

The *Instrumentation Calculator*

Robin Linaberry, 2026

Overview

The Instrumentation Calculator is simply a *tool* to save a lot of time for Band Directors, especially those at the beginning of their careers, entering a new position, or working on new departmental/curricular initiatives. The tool is presented in Excel format, with *formulas* already embedded, but it should work in Google Sheets as well. By entering your Band's *total population* in the spreadsheet – that is, how many students are in the Band – the *Instrumentation Calculator* will immediately display a number for each instrument to indicate the *size* of each Section. The numbers shown will provide the basis for a pleasant-sounding, well-balanced instrumentation.

Provisos, Qualifiers, and Disclaimers

- This tool is based on standard-practice models, and should *not* be viewed as an ‘exact’ and irrefutable answer to Band Instrumentation/Balance.
- The Balance suggestions are based on *percentages*, which are entirely changeable according to your needs and preferences. So, you may enter your own *percentages* as you choose. Examples:
 - In *smaller* Bands, certain instruments might be eliminated entirely.
 - As the Band gets *larger*, your ratios may be altered as needed (e.g. in your Band of 150, you might not prefer 15 French Horns and 15 Percussionists). TIP: You’ll notice that I edited *some* of the ratios in the large-Band models.
- You’ll see that I’ve created several TABS at the bottom of the page: these are pre-designed Bands of 40, 55, 70, 85, 100, and 115. *Still* each Tab is adjustable, allowing you to enter your own group size.

Instructions

1. **Open any Tab.** TIP: Choose one that *generally* resembles the size of your Band (if you have 88 students, maybe you’d choose the Tab marked “85” to start).
2. **Type your Band’s total enrollment in the yellow box.**
3. **View results:** the right-hand Column immediately suggests a number of Flutes, Oboes, Clarinets (etcetera) that you can target to create a well-balanced Instrumentation.
4. **Additionally**, it will be your responsibility to ...
 - a. *Balance* each Section within the Band (e.g. having “13 Clarinets” might suggest numbers of 3-4-6 or 3-5-5 even 2-4-7 for the 1st, 2nd, and 3rd Clarinets, respectively). Stay keenly aware of each student’s technical strengths, level of confidence, capacity for leadership, and record of attendance while you design your school’s best plan.
 - b. *Transfer* students to new instruments to fill voids in your Band’s instrumentation.
 - c. *Communicate* with colleagues in your department to create a long-term strategy for recruitment/retention with *Balance* in mind.
5. **SPECIAL:** I’ve also included a model for “Beginner Recruitment Version” (the Tab furthest-to-the-right) which concentrates on the instruments most commonly chosen for starting Band Beginners.

Follow-up

If you don’t yet have a full-Department plan in place, consider using my “**Schoolwide Band Instrumentation Census**”. This tool – which relies on the cooperative contributions of all your departmental colleagues – is a great way to check the *numbers-of-students* in all Grades and Buildings within your District, while also monitoring the Instrumentation. This is especially important in long-term planning. I suggest completing this census *at least* once at the end of the year, but 2-to-3 times yearly might be more productive.

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