Name: Zein Class: 9-S

Overall mark

Heart Rate

3. Are there hazards with the experiment and how will you minimize them?

|  |  |  |  |
| --- | --- | --- | --- |
| What is the hazard? |  | How could it be  dangerous? | How will you reduce the risk? |
|  |  |  |  |
| Injuring yourself |  | You can pull a muscle | Warming up before exercise |
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**Section 2 - Results**

4. Record your results in a table.

|  |  |  |
| --- | --- | --- |
| **Activity** | **BPM** | **Friend’s BPM** |
|  |  |  |
| **Rest Rate**    **1 Minute walking**  **1 Minute Star Jumps** | **69 BPM**  **83 BPM**  **98 BPM** | **71**  **86**  **97** |
| **1 Minute Running On Spot**  **1 Minute Walking** | **124 BPM**  **86 BPM** | **116**  **83** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Question: What exercise will make your heart beat the fastest (see ideas sheet)

Your prediction: I think the heart rate will increase the most during the running

**Section 1 - Planning**

1. What will be the independent variable? (What will you change?)

* The exercise that we will be doing

What will be the dependent variable? (What will you measure?)

* My heart rate

What are the control variables?

(What will you keep the same to make it a fair test?)

* The time that we do for each exercise.
* The amount of rest in between the exercises

2. Describe how you will carry out the experiment.

(Name the key equipment you will use and talk about how you will measure your results)

1. Collect apparatus
2. Set the timer to 1 minute an 2 seconds because it will take 2 seconds to get into position
3. Do the exercise (unless its rest)
4. Repeat step 2-3

**Section 3- Conclusions**

6. Can you compare………………………………………...?

Our heart rate was very similar. The rest rate was 69 to 71 bpm. Our heart rate after walking as 83 to 86 bpm. Our heart rate after star jumps was 98 to 97 bpm. Our heart rate after running was 124 to 116 bpm.. We kept the amount of time in between the rest the same.

7. Can you explain your results?

Our heart rate increased due to the more effort we put in. This indicates that running requires the most effort because that’s when we had the greatest heart rate

8. How could the experiment be improved to get better or more reliable results?

We could try and run along a stretch in order to get a more accurate measurement for running as well as do a warmup before the investigation

5. Draw a graph of your results.

Remember to label your axes and include the correct units.