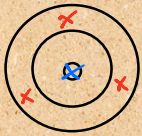


Warm-up:

- Comment on the accuracy & precision of the following dart boards



Accuracy: Good
Precision: Good



Accuracy: Bad
Precision: Good



Accuracy: Good
Precision: Good

- Significant Figure Rules:

1. All non-zero digits are significant $\rightarrow 1.3785 \rightarrow 5 \text{ SF's}$
2. Zeros between two non-zero digits are significant $\rightarrow 105.208302 \rightarrow 9 \text{ SF's}$
3. ★ Leading zeros are not significant $0.000842 \rightarrow 3 \text{ SF's}$
4. Trailing zeros after a decimal are significant $\rightarrow 18.300 \rightarrow 5 \text{ SF's}$
5. ★ Trailing zeros w/out decimal are not significant $\rightarrow 4,500,000 \rightarrow 2 \text{ SF's}$

★ Place holders to show magnitude

Operation Rules:

1) Addition/subtraction: round to lowest # of decimals

$$\begin{array}{r} 2.13 \\ + 11.4 \\ \hline 13.53 \end{array} \xrightarrow{1 \text{ decimal}} \boxed{13.5}$$

2) Multiply/Divide: round to lowest sig fig

$$\begin{array}{r} 11.0^3 \\ \times 8.5^2 \\ \hline 5.50 \\ + 88.00 \\ \hline 93.50 \end{array} \xrightarrow{2} \boxed{94}$$

• Scientific Notation: shorthand for writing very large or small #'s

$$\begin{aligned} \rightarrow (-) \text{ exponents} &= \text{less than } 1 \rightarrow 1.0 \times 10^{-3} = 0.0010 \\ \rightarrow (+) \text{ exponents} &= \text{greater than } 1 \rightarrow 86 \cdot 10^8 = 86000000 \end{aligned}$$