Significant Digits Vodcast

<http://www.bozemanscience.com/science-videos/2010/10/3/significant-digits.html>

1. What else are significant digits known as?
2. Draw the 2 targets- 1 showing the holes as accurate, the other with the holes precise
3. Now draw a target with holes being both accurate and precise.
4. Using a complete sentence, describe the difference between accurate and precise.
5. Mr. Anderson initially measured the wasp to be 2.5 cm. Which number in the measurement is the estimated digit? Explain.
6. When Mr. Anderson measured the wasp a second time, why did the measurement change to from 2.5 cm to 2.55 cm?
7. Which of these two numbers is more precise? Why?
8. What digits are significant?

|  |  |
| --- | --- |
| Rules | Examples |
| * All non-zeroes
 | 326 3 sig figs 12.48 \_\_ sig figs |
|  |  |
|  |  |
|  |  |

1. What digits are not significant? Give an example.
2. Complete the following: Answers can be no more precise than \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Explain the Law of Multiplication and Division and write the example problems.
4. Explain the Law of Addition and Subtraction and write the example problems.
5. Do the final practice problem.

Practice Problems

Indicate the number of sig figs in each number.

1. .0899
2. .08990
3. 1.01
4. 10.01
5. 1100
6. 222
7. 2022
8. 3003
9. .0101090
10. 102000

Write the following numbers to the indicated number of sig figs

2 Sig Figs

1. 6999
2. 1.00988
3. .0099
4. \*\* 2000
5. 66

Complete the following problems

1. 8.1 – 4.2=
2. 3.9990 x 4.22=
3. 2/60=
4. 6 + 10=
5. 844/.0091=