How accurate are the step trackers on watches?

## By AG and GC

How accurate are step trackers on watches? Hypothesis: Our hypothesis is that the trackers will be pretty accurate but maybe at most around 5 steps off. It might be a few steps more than was really taken. That is our hypothesis because watches can be pretty sensitive and will sometimes keep counting steps even when you're no longer walking.

## Project Design

- Materials: For materials, all we really needed was multiple different watches, computers to record our data, and the ability to know how to count.
- Set up: For our set up, we just used watches and walked around, then recorded our data and put it into a google slide. z
- Procedure: Our procedure was basically using watches while counting how many steps we actually took and comparing to what the watch said. Then we would record our data on the google slide to put together the presentation.

Result Images
When we walked 100 steps the watches counted...
Each $X$ counts for one watch, and the numbers are how many steps it counted.


## Result Descriptions

We counted 100 steps with 6 different watches, some of them made by different companies. This is what the watches counted:
$100,97,104,97,105,98$.
The average from all these different watches is about 100.16, meaning that overall, the step tracking watches that we used were pretty accurate.

## Conclusion

Our project didn't exactly confirm our hypothesis, but it came close. Our hypothesis was that the watches would be pretty accurate, but at most, about 5 steps off. This stayed true to the experiment; the farthest from 100 a watch counted was 5 steps. Our guess that it would be a few steps more wasn't entirely accurate, as more watches counted less than 100 then counted more. What we were able to conclude is that the step counting watches were overall very accurate, and are probably a reliable source to count how many steps you have.

