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|  | Topic/Objective:  Accuracy & Precision  Significant Figures | Name: |
| Class/Period: |
| Date: |
| Essential Question: I express the accuracy and precision of my lab measurements using significant figures.  BOP: Pages 6 and 7 | | |
| Questions: | Notes:    Accuracy is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   * Reflects the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the measuring tool. * The experimenter can improve accuracy by   Selecting \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  Precision is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   * Reflects the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the experimenters.   \_\_\_ accuracy  \_\_\_ precision  \_\_\_ accuracy  \_\_\_ precision  \_\_\_ accuracy  \_\_\_ precision  \_\_\_\_accuracy  \_\_\_\_precision  Significant Figures are the number of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ that ‘count’.  The trick to Sig figs is knowing when to count \_\_\_\_\_\_\_\_\_\_\_\_  And when to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ them. | |
| Summary: | | |
|  | Rule one: All non-zeroes are\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (they count).  **56,764.3** has \_\_\_\_\_ sig figs.  **2** has \_\_\_\_ sig fig.  Rule two: All zeroes are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (they count) if they are . \_\_\_\_\_\_\_\_\_\_\_\_\_ non-zeroes.  **605** has \_\_\_\_\_\_ sig figs.  **80,704** has \_\_\_\_\_ sig figs.  Rule three: All zeroes are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (they count) if they are . on the \_\_\_\_\_\_\_\_\_\_\_\_ AND  . there is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  **280,000.** has \_\_\_\_ sig figs.  **8070.** has \_\_\_ sig figs.  **280,000**  has \_\_\_\_ sig figs.  **8070** has \_\_\_ sig figs.  Rule four: Zeroes are NOT \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (they do not . . count) if they are on the \_\_\_\_\_\_\_\_\_\_\_\_ EVEN IF  . there is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  **0.007** has \_\_\_\_ sig figs.  **0.007000** has \_\_\_ sig figs.  **280.000**  has \_\_\_\_ sig figs.  **0.9** has \_\_\_ sig figs.  When you multiply and divide sig figs, round the answer to the least number of sig figs.  40 \* 12.0 = 480 but the correct sig fig answer is \_\_\_\_\_\_\_\_\_\_\_\_\_\_.  STEPS:   1. Complete the multiplication or division 2. Count the sig figs in the values you started with. 3. Select the lowest number of sig figs. 4. Round your answer to the lowest number of sig fig’ | |
| Summary: | | |