Answer Key: Data Detectives: Can You Solve the Mystery of Information?

Challenge your young analysts to build their own data collection systems and predict community patterns using visual synthesis skills.

---

1. Imagine you want to find out which fruit is the favorite in our class. You decide to use a 'Sticker Chart' where every kid puts a sticker under their fruit. What are you doing with the data?

Answer: B) Organizing and collecting data

> Creating a sticker chart is a way to collect information and organize it so it is easy to read and understand.

2. If we look at a weather chart and see 5 suns and 0 rain clouds, we can ___ that tomorrow will most likely be sunny.

Answer: C) Predict

> Predicting means using the data we already have (the previous sunny days) to make a smart guess about what happens next.

3. If a robot tells you that it is snowing outside, but you look out the window and see bright sunshine, the robot's data is reliable.

Answer: B) False

> Data literacy involves evaluating information; if the data doesn't match the real world, it is not reliable or accurate.

4. You see a tally mark chart showing 10 kids like dogs and 2 kids like sharks. How should the pet store use this data for their window display?

Answer: C) Put more dog toys in the window

> Using data means making decisions based on what the numbers tell us. Since more kids like dogs, dog toys are a better choice for the display.

5. To keep our classroom library data safe and easy to find, we should ___ our books by color or topic.

Answer: A) Group/Categorize

> Grouping or categorizing is a key part of managing data so that we can find what we need quickly.

6. If you want to know which playground toy is the most popular, you should watch the playground and write down what you see.

Answer: A) True

> Observation is a primary way to find and collect data for our own research tasks.

7. Sarah wants to count how many red cars pass the school. She creates a drawing of a car and colors it in every time one passes. What is the drawing represent?

Answer: B) A data point

> Each drawing represents one piece of information, which in data terms is called a data point.

8. When we look at a big pile of mixed LEGOs and sort them by size, we are making the data ____ to use.

Answer: C) Easier

> Sorting and managing data makes it easier for us to find the right pieces and build what we want.

9. A graph that shows that 'Elephants are smaller than Ants' is providing accurate data.

Answer: B) False

> Evaluating data means checking it against facts. We know elephants are larger, so this data is incorrect.

10. If we want to know if the birds like the blue birdhouse or the red birdhouse best, what should we do?

Answer: C) Count how many birds go into each house

> Counting visits is a way to gather data to answer a specific question using evidence.