

Unit Conversion and Scientific Notation Worksheet

A. Convert the following numbers to the units located to the right of the blank.

- 109 mm = _____ cm
- 58 g = _____ kg
- 0.813 kg = _____ mg
- 4.7 cm = _____ m
- 220 μg = _____ kg
- 0.571 L = _____ mL
- 5.86 μL = _____ mL
- 49.8 g = _____ mg
- 743 mL = _____ L
- 110 μg = _____ mg
- 4,279 pg = _____ mg
- 5.1 L = _____ mL
- 10 mm = _____ cm
- 300 mL = _____ dL
- 1005 μL = _____ L
- 16 m = _____ pm

B. Compare the following calculations using greater than (>), less than (<), or equal to (=).

- 50 cm 5 m
- 2.6 L 260 mL
- 430 mm 0.43 m
- 0.5 kg 50 g
- 0.65 mL 650 μL
- 0.70 g 0.70 mg
- 89 mL 0.89 L
- 10 m 1000 cm

C. Express the following numbers in scientific notation.

- 3000 kg = _____
- 0.00375 cm = _____
- 0.421 m = _____
- 5005 mL = _____
- 7,008,000 μL = _____
- 890 g = _____
- 0.4039 L = _____
- 0.1007 pm = _____
- 200 L = _____
- 0.987 mm = _____
- 12.8 kg = _____
- 120 m = _____

D. Express the following numbers in standard notation.

1. $1.39 \times 10^{-2} =$ _____

2. $4.98 \times 10^3 =$ _____

3. $7.05 \times 10^{-4} =$ _____

4. $9.2 \times 10^{-6} =$ _____

5. $1.97 \times 10^4 =$ _____

6. $2.61 \times 10^2 =$ _____

7. $3.009 \times 10^{-5} =$ _____

8. $6.02 \times 10^7 =$ _____

E. Complete the following calculations and express the answers using scientific notation.

1. $(8.9 \times 10^{-3}) \times (1.3 \times 10^{-4}) =$ _____

2. $(5.2 \times 10^2) \times (4 \times 10^{-1}) =$ _____

3. $(2.4 \times 10^3) \div (6 \times 10^4) =$ _____

4. $(5 \times 10^3) \div (2.0 \times 10^{-2}) =$ _____

5. $(4.2 \times 10^{-6}) \times (3.0 \times 10^{-9}) =$ _____