

Name

Date

Per

Math8 Sci Notation Assignment#2

Castleberry

Adding and Subtracting Scientific Notation Word Problems

1) In 2006, about 1.9×10^7 people visited Blue Ridge Parkway. That same year, about 9.3×10^6 people visited Great Smoky Mountains National Park. How many more people visited Blue Ridge Parkway than Great Smoky Mountains National Park in 2006?

2) In 2006, the US had a Gross Domestic Product (GDP) of 1.313×10^{13} . The United Kingdom had a GDP of 1.93×10^{12} . What were the combined GDPs of the US and the UK in 2006?

3) In 2006, China had 1.311×10^8 internet users. That same year, Japan had 9.09×10^7 internet users. How many internet users did the two countries have combined?

4) The average distance from Earth to the Sun is 1.46×10^8 kilometers. The average distance from Earth to the Moon is 3.84×10^5 kilometers. How much farther is the distance from Earth to the Sun than to the Moon?

5) About 8.73×10^8 people in the world speak Chinese. About 3.22×10^8 speak Spanish. In scientific notation, how many more people speak Chinese than Spanish?

6) The following incomes are recorded for music artists in 2010.

Artist	2010 Income
Jay-Z	2.56×10^7
Yo Gotti	5.1×10^6

How much more money did Jay-Z make over Yo Gotti?

7) Great Lake Superior covers an area of 3.17×10^4 square miles. The smallest Great Lake, Ontario, covers an area of 7.34×10^3 square miles. About how many times as great is the area covered by Lake Superior than Lake Ontario?

8) The distance between Qatar and South Korea is 7.52×10^3 kilometers. The distance between Qatar and New York City, USA is 1.07×10^4 . How much further away is New York City?

Show your work or explain, leave your answers in scientific notation.

1) A flight from Singapore to New York includes a stopover in Hawaii. The distance between Singapore and Hawaii is about 6.7×10^3 miles. The distance between New York and Hawaii is about 4.9×10^3 miles.

a) Find the total distance from Singapore to New York.

b) How much farther is the first half of the trip compared to the second half of the trip?

2) The table shows the weights of some animals.

Animal	Average weights in lbs
African Bush Elephant	2.7×10^4
Hippopotamus	9.0×10^3
Walrus	4.5×10^3

a) How much greater is the average weight of an African Bush Elephant than the average weight of a Hippopotamus?

b) What is the total weight of all animals?

3) Factories A and B produced potato chips. Last year, each factory reported the amount of each ingredient. Factory A reported their amounts in scientific notation and Factory B reported their amounts in standard form.

Ingredient	Factory A (amount used in lbs)	Factory B (amount used in lbs)
Potato	4.87×10^6	3,309,000
Oil	5.61×10^5	356,000
Salt	2.87×10^5	193,500

a) Which factory used more oil last year? By how much?

b) What is the total amount of salt used by both factories?

c) What is the total weight of all of the ingredients in Factory A?

4) The Earth's surface that is covered by water is 3.61×10^8 , compared to the amount of Earth's surface that is covered by land which is 1.49×10^8 , approximately how many times greater is the amount of the Earth's surface covered by water, compared to the surface covered by land?