Name: _____ **Date:** _____

Data Detectives: Solving the Case of the Missing Track Star for 4th Grade

Evidence sorting, trend spotting, and source verification. Students apply data analysis to solve real-world mysteries using digital spreadsheets and athletic statistics.

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1. The local animal shelter wants to know which food cats like best. They only ask 3 people who own dogs. Why is this data 'unreliable'?

A. The sample group does not match the topic.
B. The data was collected on a weekend.
C. The shelter used a computer to store the names.
D. There are too many different types of cat food.

2. A line graph showing a plant growing taller every day is an example of a data trend.

A. True
B. False

3. When you put a list of student names in alphabetical order (A-Z) in a digital spreadsheet, you are _____ the data.

A. Deleting
B. Sorting
C. Coding
D. Predicting

4. If you are researching the average temperature in the Amazon Rainforest, which source is the most 'credible' (trustworthy)?

A. A personal travel blog from 2005.
B. A comment left on a YouTube video.
C. A 2023 report from a National Weather Organization.
D. A fictional story about a jaguar.

5. Data can only be shown in numbers; it cannot be shown in pictures or symbols.

A. True
B. False

6. A digital school library system uses _____ to protect student records so that only authorized teachers can see them.

A. Public links
B. Encryption or passwords
C. Open folders
D. Social media

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7. You see a chart showing that ice cream sales and shark attacks both go up in July. What is the most logical conclusion?

A. Eating ice cream causes shark attacks.
B. Sharks like to eat ice cream.
C. Warmer summer weather leads to more of both activities.
D. The data is a lie because sharks don't like July.

8. If you find a data error in your spreadsheet, you should keep it there to show how hard you worked.

A. True
B. False

9. When a scientist looks at 100 different experiments to see if they all had the same result, they are _____ the data.

A. Ignoring
B. Hiding
C. Downloading
D. Evaluating

10. A grocer notices that they run out of apples every Tuesday. How can they use this data to solve the problem?

A. Stop selling apples entirely.
B. Order more apples to arrive on Monday night.
C. Raise the price of oranges instead.
D. Close the store on Tuesdays.