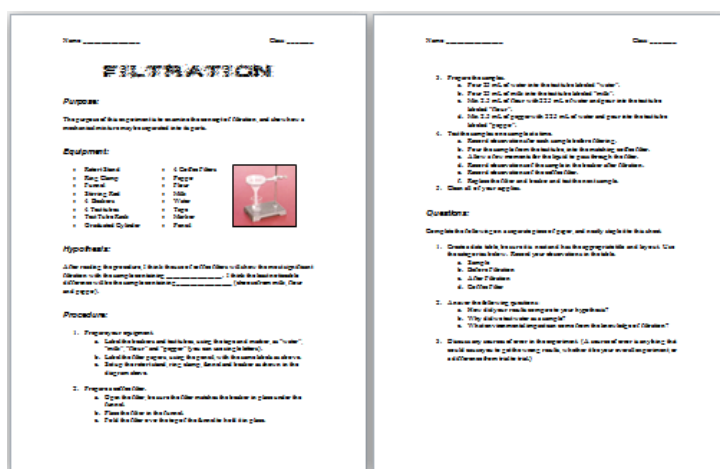
# Filtration

Today you will be performing another experiment. Here is an outline of what we will do today, in order to make sure we complete our task:

1. Read through experiment sheet, paying close attention to procedure and clarifying any steps that are unclear (hopefully we had a chance to do this last class, so that you have more time for the experiment.)
2. Form a group of 3 students (you were asked to do this as homework.)
3. Perform experiment, as outlined in procedure.
4. Clean all supplies, and have experiment materials as they were at the start of class.
5. Receive a reminder that the questions asked on the experiment sheet are a required task, and need to be completed on your own time.

# Filtration

Let's have a look at the worksheet:



You will note that there is a lot of work to be done. You are in a group of three, all three of you need to be doing work, and not waiting around, or you will not get done. This is the only period you have to work on this.

# Filtration

Just before you start, let's look at a few quick definitions:

- Filtration**      *The act of pouring a mixture through a mesh, in attempts to separate the components of the mixture.*  
*Note: Filtration does not separate "properties," that would not make sense, it separates "components."*
- Filtrate**        *The part of the mixture that goes through the filter.*
- Residue**        *The part of the mixture that remains on the filter.*

Today you will look at the process of filtration, and **compare the difference between separating a solution and a mechanical mixture** by using a coffee filter.

**Note:**      A mechanical mixture DOES NOT have a solute and solvent. Why?



# Filtration

You may now begin your experiment. When the buzzer sounds, please begin to clean. Check your timing often so that you can stay on schedule.



If you get done early, you may begin working on the questions on the experiment sheet.

**All materials should now be cleaned and put away properly.**

Your homework is to complete the experiment sheet. No further class time will be given.

You will have a filtration question on your unit test.

## Attachments

---

3-12 Filtering Worksheet.pdf