

☐

I'm not robot


reCAPTCHA

Continue

Multiplying and dividing using scientific notation worksheet

If you see this message, it means we don't have a problem loading external resources into our website. If you are behind a web filter, make sure that the *.kastatic.org and *.kasandbox.org are unblocked. This Algebra 1 - Exhibitors worksheet produces problems for working with different functions with scientific notation. You can choose problems with multiplication, division, or products in a power. This worksheet produces 12 problems per page. Click here for more algebra 1 - Exponents Worksheets How to multiply and divide values in scientific notation - Multiplying and dividing values with scientific notes is easier, since the values have the same base of 10 in them. Let's solve both separately with the help of examples. Multiplication - $(5.6 \times 10^5) \times (2.4 \times 10^5)$. Here we must first separate the decimal number and base number 10 and multiply it. $(5.6 \times 2.4) \times (10^5 \times 10^5)$ Exponential numbers have the same basis (i.e. 10), so according to the multiple property, powers are added. Now the decimal numbers will result in 13.44 (13.44×10^{10}) . Division - $((5.6 \times 10^5)/(4.3 \times 10^4))$. Here, similar to multiplication, we can use an exponential split property to divide the notation by subtracting the powers: $((5.6 \times 10^{(5-4)}) / (4.3))$ Now, you can divide the decimal numbers to get an answer of 1.3, and the answer becomes: $1.3 \times 10^1 = 13$. These worksheets show students how to find the effect of gels and products of values expressed in scientific notation. Click here to upgrade The top half of all worksheets is filled with multiplication. The bottom parts of the sheets are where you will be editing the segment problems. Work 1 - Divide the problem into two components and then break the pieces into parts. Work 2 - Writing the number in the correct scientific form. You're going to practice with both operations here. Work 3 - Find the quotient of ten forces by subtracting. That's hard at first. A good idea is to get into the habit of circling and rewriting exhibitors immediately. Practice 1 - Separate the problem into its two components. a) Fixed b) Powers ten Practice 2 - A sample problem you should be working with here: $(1.17 \times 10^3) (2.11 \times 10^3)$ Practice 3 - The important part is to follow the parts of the notation before you start multiplying or dividing it. I used a larger font for the numbers that forces children to rewrite the problem. That's a good thing! Quiz 1 - Rearrange the problem to put the constants and powers of the ten together. Quiz 2 - the exact same strategy that we need to. See how you're doing with this skill. Quiz 3 - Complete all the problems to get them all headed in the right direction. As the name suggests, scientific notation is a form of display of numerical values to which the scientific community leans. This because they constantly study and research things that are either too big or too small. The chemist will often use this form of number expression to indicate the amount of a substance they use to create a reaction. When calculating the degree of substance required to be present in order to carry out the reaction, they should either multiply or divide the values mentioned in the scientific notation. There is an example of the use of business with scientific notation when prices are ridiculously small, and another example would be Microbiology studying the effects of a drug on cells. Often you will place the remains of the drug on a plate with bacterial cells to see how they react to the drug. After some time, they will return and evaluate the number of bacteria that survived the treatment of the drugs. To determine the mortality rate of the drug will often divide the surviving population from the original population in scientific notation. Astronomers are working with numbers that are on the opposite spectrum, they're really big numbers. They will often use these distances to measure the size of stars or solar systems. To determine the relative distances of solar systems between them they will often multiply and divide their distances in scientific notation. Notation.