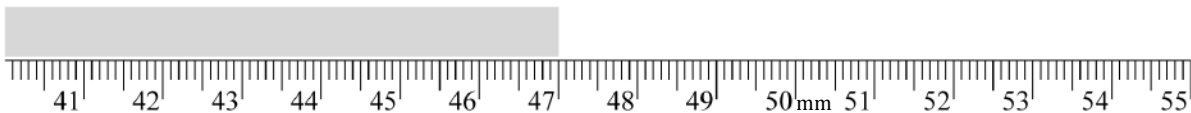
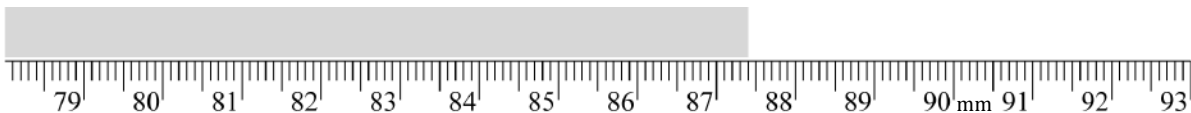
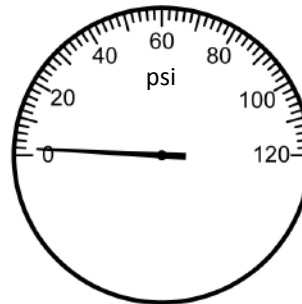
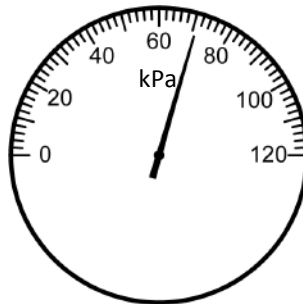
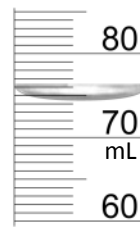
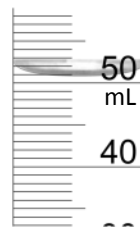
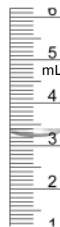
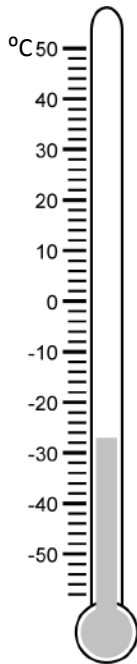
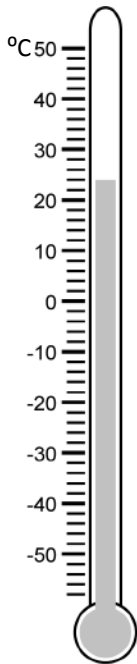
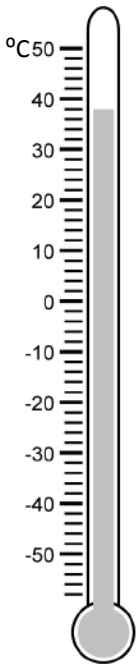
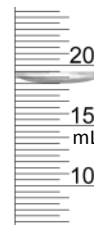
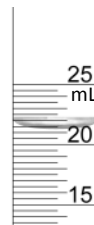
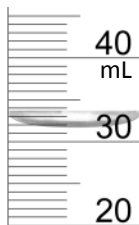
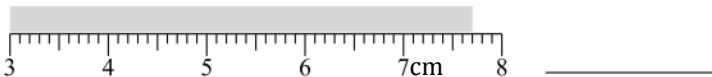
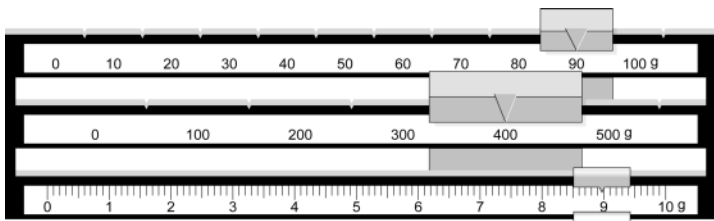
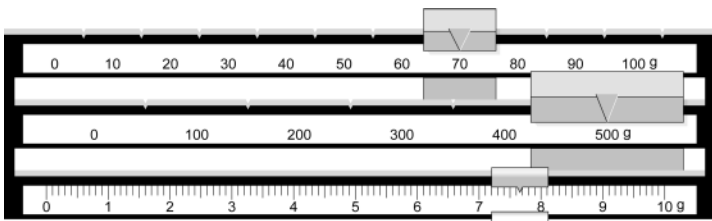
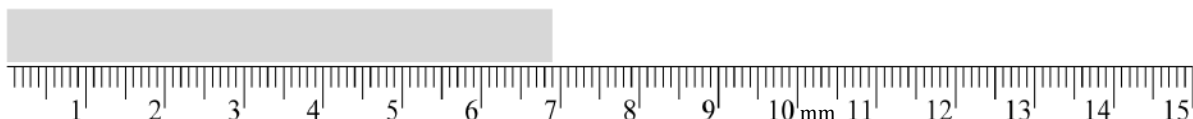
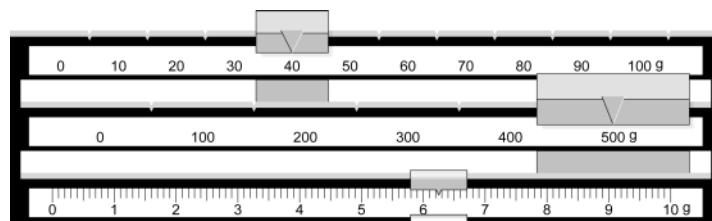
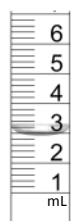
