**Real Life Scenario:**

Being a detective is not easy work. Sometimes you find yourself in some very unpleasant conditions and circumstances. It is a very important job though. A detective can be the key to bringing criminals to justice. In this unit, you will be playing the role of a detective. Your first case is a pretty tough one to handle, a murder. The only clue at the scene is a 50 centimeter long footprint left by the perpetrator. Your job is to help narrow the suspect list by determining his/her height.

**Task #1**

In order to establish a baseline of data comparing height and foot length, you will collect data about the height and foot length of your classmates. You will then create a scatter plot of data and determine a line of best fit.   
• Pair up with a learning partner   
• Take turns measuring each other’s height using a measuring tape and foot length using a yardstick. Measure both in centimeters.  
• Record your data in the data table that was given to you  
• Collect data from the rest of your classmates and record in the data table  
• Plot data as a scatter plot in the graph template  
• Determine the line of best fit for the data  
• Write a paragraph assessing the accuracy of your line of best fit based on its closeness to the data points