DATA SHEET

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Length (m) | 3.0 | 3.5 | 4.0 | 4.5 | 5.0 | 5.5 | 6.0 | 6.5 | 7.0 |
| # of CARS |  |  |  |  |  |  |  |  |  |
| # of TRUCKS |  |  |  |  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| TYPE OF CAR | Number | Type of Truck | Number |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

ANALYSIS

Sample 2 populations of organisms (cars & trucks) in this ecosystem (parking lot). Measure their length and record.

GRAPH LENGTH OF VEHICLE vs NUMBER of individuals.  
  
Calculate mean length and standard deviation for cars and trucks in this ecosystem.

Compare the biodiversity in the two populations (cars and trucks)

Use data from the tables to answer the questions. Connect to real world

1. Why do you think Cuba has many more species of amphibians and reptiles than the Caribbean island of Saba? Why does New Guinea have many more species of birds than Bali?

|  |  |  |
| --- | --- | --- |
| ISLAND | DISTANCE TO MAINLAND | AREA (square miles) |
| Cuba | 90 miles (to Florida) | 44,218 |
| Saba | 500 miles (to Venezuela) | 5-10 |
|  |  |  |
| New Guinea | 100 miles (to Australia) | 311,737 |
| Bali | 700 miles (to mainland) | 2,147 |

2. The Society Islands (Tahiti, Moorea, Bora Bora, etc.) have about the same area as the Loiuisiade Archipelago off the tip of New Guinea, yet the latter have several times the number of bird species. Why?

|  |  |
| --- | --- |
| Society Islands | 90 miles to mainland |
| Louisiade Archipelago | 600 miles to Australia |

3. The volcanic island of Krakatau exploded on August 27, 1883 totally destroying the flora and fauna of the island. Biological surveys showed that 14 species of birds had repopulated the island by 1908, 60 by 1920, and 64 by 1933. During the fifty years of the censuses, 71 birds actually became established, but 7 of those went extinct again.   
EXPLAIN WHY?

Explain what kind of succession is exemplified?