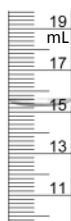
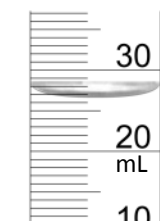
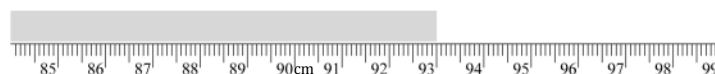
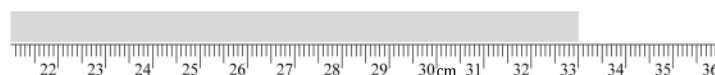
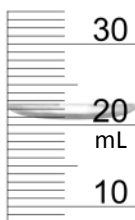
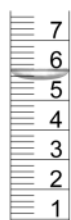
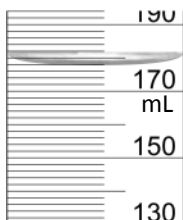
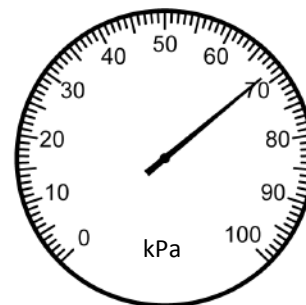
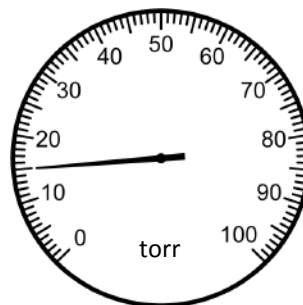
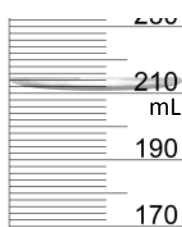
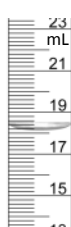
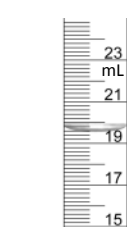
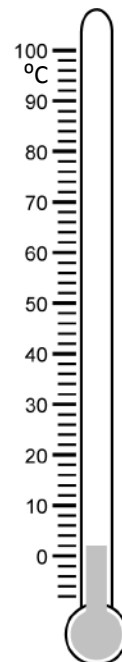
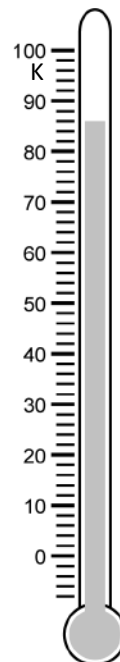
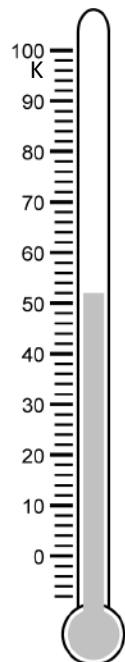
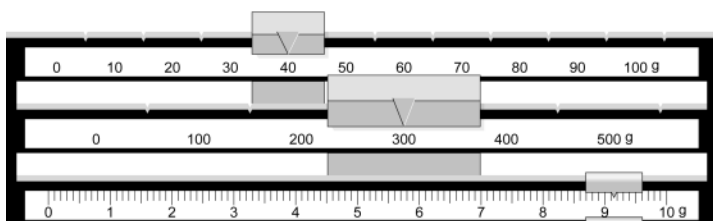
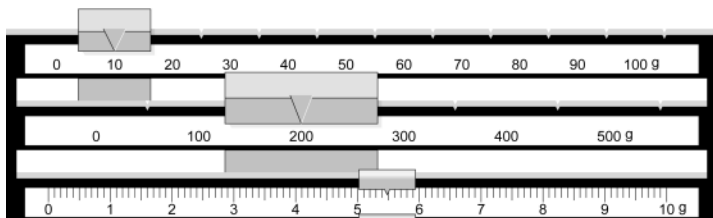
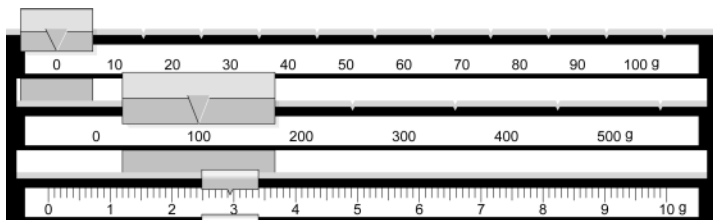


