Caffeine and Pulse 2012 Investigation marking key

Student name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| Aspect | What is needed | Possible Score | Student mark |
| Introduction | Statement of what pulse rate represents.  Uses of pulse rate. | 2 |  |
| Hypothesis | Both independent and dependent variable included in statement. | 1 |  |
| Independent variable stated | Caffeinated drink | 1 |  |
| Dependent variable | Pulse rate | 1 |  |
| Controlled variable | Volume of drink.  Type of drink.  Any other caffeine intake avoided.  Other stimulants avoided. Person etc | 2  Any four valid points with 0.5 marks for each valid response. |  |
| Test group stated | Those drinking the caffeinated drink | 1 |  |
| Control group stated | Those drinking the decaffeinated diet coke | 1 |  |
| Investigation done blind | This must be stated as such in the report  1  Term placebo used  1 | 2 |  |
| Results  Raw data table | Lined=1  All column/row headings stated=1  Units of measure=1  Average calculated=1 | 4 |  |
| Graph of results | Only averages graphed=1  Line graph Or appropriate Bar graph=1  Heading=1  Axis both labelled=1  Units of measure given=1  Correctly drawn=1  Presentation=1 | 7 |  |
| conclusion | According to the results the hypothesis was shown to be... | 1 |  |
| Discussion/review | At least one problem or source of error stated(1 mark)  At least one recommendation on how to do the experiment better in the future stated(1 mark) | 2 |  |
| Total |  | 25 |  |