**MARKING KEY**

***RESULTS & DISCUSSION***

1. Fill in your results in the table below [4 marks]

- All completed (1)

- Averages for all determined correctly (2)

- HR is for 1 min (1)

2.Graph your results on the separate graph paper [6 marks]

- title (1)

- correct graph BAR (1)

- axes labelled with units (1)

- scale in equal intervals (1)

- Pencil and ruler (1)

- data plotted correctly (1)

3. Formulate a hypothesis for your investigation. [2 marks]

- If…..IV (1)

- then…..DV (1)

4. What was the independent variable and dependent variable of this investigation? [2 marks]

INDEPENDENT: type of exercise (1)

DEPENDENT: blood pressure and heart rate (1)

5. State **three** variables that have been controlled for the investigation to be fair. [3 marks]

Any 3 suitable variables (1 mark each)

6. For the variables you suggested, state how you controlled each one. [3 marks]

Any suitable means to match the suggested variables (1 mark each)

7. What was the purpose of taking the resting heart rate at the start of the experiment? [2 marks]

-To provide a baseline (1)

- allows for comparison (1)

- see if there is any effect by the IV (1)

*Any 2 points for 1 mark each*

8. Using whole sentences summarise what happened in your results. Describe any trends seen in the data. [3 marks]  
- state which exercise increased BP and HR the most (1)

- second highest exercise (1)

- lowest rise in BP and HR exercise (1)

9. Explain how you achieved the results you did using your knowledge of the respiratory system, gas exchange and the body’s need for nutrients. You may include diagrams to help with your explanations. [5 marks]

* Highly detailed link between results and science with accurate diagram (5)
* Highly detailed link between results and science BUT no diagram / Detailed link between results and science with diagram BUT minor errors (4)
* Detailed link between results and science BUT no diagram (3)
* Link between results and science attempt at a diagram but errors (1)
* Attempt to answer but errors (1)
* No attempt (0)

***CONCLUSION***

10. What do the results tell you about your original aim or hypothesis? Which results specifically show this? [2 marks]

- States support/refute of hypothesis (1)

- States results that support (1)

11. Is the data you collected supported by the research you attained in your literature review? Explain in detail. [4 marks]

* + Excellent A grade presentation = 4 marks
  + Detailed B grade = 3 marks
  + Adequate C grade = 2 marks
  + Limited D grade = 1 mark

***Evaluation***

12. What problems or difficulties did you have and how might you solve these? [2 marks]

- states problem (1)

- accurate way to solve (1)

13. How could you improve your investigation to ensure it were more reliable if you were to do it again? [2 marks]

* States improvement and how to do it (2)
* States an improvement (1)