Human Biological Sciences 3A

Caffeine and FVC Investigation

Introduction

Caffeine is a commonly consumed drug. It has a number of effects on the body. This investigation will look at the effect of caffeine on Forced Vital Capacity (FVC) of the lung.

Requirements.

You will be expected to plan, carry out and write up a scientific report on this topic. You may work in groups of 4. Each student will hand in their own final write up. The final report you hand in must contain all the **steps** required for scientific investigation. All variables must be stated. All sample groups must be described. Any methods used to reduce error must also be stated. A raw data table and suitable graph of results must also be included. An introductory paragraph should be given explaining what FVC is and how and how and why it is sometimes measured.

There will be a validation on the report after the investigation’s completion.

Time

You will be given one period in class to plan the investigation. You will be given two periods in class to carry out and collect results for the investigation. You will be given one week to complete the write up of the investigation in your own time.

Equipment

You will be given the following equipment.

Equipment=2 cans of diet coke and two cans of decaffeinated diet coke. A spiromenter. The teacher will show you how to measure FVC with the spirometer.

Due date of report=

Value of write up=15%

Value of validation=5%