

# Grade 8 Science

## Unit 3: Fluids

### Flow Rate

Today you will complete the flow rate experiment. To do so, we will do the following:

1. Obtain a copy of the worksheet.
2. Form a group of 3 (8 groups total).
3. Take a paper with numbers, which assigns you your fluids.
4. Perform the experiment, as discussed last class, and as laid out on the worksheet.
5. Clean up.
6. Record your results on the class data sheet.
7. Complete the remainder of the assignment as homework.

The assignment will be due:

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# Flow Rate

Remember what we discussed last class, this assignment involves the use of a spreadsheet. If you are not familiar with how to use one, you need to see me as soon as possible, so that I can refresh you on what you learned in grade 7.

The image shows a screenshot of a spreadsheet application. The title bar reads "Flow Rate Data - 81". The menu bar includes "File", "Edit", "View", "Insert", "Format", "Data", "Tools", "Add-ons", and "Help". The status bar at the bottom indicates "Last edit was 2 minutes ago".

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
2	Fluid	Trial #1	Trial #2	Trial #3	Trial #4	Trial #5	Trial #6	Trial #7	Trial #8	Trial #9	Trial #10	Trial #11	Trial #12			
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Reflection questions:

- 10 How is the flow rate of a fluid related to its viscosity?
- 14 Which fluid was the most difficult to measure?
- 18 What could have been done to make it easier to take the measurements?
- 22 Discuss any sources of error in the experiment. (Recall, a source of error is anything that could cause you to get the wrong results, whether it be your overall experiment, or a difference from trial to trial.)