

Progress Check 1: Can You Read Evidence?

Mission Objective

To demonstrate mastery of the foundational concepts related to the Consider Data and Pose Questions phases of the Data Cycle. Students should be able to identify data types and organize information with a data table.

Investigative Task 1: Data Structure Analysis

The DSU has been called to the **Silverwood Wildlife Sanctuary**, where a rare, nocturnal creature has vanished. Below is a portion of the evidence collected on the different habitat zones near the creature's enclosure.

Evidence File 1.0: Sanctuary Zone Audit					
Zone ID	Habitat Type	Elevation (meters)	Nearest Water Source	Nighttime Temp (Celsius)	Security Cameras
Z-01	Swamp	2	Stream	18	Yes
Z-02	Grassland	15	Pond	16	Yes
Z-03	Forest	45	None	12	No
Z-04	Swamp	1	Stream	17	Yes
Z-05	Forest	30	River	14	No

Answer the following questions based **only** on the table above:

- Who or what are the cases (observations) in this dataset? How many total cases are there?

Answer: _____

- Which of the following represents a variable in the table above? Circle one.

Zone ID Z-03 18 Pond

- For each variable below, classify it as either Numerical or Categorical:

Elevation (meters): _____ Nearest Water Source: _____

Nighttime Temp (Celsius): _____ Habitat Type: _____

Investigative Task 2: Formulating Questions

The next mystery your team will tackle is related to **Animal Adoption Habits** at the local shelter. To start the investigation, you need to form strong questions that can be answered using data.

1. **Survey Questions:** Write two survey questions you would ask a single family to collect information about their animal adoption preferences.

Survey Question 1: _____

Survey Question 2: _____

2. **Statistical Questions:** Write two statistical questions that can be asked based on the data you collected from your survey questions.

[Using a Categorical Variable]

Statistical Question 1: _____

[Using a Numerical Variable]

Statistical Question 2: _____
