Question to investigate: Does your heart rate change when you exercise?

Prediction: I predict that when you exercise your heart rate will increase because your heart needs to pump blood, containing oxygen, for your muscles to work properly. I also predict that the more effort you put in the higher your heart rate will be.

I could change (variables): Our variables are: how much time you have to complete each exercise, how much time you have to rest in-between each exercise, the clothes you are wearing, what we did before the experiment, the exercise we completed and who is completing the exercise.

The variable we will change (independent variable) is: Our independent variable will be what exercise we complete. We will complete the following: *list what you did*

The variable we will measure (dependent variable) is: We will measure our heart rate (pulse). First, we will measure our resting heart rate. Then, we will complete our exercise. Finally, we will measure our heart rate again. We will measure our heart rate for 30 seconds and then multiply it by 2. We will then repeat this for different exercises.

The variables we will keep the same are: The variables we will keep the same are: how much time you have to complete each exercise, how much time you have to rest in-between each exercise, the clothes you are wearing, what we do before the experiment and who is completing the exercise.

The equipment I will use is: The equipment we will use is: a stop-watch, exercise equipment, pen and a piece of paper and participants.

Method:

First, second, next, finally,

Results: Our results show that the question is true. Our heart rate does increase when you do exercise, for example Toby’s resting heart was 78 BPM. After he had completed 30 seconds of star jumps his heart rate had increased to 120 BPM. Our heart rate is getting quicker because your muscles need oxygen which is contained in the bloodstream. The more effort you put in the harder your muscles are working therefore the more blood is required (so your heart will pump faster).