Name: _____   Date: _____

Data Detectives: The Case of the 7th Grade Digital Trail Quiz

Solve these 10 data puzzles to identify reliable sources and spot hidden bias in everyday statistics.

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1. Imagine you are researching the average score of Minecraft players worldwide. Which source would provide the most reliable data for your report?

    A.   A comment left on a YouTube gaming video
    B.   An official report from the game's developer, Mojang Studios
    C.   A personal blog post titled 'Why I am the best player'
    D.   A poll with five votes on a fan-made Discord server

2. True or False: If you find a data chart on a professional-looking website, it is always 100% accurate and does not need to be checked.

    A.   True
    B.   False

3. A scientist studies 5,000 birds to understand migration. In data terms, the group of people or objects being studied is called a ___.

    A.   Variable
    B.   Algorithm
    C.   Sample
    D.   Spreadsheet

4. You see a social media post claiming a new soda makes people run faster, but the study only tested three professional runners. What is the main problem with this data?

    A.   The sample size is too small to be reliable
    B.   The data was stored on a cloud server
    C.   The researchers used a bar graph
    D.   The soda tastes bad

5. When a person only looks for data that proves what they already believe, they are demonstrating ___ bias.

    A.   Selection
    B.   Confirmation
    C.   Measurement
    D.   Omission

6. True or False: Using a password-protected folder and regular backups are methods used to manage and protect data integrity.

    A.   True
    B.   False

7. A fitness app tracks your steps and heart rate every day. This collection of raw numbers and information before it is analyzed is known as:

    A.   An opinion

    B.   A dataset

    C.   A hypothesis

    D.   A conclusion

8. To display how a student's grades have changed over the entire school year, the best type of data visualization to use is a ___ graph.

    A.   Pie

    B.   Line

    C.   Scatter

    D.   Box

9. True or False: Data literacy only matters for people who work as computer programmers or mathematicians.

    A.   True

    B.   False

10. You find a chart about global temperatures, but the creator didn't label the X-axis or Y-axis. Why is this a problem for evaluating data?

    A.   The chart is too colorful

    B.   The computer might crash

    C.   Without labels, there is no context to understand what the data represents

    D.   The labels are only required for professional scientists