Reading Instruments With Significant Figures Worksheet

Name: _____ Period: _____

Please read each instrument to their limits. Include units and correct number of SigFigs.





Reading Instruments with Significant Figures - Teacher Key

Notes:

When explaining how Significant Figures work, discuss the importance of the number of place values in a measurement. The more place values, the greater the certainty in the accuracy of a measurement.

compare:

3 m vs. 3.00 m

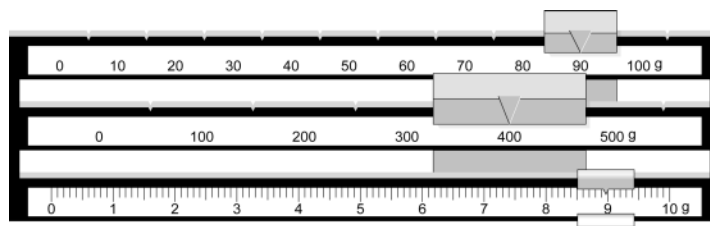
The second expresses confidence out to the hundredths place, where the first only has confidence to the ones place.

Using the worksheet:

When reading an instrument, you will read as far as the graduations will allow. Then, you will estimate one final place value. This is called “the digit of guess” and can vary from student to student, due to it being an estimation.

On the worksheet’s answer key, I’ve underlined my “digit of guess”. I’ve also included how many significant figures (or SigFigs) your answer should have, so you know whether you are reading the instrument correctly or not.

