Name: _____

Scientific Notation Word Problems

Solve each problem.

1. The Sun is about 93,000,000 miles from Earth. Write this in scientific notation.

Answer: _____

2. A company sold 2.4×10^6 phones in one year and 3.1×10^6 the next. How many phones did it sell in both years?

Answer: _____

3. A red blood cell is about 0.000007 meters wide. Write this in scientific notation.

Answer: _____

4. A virus is about 1×10^{-7} m long. A bacterium is about 2×10^{-6} m long. How many times longer is the bacterium?

Answer: _____

5. A grain of sand has a mass of about 6.7×10^{-4} grams. What is the mass of 1,000 grains?

Answer: _____

6. A hard drive holds 2×10^{12} bytes. A photo uses 4×10^6 bytes. How many photos fit on the drive?

Answer: _____

7. The U.S. national debt is about $\$3.5 \times 10^{13}$ and the population is about 3.5×10^8. About how much debt is that per person?

Answer: _____

8. Light travels about 3×10^8 meters per second. How far does it travel in 60 seconds?

Answer: _____

9. A dust particle has a mass of 7.53×10^{-10} kg. Write this in standard form.

Answer: _____

10. Earth's mass is about 5.97×10^{24} kg. The Moon's mass is about 7.35×10^{22} kg. About how many times heavier is Earth?

Answer: _____

Name: **ANSWER KEY**

Scientific Notation Word Problems

Solve each problem.

1. The Sun is about 93,000,000 miles from Earth. Write this in scientific notation.

Answer: 9.3×10^{7} miles

2. A company sold 2.4×10^{6} phones in one year and 3.1×10^{6} the next. How many phones did it sell in both years?

Answer: 5.5×10^{6} phones

3. A red blood cell is about 0.000007 meters wide. Write this in scientific notation.

Answer: 7×10^{-6} m

4. A virus is about 1×10^{-7} m long. A bacterium is about 2×10^{-6} m long. How many times longer is the bacterium?

Answer: 20 times

5. A grain of sand has a mass of about 6.7×10^{-4} grams. What is the mass of 1,000 grains?

Answer: 6.7×10^{-1} g (0.67 g)

6. A hard drive holds 2×10^{12} bytes. A photo uses 4×10^{6} bytes. How many photos fit on the drive?

Answer: 5×10^{5} photos

7. The U.S. national debt is about $\$3.5 \times 10^{13}$ and the population is about 3.5×10^{8}. About how much debt is that per person?

Answer: about $\$1 \times 10^{5}$ ($100,000)

8. Light travels about 3×10^{8} meters per second. How far does it travel in 60 seconds?

Answer: 1.8×10^{10} m

9. A dust particle has a mass of 7.53×10^{-10} kg. Write this in standard form.

Answer: 0.000000000753 kg

10. Earth's mass is about 5.97×10^{24} kg. The Moon's mass is about 7.35×10^{22} kg. About how many times heavier is Earth?

Answer: about 81 times