Name Period Date

Unit 5 | Handout _____

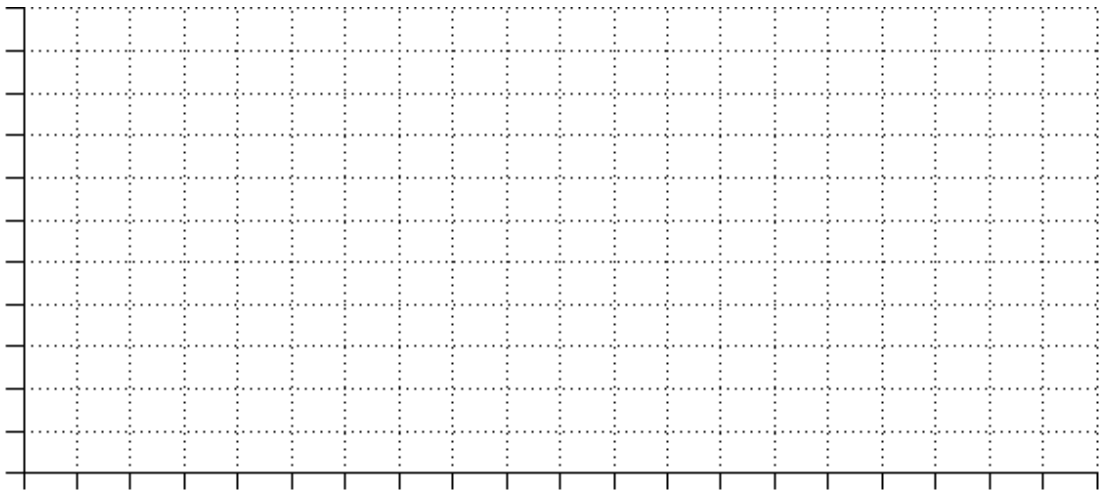
Data in Stride

Purpose: To see how scientists infer information about animals from their footprints.

Instructions: In this activity you will be measuring leg length and finding its relationship to the stride an animal takes when walking or running. To do this you will have to setup a "course" in which you are able to take measurements about the distance of your stride and the stride of your group members. You will record this information in the data table below and then graph it to see the relationship.

Setup: Measure 10m on the floor. Mark the beginning and the end with an object. Each member will measure the length of their leg (hip to ankle) and record that under the leg length. Then, each member will walk the 10m distance and estimate how many strides they took. A stride is the distance between two of the same footprints (ex: right foot to right foot). To calculate stride length: 10m ÷ (0.5 x steps taken).

Group Member	Leg Length (y)	Steps Taken	Stride Length (x)



Analysis of Data

Question 1 Which group member had the longest stride length?

What was their height relative to the other group members?

Question 2 Which group member had the shortest stride length?

What was their height relative to the other group members?

Question 3 What is the connection between stride length and height?

Question 4 Which group member had the greatest amount of steps?

What was their height relative to the other group members?

Question 5 Which group member had the least amount of steps?

What was their height relative to the other group members?

Question 6 What is the connection between number of steps and height?