For example:



One acceptable answer: 498.97 g

but another acceptable answer would be: 498.99 g

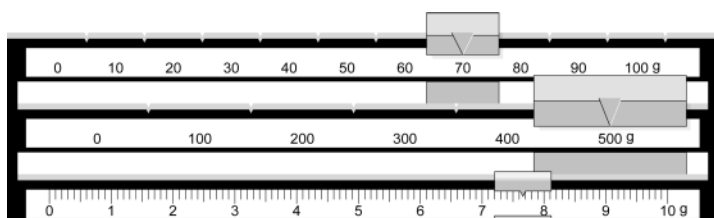
In either instance, both answers have **5 Significant Figures** so on the answer key, it is written as:

498.9 <u>7</u> g 5 SigFigs

Reading Instruments With Significant Figures Worksheet **With Answers**

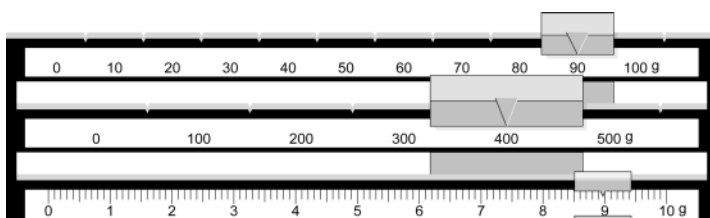
Name: _____ Period: _____

Please read each instrument to their limits. Include units and correct number of SigFigs.



