

Elementary Statistics Exploration

Statistics · Answer Key · 18 Questions

1. Which type of graph uses vertical bars to represent data, where the height of each bar shows a frequency or count?

- A) Line Graph
- B) Pie Chart
- C) Bar Graph**
- D) Scatter Plot

2. What is the most common number that appears in a data set called?

- A) Mean
- B) Median
- C) Range
- D) Mode**

3. When ordering a set of numbers from least to greatest, what is the middle number called?

- A) Mode
- B) Mean
- C) Median**
- D) Outlier

4. What does a pie chart use to show parts of a whole?

- A) Lines
- B) Slices (Sectors)**
- C) Dots
- D) Bars

5. Which statistical measure describes the difference between the highest and lowest values in a data set?

- A) Mode
- B) Mean
- C) Median
- D) Range**

6. In a data set of [2, 5, 5, 8, 9], what is the mode?

- A) 2
- B) 5**
- C) 8
- D) 9

7. Which of the following is a unit of measurement often used to describe the 'average' of a data set?

- A) Mode
- B) Range
- C) Mean**
- D) Frequency

8. What does a line graph primarily show?

- A) Distribution of single values
- B) Comparison of categories
- C) Trends over time**
- D) Individual data points only

9. If you flip a fair coin, what is the probability of getting heads?

- A) $\frac{1}{4}$
- B) $\frac{1}{2}$**
- C) $\frac{3}{4}$
- D) 1

10. What is a 'pictograph'?

- A) A graph using pictures to represent data**
- B) A graph showing data over time
- C) A graph with circular slices
- D) A graph with vertical bars

11. When data is collected and organised, what is the first step in analysis usually?

- A) Calculating the range
- B) Creating a graph
- C) Finding the mode
- D) Sorting the data**

12. What term refers to how often a specific value appears in a data set?

- A) Median
- B) Mean
- C) Frequency**
- D) Range

13. In a data set of [3, 7, 1, 9, 5], what is the median?

- A) 1
- B) 5**
- C) 7
- D) 9

14. A 'scale' on a graph is used to:

- A) Label the bars
- B) Show the range of values represented**
- C) Indicate the mode
- D) Connect the data points

15. What does 'data' represent in statistics?

- A) A single opinion
- B) A collection of facts or numbers**
- C) A prediction of the future
- D) A mathematical formula

16. Which type of graph is best for showing the relationship between two different sets of data?

- A) Bar Graph
- B) Pie Chart
- C) Scatter Plot**
- D) Line Graph

17. What is the probability of rolling a 4 on a standard six-sided die?

- A) $\frac{1}{6}$**
- B) $\frac{2}{6}$
- C) $\frac{3}{6}$
- D) $\frac{4}{6}$

18. When all numbers in a data set are the same, which statistical measure will be equal to that number?

- A) Range
- B) Median
- C) Mode
- D) All of the above**