Name : _____ Score : _____

Teacher : _____ Date : _____

How Many Significant Digits for Each Number?

1) 0.00860 = 3

2) 0.00100 = 3

3) 8017 = 4

4) 2.300×10^{-5} = 4

5) 2.559×10^{4} = 4

6) 3.0×10^{-3} = 2

7) 0.0676 = 3

8) 4.39×10^{-4} = 3

9) 0.0004 = 1

10) 4806 = 4

11) 2.6×10^{9} = 2

12) 300 = 1

13) 0.0506 = 3

14) 1×10^{-7} = 1

15) 58.2 = 3

16) 9090 = 3

17) 790 = 2

18) 9950 = 3

19) 0.21520 = 5

20) 1×10^{1} = 1

Name : Cora S Score : _____

Teacher : Ms. Parker Date : 09/20

How Many Significant Digits for Each Number?

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20) 1×10^{1} = 1

Worksheet: Metric Conversions

Name Cora S.

1. 0.057 m to km

$\frac{0.057\,m}{1} \cdot \frac{1\,km}{1000} = \boxed{5.7 \times 10^{-5}\,km}$

2. 13 cm^3 to mL

$\boxed{13\,mL}$ or $\boxed{1.3 \times 10^{1}\,mL}$

3. 0.986 hours to seconds

$\frac{0.986\,hr}{1} \cdot \frac{60\,min}{1\,hr} \cdot \frac{60\,s}{1\,min} = \boxed{3.55 \times 10^{-3}\,s}$

4. 3.004 L to mL

$\frac{3.004\,L}{1} \cdot \frac{1000\,mL}{1\,L} = \boxed{3.004 \times 10^{3}\,mL}$

5. 86 kg to g

$\frac{86\,kg}{1} \cdot \frac{1000\,g}{1\,kg} = \boxed{8.6 \times 10^{4}\,g}$

6. 24 cm^3 to L

$\frac{24\,cm^3}{1} \cdot \frac{1\,mL}{1\,cm^3} \cdot \frac{1\,L}{1000\,mL} = \boxed{2.4 \times 10^{-2}\,L}$

7. 56,000 μg to kg

$\frac{56000\,\mu g}{1} \cdot \frac{1\,g}{1000000\,\mu g} \cdot \frac{1\,kg}{1000\,g} = \boxed{5.6 \times 10^{-5}\,kg}$

8. 56 km to mm

$\frac{56\,km}{1} \cdot \frac{1000\,m}{1\,km} \cdot \frac{1000\,mm}{1\,m} = \boxed{5.6 \times 10^{7}\,mm}$

9. 20 km to feet

$\frac{20\,km}{1} \cdot \frac{1000\,m}{1\,km} \cdot \frac{100\,cm}{1\,m} \cdot \frac{1\,in}{2.54\,cm} \cdot \frac{1\,ft}{12\,in} = \boxed{7 \times 10^{4}\,ft}$

Worksheet: Metric Conversions Name KEY

1. 0.057 m to km

$$?\,km = \frac{0.057\ \cancel{m}}{1} \times \frac{1\,km}{1000\ \cancel{m}} = \boxed{5.7\times10^{-5}\ km}$$

2. 13 cm^3 to mL

$$?\,mL = \frac{13\ \cancel{cm^3}}{1} \times \frac{1\,mL}{1\ \cancel{cm^3}} = \boxed{1.3\times10^{1}\ mL}$$

3. 0.986 hours to seconds

$$?\,s = \frac{0.986\ \cancel{hours}}{1} \times \frac{60\ \cancel{min}}{1\ \cancel{hour}} \times \frac{60\,s}{1\ \cancel{min}} = \boxed{3.55\times10^{3}\ s}$$

4. 3.004 L to mL

$$?\,mL = \frac{3.004\ \cancel{L}}{1} \times \frac{1000\,mL}{1\ \cancel{L}} = \boxed{3.004\times10^{3}\ mL}$$

5. 86 kg to g

$$?\,g = \frac{86\ \cancel{kg}}{1} \times \frac{1000\,g}{1\ \cancel{kg}} = \boxed{8.6\times10^{4}\ g}$$

6. 24 cm^3 to L

$$?\,L = \frac{24\ \cancel{cm^3}}{1} \times \frac{1\ \cancel{mL}}{1\ \cancel{cm^3}} \times \frac{1\,L}{1000\ \cancel{mL}} = \boxed{2.4\times10^{-2}\ L}$$

7. 56,000 μg to kg

$$?\,kg = \frac{56{,}000\ \cancel{\mu g}}{1} \times \frac{1\ \cancel{g}}{1{,}000{,}000\ \cancel{\mu g}} \times \frac{1\,kg}{1000\ \cancel{g}} = \boxed{5.6\times10^{-5}\ kg}$$

8. 56 km to mm

$$?\,mm = \frac{56\ \cancel{km}}{1} \times \frac{1000\ \cancel{m}}{1\ \cancel{km}} \times \frac{1000\,mm}{1\ \cancel{m}} = \boxed{5.6\times10^{7}\ mm}$$

9. 20 km to feet

$$?\,feet = \frac{20\ \cancel{km}}{1} \times \frac{1000\ \cancel{m}}{1\ \cancel{km}} \times \frac{100\ \cancel{cm}}{1\ \cancel{m}} \times \frac{1\ \cancel{in}}{2.54\ \cancel{cm}} \times \frac{1\,foot}{12\ \cancel{in}} = \boxed{7\times10^{4}\ feet}$$