Scientific Notation – Multiplying and Dividing Word Problems and Practice	
Name	e: Date: Class Period:
	Express all answers in Scientific Notation. Most statistics given are purely fictional.
1.	The Lucky Town Lottery has a jackpot of 4.5×10^7 dollars. If Shirley and seven of her closest friends share the prize, how much will each lucky lotto player receive?
2.	A piece of notebook paper is approximately 1.3 x 10 ⁻² inches thick. Frankie cleaned out his math notebook and had a stack of 243 pieces of paper. How tall was his paper stack?
3.	One size of a rectangular garden is 7.87×10^2 feet. The other size measures 5.04×10^2 feet. What is the size of the garden in square feet?
4.	The speed of light is 2.99×10^8 meters per second. It is $1.49669180 \times 10^{11}$ m from the earth to the sun. How much time does it take light to travel from the sun to the earth?
5.	The area of Australia is approximately 7.7×10^6 km. If it were to be divided into states of about 1.54×10^6 km, how many states would there be?
6.	The Amazon River is 6.4×10^3 km long. The Mississippi River is 3.733×10^3 km. How many times longer is the Amazon River than the Mississippi River?
7.	A microscopic ocean creature is 2×10^{-5} m in length. If you laid them end-to-end to form a chain of 1 m in length, how many creatures would be in the chain?

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- 1. The Lucky Town Lottery has a jackpot of 4.5×10^7 dollars. If Shirley and seven of her closest friends share the prize, how much will each lucky lotto player receive? 4.5 × 10 = -5,625 × 10 = -5.625 × 10;
- 2. A piece of notebook paper is approximately 1.3 x 10-2 inches thick. Frankie cleaned out his math notebook and had a stack of 243 pieces of paper. How tall was his paper stack?

1.3×10-2 = 315,9×10-2+2 3.159×10°

3. One size of a rectangular garden is 7.87 x 10² feet. The other size measures 5.04 x 102 feet. What is the size of the garden in square feet?

x 5.04 x 102 = 39,6648 x 104+1 (3.96648 x 105)

4. The speed of light is 2.99 x 108 meters per second. It is 1.49669180x1011 m from the earth to the sun. How much time does it take light to travel from the sun to the earth?

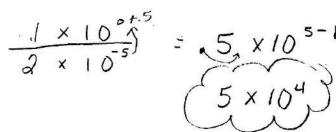
 $\frac{1.49669180 \times 10^{11}}{2.99} = 0.501 \times 10^{3-1}$ $\frac{5.01 \times 10^{2}}{5.01 \times 10^{2}}$

5. The area of Australia is approximately 7.7 x 106 km. If it were to be divided into states of about 1.54 x 106 km, how many states would there be?

6. The Amazon River is 6.4×10^3 km long. The Mississippi River is 3.733×10^3 km.

How many times longer is the Amazon River than the Mississippi River?
$$\frac{6.4 \times 10^{3}}{3.733 \times 10^{3}} = 1.71 \times 10^{\circ}$$

7. A microscopic ocean creature is 2 x 10-5 m in length. If you laid them end-toend to form a chain of 1 m in length, how many creatures would be in the chain?



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