

Name \_\_\_\_\_

## Unraveling the Mystery: Descriptive vs. Inferential Statistics

### Open-Ended Response Answer Key

1. Descriptive statistics help us understand data patterns by summarizing information into charts, graphs, or numerical summaries, making it easier to identify trends or outliers.
2. Possible scenarios include using inferential statistics to estimate the average lifespan of a species based on a sample of individuals or predicting the success rate of a new product based on consumer feedback.
3. Understanding the difference between descriptive and inferential statistics is important because it helps us know when to use each type of analysis depending on our goals, whether it's summarizing current data or making predictions about the future.
4. An example might be conducting a survey (descriptive) to gather information about customer preferences, then using that data to predict future sales trends (inferential) for a business.