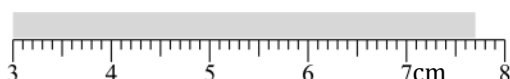
577.6 g

5 SigFigs



498.9 g

5 SigFigs



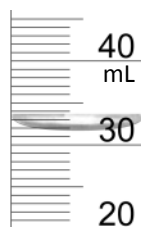
7.70 cm

3 SigFigs



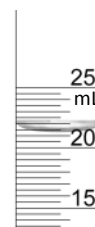
1.00 cm

3 SigFigs



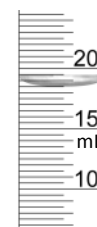
31.7 mL

3 SigFigs



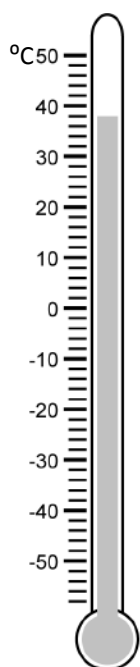
21.3 mL

3 SigFigs



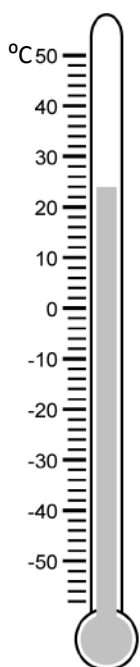
18.50 mL

4 SigFigs



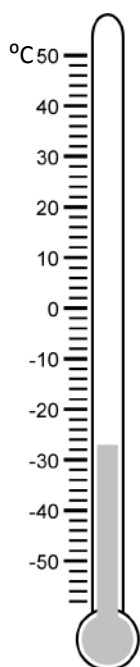
38.0 °C

3 SigFigs



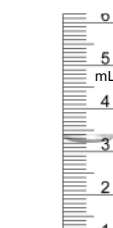
24.0 °C

3 SigFigs



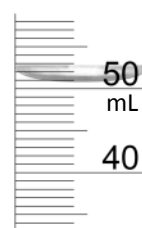
-26.0 °C

3 SigFigs



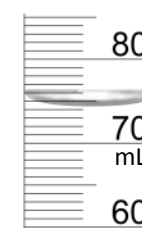
3.21 mL

3 SigFigs



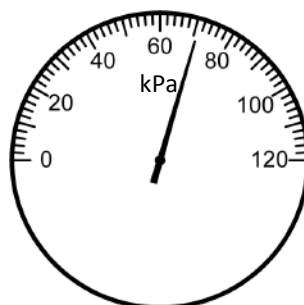
50.9 mL

3 SigFigs



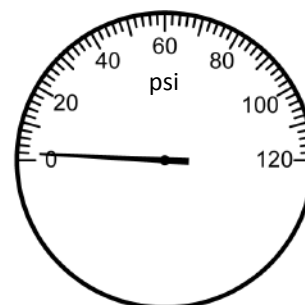
74.5 mL

3 SigFigs



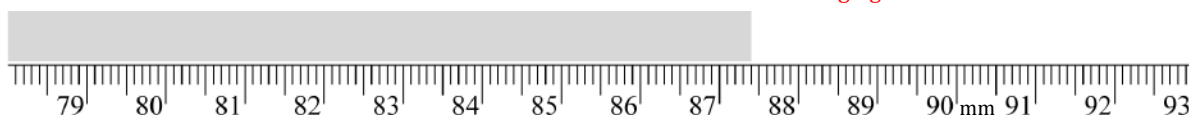
70.0 kPa

3 SigFigs



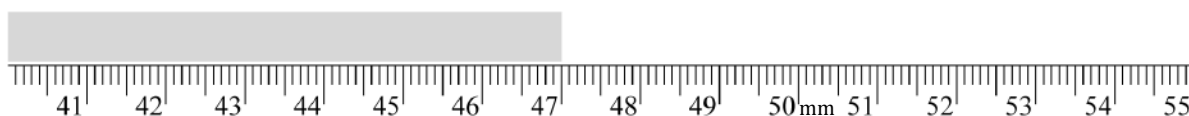
2.0 kPa

2 SigFigs



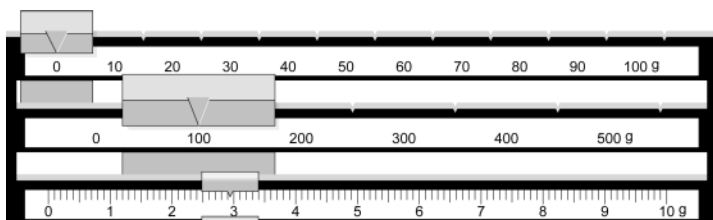
87.40 mm

4 SigFigs



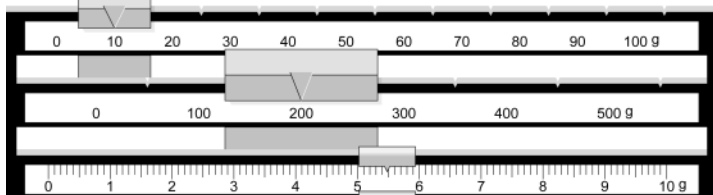
47.00 mm

4 SigFigs



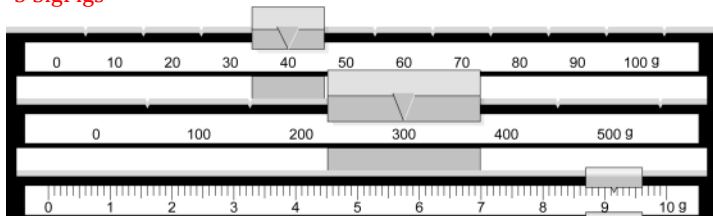
102.98 g

5 SigFigs



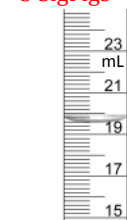
