

1
10
100
1,000
10,000
100,000

**SKILLS & TECHNIQUES**

**Order of Magnitude & Scientific Notation**

**Problem Set**

**Problem 1: Scientific Notation and Animal Length Scales**

Convert the following numbers from scientific notation to prefix notation. Then write the name of an animal whose length is on the same order of magnitude.

- $1 \times 10^{-3} \text{ m} = \underline{\hspace{2cm}} \rightarrow \underline{\hspace{2cm}}$
- $1 \times 10^{-2} \text{ m} = \underline{\hspace{2cm}} \rightarrow \underline{\hspace{2cm}}$
- $1 \times 10^{-1} \text{ m} = \underline{\hspace{2cm}} \rightarrow \underline{\hspace{2cm}}$
- $1 \times 10^0 \text{ m} = \underline{\hspace{2cm}} \rightarrow \underline{\hspace{2cm}}$
- $1 \times 10^1 \text{ m} = \underline{\hspace{2cm}} \rightarrow \underline{\hspace{2cm}}$

**Problem 2: Scientific Notation and Animal Speed Scales**

Convert the following numbers from scientific notation to prefix notation. Then write the name of an animal whose speed is on the same order of magnitude.

- $1 \times 10^{-3} \text{ m/s} = \underline{\hspace{2cm}} \rightarrow \underline{\hspace{2cm}}$
- $1 \times 10^{-2} \text{ m/s} = \underline{\hspace{2cm}} \rightarrow \underline{\hspace{2cm}}$
- $1 \times 10^{-1} \text{ m/s} = \underline{\hspace{2cm}} \rightarrow \underline{\hspace{2cm}}$
- $1 \times 10^0 \text{ m/s} = \underline{\hspace{2cm}} \rightarrow \underline{\hspace{2cm}}$
- $1 \times 10^1 \text{ m/s} = \underline{\hspace{2cm}} \rightarrow \underline{\hspace{2cm}}$
- $1 \times 10^2 \text{ m/s} = \underline{\hspace{2cm}} \rightarrow \underline{\hspace{2cm}}$

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