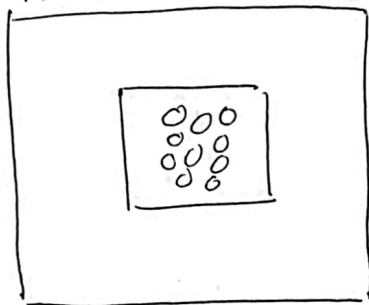


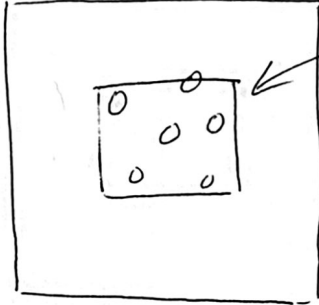
Noteset 1 F - In Class Notes

Comparing Accuracy and Precision

Accurate and Precise

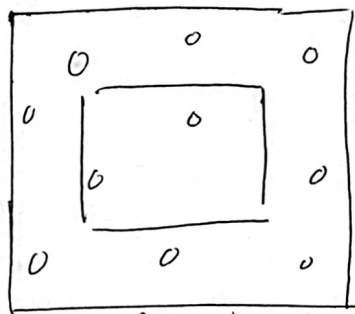
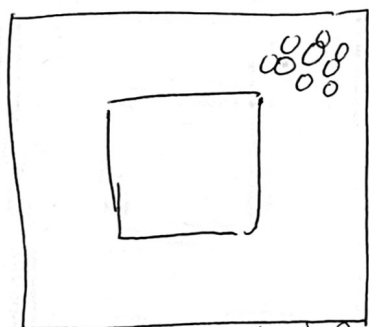


Accurate / Not Precise*



* Normally due to not reading equip. correctly, carefully

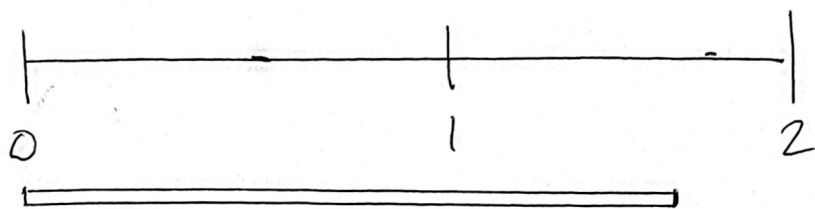
** Calibration error, normally due to problems with equipment



** Not Accurate but Precise

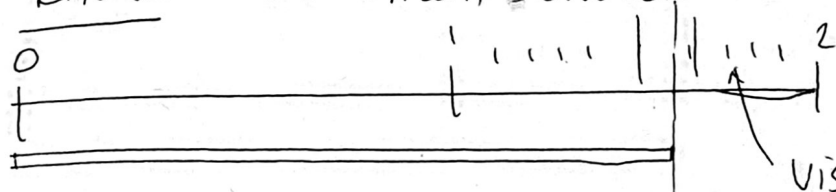
Not Accurate or Precise

Determining Precision



Smallest division of scale determines "known values."

known: measurement between 1 and 2



We can estimate 1 additional digit

visual estimated marks

estimated: between 1.5 and 1.6

1.5
known estimate

Accuracy / Precision in Measurements

Measurements : , (last digit)
known known unknown

130.40g : Precision is at the "hundredths" place
known unknown $\pm 0.01g$ unknown digit

0.0189m Precision $\pm 0.0001m$
known unknown unknown

921m Precision $\pm 1m$
known unknown unknown