

Chemistry 3rd edition - Video Instruction Thumb Drive ERRATA – Update 6/2026

Module 1: Using Significant Figures in Mathematical Problems:

At the 8:15 time stamp, the teacher states incorrectly:

“When you multiply or divide you use the significant figures of the least precise measurement. Both of our measurements go to the hundredths place so the answer needs to be rounded to the hundredths place as well.”

Instead, as stated in the textbook on page 28, when multiplying or dividing with significant figures, you round the answer so that it has the same number of significant figures as the measurement with the fewest significant figures. Therefore, in the video, when multiplying 7.88 by 5.38, you get 42.3944. Since both measurements have 3 significant figures, the answer will be rounded to 3 significant figures as well. The final answer should be shown as 42.4.

As additional reference, the teacher communicates this concept correctly at the following time stamps in the video: 3:31, 4:00, and 10:43.

Module 6: Video for Experiment 6.4:

In the sample calculations in two places: at about 7:35 and 10:11, the teacher misstates the significant figures rule as rounding to the least precise, when the calculations involve dividing. Correctly, while dividing, you count the least number of significant figures.

7:35-8:08 – $64 \text{ g}/50.0 \text{ mL} = 1.28 \text{ g/mL}$. Round to 2 significant figures, so 1.3 g/mL.

10:11-10:23 – $43 \text{ g}/50.0 \text{ mL} = 0.86 \text{ g/mL}$. Round to 2 significant figures, so 0.86 g/mL.

Module 7: Video for Experiment 7.1:

In the sample calculations at about 16:40 the teacher divides wrong. $10.0/454 = 0.0220$ (not 0.22).

In turn, the calculations are wrong throughout the rest of the problem.

She also rounds incorrectly to .2 vs .0220 (3 sig figs based on the original calculation $10.0/454$). This also changes the final calculation, which would be 5.41×10^{15} molecules.

There are sample calculations for this experiment in the Solutions and Tests Manual. The number of drops varies, but the concept and math of the calculations is correct.

Module 8: Video for Example 8.6 under the section Mass Relationships in Chemical Equations:

At about the 02:57-03:02 time stamp, the teacher calculates the moles of GaCl_3 to equal 0.5675. This corresponds to the calculation in the textbook on page 290. But then she moves that number up to the original question to help the student visualize what she just calculated and somehow the two middle digits in that answer switched so it shows 0.5765 moles GaCl_3 . This, of course, is wrong. The correct calculation should be 0.5675. This is later shown again correctly under the ? g Ga on the lefthand side of the original problem.

Module 11: Video for Experiment 11.1:

Two errors on this video.

At time stamp 12:24, degrees C is not converted to K. A green screen edit was made to point this out.

At time stamp 17:20 the R value is listed as 0.081 while the teacher says 0.0821. This carries throughout the final calculations, although the correct answer is computed since she actually uses 0.0821 in her calculator.