215.49 g

5 SigFigs



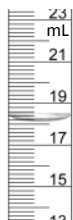
349.16 g

5 SigFigs



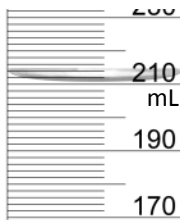
19.58 mL

4 SigFigs



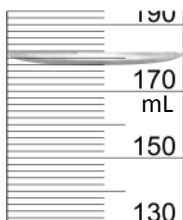
18.17 mL

4 SigFigs



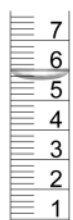
210.9 mL

4 SigFigs



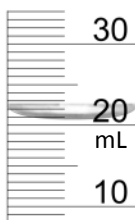
177.7 mL

4 SigFigs



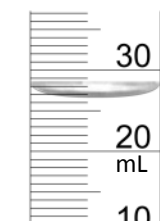
5.70 mL

3 SigFigs



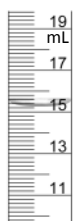
20.9 mL

3 SigFigs



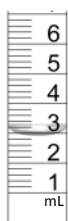
26.7 mL

3 SigFigs



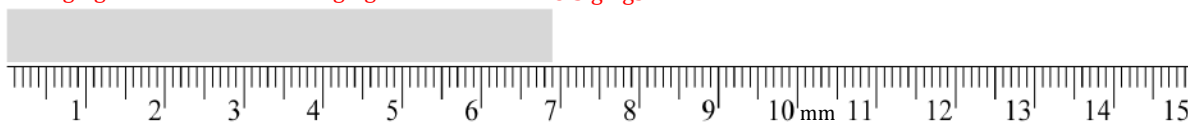
15.21 mL

4 SigFigs



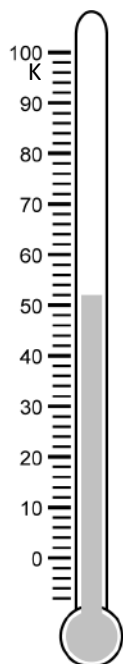
2.89 mL

3 SigFigs



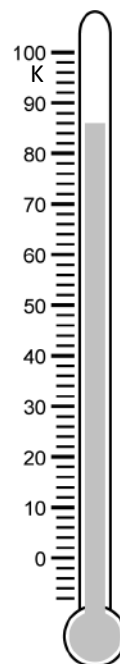
6.91 mm

3 SigFigs



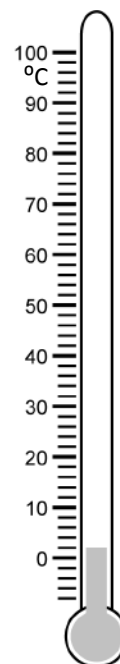
52.0 K

3 SigFigs



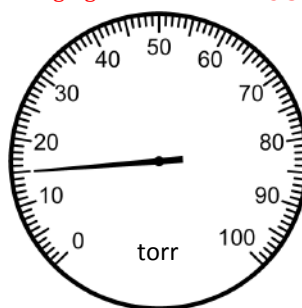
96.0 K

3 SigFigs



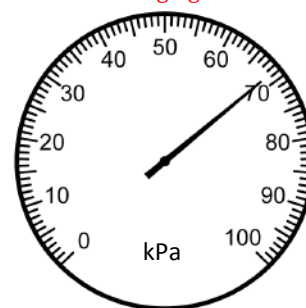
2.0 K

2 SigFigs



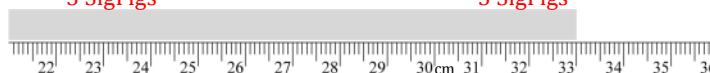
15.0 torr

3 SigFigs



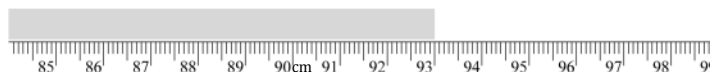
78.8 kPa

3 SigFigs



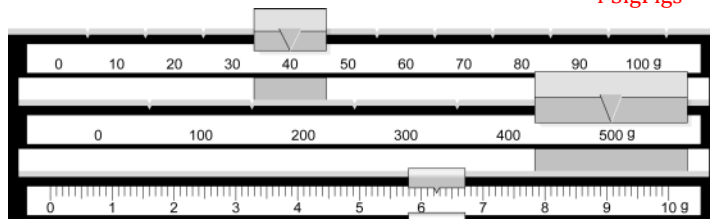
33.00 cm

4 SigFigs



93.00 cm

4 SigFigs



546.23 g

5 SigFigs