PRACTICE

A scientist weighed 4 grains of rice with a total weight of 1.64×10^{-2} grams. Find the average weight of each grain.

$$\frac{1.64 \times 10^{-2}}{4}$$

$$.41 \times 10^{-2}$$

$$\boxed{4.1 \times 10^{-3}}$$

PRACTICE

A scientist found 2 grains of rice. One weighed 1.82×10^{-2} grams and the other 1.3×10^{-2} grams. Find the difference in their weights and write your answer in scientific notation.

$1.82 \times 10^{-2} - 1.3 \times 10^{-2}$

$(1.82 - 1.3) \times 10^{-2}$

$.52 \times 10^{-2}$

5.2×10^{-3}

REVIEW

How many times larger is 1.3×10^{11} than 1.3×10^{9} ?

$$\frac{1.3 \times 10^{11}}{1.3 \times 10^{9}}$$

$$1 \times 10^{2}$$

$$\boxed{100}$$

How many times larger is 7×10^{8} than 7×10^{5} ?

$$\frac{7 \times 10^{8}}{7 \times 10^{5}}$$

$$1 \times 10^{3}$$

$$\boxed{1000}$$

REVIEW

Evaluate the expressions and write in scientific notation.

$$\frac{5\times10^{6}}{4\times10^{2}}$$

1.25×10^{4}

$$\frac{8.2\times10^{3}}{2\times10^{-6}}$$

4.1×10^{9}

REVIEW

Evaluate the expressions and write in scientific notation.

$(1.4\times10^{-3})+(6.2\times10^{-2})$

$(1.4\times10^{-3})+(62\times10^{-3})$

$(1.4+62)\times10^{-3}$

63.4×10^{-3}

$\boxed{6.34\times10^{-2}}$

$(2.06\times10^{-2})-(1.7\times10^{-3})$

$20.6\times10^{-3}-1.7\times10^{-3}$

$(20.6-1.7)\times10^{-3}$

18.9×10^{-3}

$\boxed{1.89\times10^{-2}}$

11/4/19
Joe
PreAlg

→ 8.6×10^{13} and 4×10^{9}
→ all operations - review - test Wed
⊕ 2.15×10^{4}
⊗ 3.44×10^{23}
⊕
⊖

~→ Calculators? No calculators? → Gr 8 uses them. Hmm...

8.6×10^{13} $8.6000 10^{13}$ $4 \times 10^{9} = .0004$

$- \frac{.0004 \times 10^{3}}{8.5996 \times 10^{13}}$

~→ Put up work on smartboard → They like this opportunity to show it.

~→ Review packet
↳ Nice big text, lots of space → less overwhelming
↳ Answer keys provided to go back over work. → This is so positive for putting the learning on them and showing how to independently study!!! ☺

$3 + +6 = (9)$ $3 - -6 =$

$\frac{8.2 \times 10^{3}}{2 \times 10^{6}}$ ↗ $\frac{8.2 \times 10^{3} \times 10^{6}}{2}$

$\frac{(\ )(\ )}{(\ )(\ )}$

Joe PreAlg

- Indep work time → Completely silent!
- Students come to JD when stuck
  - "What's a strategy that we use?" st: make smaller #s → St. know strategies ☺
  - Writing some work on a post-it as support
  - Some whisper support when stuck (Liam christopherus group #3 division)
    → Provides an artifact for student to take with her as reference.
    → Keeps the ownership for the actual work on the student ☺
  - Question from L. Braun → know which way to set up?
    → I shared him to use the words as labels in setting up a station to decide what to divide.
  - Claire Link → good # sense + estimating
  - #2 seems like a stumper
  - JD - roving w/ answer key + then decide who's on track → Looked @ #1 to see who got it ☺
    * Nice looking for evidence
    * Then 3 points of specific feedback

Three tips:

↑ Brought out the misconceptions

#1 3.765×10^0 → Can take the 10^0 off because it's 1 right?

#2 $1.\overline{6}$

#4 Place value → labeled board w/ # in the billions
→ need to convert trillions

↑ So much good stuff going on!!

Wonder about...
- time for purposeful talk
- other ways to practice