

Rounding & Significant Digits

Whenever you do anything with math, it's always best to back up just a little bit and make sure everyone is on the same page. Use this lesson to make sure everyone is on the page before moving ahead.

Materials:

- Calculator

Procedure:

1. Rounding: have students copy these notes. This is available as a PowerPoint (see last page). Solve them as you go.

Round these to the tenth (first decimal)

82.91

55.27

133.18

Round these to the hundredth (second d.)

99.914

99.915

725.387

2. Significant digits: have students copy these notes. Solve them as you go.

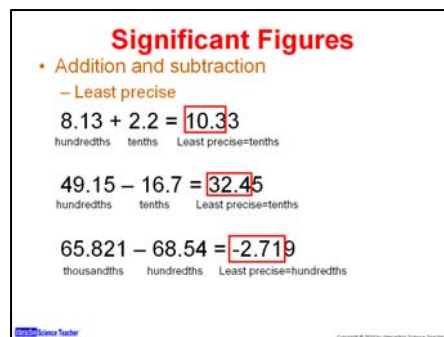
Multiplication and division- fewest digits

$$6 \times 1 = 6$$

$$5.1 \times 7.22 = 36.822$$

$$61.58 / 21.2 = 2.9047169$$

Addition and subtraction- least precise



Significant Figures

- Addition and subtraction
- Least precise

$8.13 + 2.2 = 10.33$
hundredths tenths Least precise=tenths

$49.15 - 16.7 = 32.45$
hundredths tenths Least precise=tenths

$65.821 - 68.54 = -2.719$
thousandths hundredths Least precise=hundredths

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$$8.13 + 2.2 = 10.33$$

$$49.15 - 16.7 = 32.45$$

$$65.821 - 68.54 = -2.719$$

3. For homework, assign these problems. Have students write “fewest digits” on the line after Multiplication/Division, and “least precise” after Addition/Subtraction. This is also available as a student handout (see last page).

Multiplication/Division- _____

1. $21.4 \times 2.55 =$
2. $9.4732 / 4.22 =$
3. $8765 / 254.67 =$
4. $8.3 \times 5.1 =$

Addition/Subtraction- _____

5. $52.4 - 12.15 =$
6. $45 + 82.1 =$
7. $447.56982354 - 51.2547 =$
8. $58.0 + 62 =$

Come back and visit InteractiveScienceTeacher.com to upgrade this lesson with:

PowerPoint- lead your students through the lesson click-by-click

Rounding

- Round these to the tenth (first decimal)

82.91 **82.9**
55.27 **55.3**
133.18 **133.2**

- Round these to the hundredth (second d.)

99.914 **99.91**
99.915 **99.92**
725.387 **725.39**

Significant Figures

- Multiplication and division

– fewest digits
 $6 \times 1 = \boxed{6}$
1 digit 1 digit =1 digit

$5.1 \times 7.22 = \boxed{36}822$
2 digits 3 digits fewest=2 digits

$61.58 / 21.2 = \boxed{2.90}47169$
4 digits 3 digits fewest=3 digits

Significant Figures

- Addition and subtraction

– Least precise
 $8.13 + 2.2 = \boxed{10.33}$
hundredths tenths Least precise=tenths

$49.15 - 16.7 = \boxed{32.45}$
hundredths tenths Least precise=tenths

$65.821 - 68.54 = \boxed{-2.719}$
thousandths hundredths Least precise=hundredths

Student Handout

Significant Digits Practice Problems

Multiplication/Division- _____

1. $21.4 \times 2.55 =$

2. $9.4732 / 4.22 =$

3. $8765 / 254.67 =$

4. $8.3 \times 5.1 =$

Addition/Subtraction- _____

5. $52.4 - 12.15 =$

6. $45 + 82.1 =$

7. $447.56982354 - 51.2547 =$

8. $58.0 + 62 =$