Percent Error Worksheet

1. Kayla's class went on a field trip to an aquarium. One tank had 30 clown fish. She miscounted the total number of clown fish in the tank and recorded it as 24 fish. What is Kayla's percent error?

2. The exact value for the density of aluminum is 2.699 g/cm^3. Working in the science lab at school, Joseph finds the density of a piece of aluminum to be 2.75 g/cm^3. What is Joseph's percent error? (Round to the nearest hundredth.)

3. The world's largest marathon, The New York City Marathon, is held on the first Sunday in November each year. Between 2 million and 2.5 million spectators will line the streets to cheer on the marathon runners. At most, what is the percent error?

4. In a school library, 52% of the books are paperback. If there are 2,658 books in the library, how many of them are not paperback to the nearest whole number?

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$$\frac{|24 - 30|}{|30|} \times 100\% = 20\%$$

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$$\frac{|2.75 - 2.699|}{|2.699|} \times 100\% \approx 1.89\%$$

3. The world's largest marathon, The New York City Marathon, is held on the first Sunday in November each year. Between 2 million and 2.5 million spectators will line the streets to cheer on the marathon runners. At most, what is the percent error?

$$\frac{|2.5 - 2|}{|2|} \times 100\% = 25\%$$

4. In a school library, 52% of the books are paperback. If there are 2,658 books in the library, how many of them are not paperback to the nearest whole number?

$$100\% - 52\% = 48\%$$

Let n represent the number of books that are not paperback.

$$n = 0.48(2,658)$$

$$n = 1,275.84$$

About 1,276 books are not paperback.

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