

These calipers are called vernier calipers because the vernier scale on the calipers lets you interpolate to get hundreths of a centimeter. Interpolate means to find out what number lies between two other numbers on an equally spaced scale or table. Say we look at the zero mark on the vernier scale and it lies between the 4.7 and 4.8 centimeter marks. The zero mark looks to be about halfway between 4.7 and 4.8 so we might guess the value 4.75 . But look at the position of all the marks on the vernier scale relative to the tenths of centimeter scale right
 above it. Notice the 4 on the vernier scale lines up better than any other vernier scale number with the mark above it. So our measurement would be 4.74 cm . If the 5 on the vernier scale had lined up better the measurement would be 4.75 cm . Now the 3.5 mark on the vernier scale might be judged to line up better than the 4 , in which case the measurement would be 4.735 cm . And that's why the 0.05 mm is printed on the vernier scale to let you know the ultimate accuracy you can get. I believe, however, that being able to judge a hundreth of a centimeter usimg the nearest whole number on the vernier scale is all that should be expected. $\mathrm{So} \mathbf{C M}=\mathbf{4 . 7 4}$. Remember $1 \mathrm{~cm}=10 \mathrm{~mm}$.

