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| **GOOD COUNSEL COLLEGE** | |  | GCC Colour Logo.JPG |
| **HEALTH & PHYS. EDUCATION DEPARTMENT** | |
| STUDENT NAME:  James Macgillivray |  |
| TEACHER: WORB |  |

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| **ASSESSMENT CONDITIONS** | |  | **Health & Physical Education** |
| **Date Rec’d:** |  |  |
| **Draft Due:** |  |  |
| **Date Due:** |  |  |

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| Assessment Instructions:   1. Task sheet must be attached to front of final copy. 2. 6 Weeks of In-Class and External time | | | | | |  | **Year 9 - Term 3, 2020**  **UNIT:**  **PT Yourself**  **ASSESSMENT TECHNIQUE:**  **Research**  **ASSESSMENT CONDITIONS:**   * **Performance Assessment and Report (500 – 600 words)**   **CRITERIA ASSESSED (summative):**   * **Investigating** |
|  | | | | | |  |
| **SUMMARY OF RESULTS** | | | | | |
| **CRITERIA ASSESSED** | **STANDARD** | | | | |
| **A** | **B** | **C** | **D** | **E** |
|  | | | | | |
| Investigating |  |  |  |  |  |
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| *COMMON CURRICULUM ELEMENTS* | | | | | |
| * Recalling/Remembering * Analysing, assess and conclude * Using correct spelling, punctuation, grammar * Using vocabulary appropriate to context * Justifying, judging and evaluating * Structuring/organising extended written text * Summarizing/condensing written text * Comparing, contrasting * Searching and locating items/information | | | | | |

**Criteria Sheet**

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| Criteria | **Standard A** | **Standard B** | **Standard C** | **Standard D** | **Standard E** |
| **The student work has the following characteristics:** | **The student work has the following characteristics:** | **The student work has the following characteristics:** | **The student work has the following characteristics:** | **The student work has the following characteristics:** |
| **Investigating** | purposeful application of decision-making and problem-solving skills when taking action to enhance their own and others’ health, safety and wellbeing | effective application of decision-making and problem-solving skills when taking action to enhance their own and others’ health, safety and wellbeing | application of decision-making and problem-solving skills when taking action to enhance their own and others’ health, safety and wellbeing | partial application of decision-making and problem-solving skills when taking action to enhance their own and others’ health, safety and wellbeing | isolated application of decision-making and problem-solving skills to enhance their own and others’ health, safety and wellbeing |
| **Performance and practical application** | purposeful application and transfer of movement concepts and strategies to new and challenging movement situations | effective application and transfer of movement concepts and strategies to new and challenging movement situations | application and transfer of movement concepts and strategies to new and challenging movement situations | partial application of movement concepts and strategies to new movement situations | isolated application of movement concepts and strategies to movement situations |
| purposeful application of criteria to make discerning judgments about and refinement of their own and others’ specialised movement skills and movement performances | effective application of criteria to make informed judgments about and refinement of their own and others’ specialised movement skills and movement performances | application of criteria to make judgments about and refinement of their own and others’ specialised movement skills and movement performances | partial application of criteria to make judgments about their own and others’ specialised movement skills and movement performances | isolated application of criteria to their own and others specialised movement skills and movement performances |
| purposeful design and application of solutions to movement challenges through collaboration. | effective design and application of solutions to movement challenges through collaboration. | design and application of solutions to movement challenges through collaboration. | partial design and application of solutions to movement challenges through collaboration. | isolated application of solutions to movement challenges through collaboration. |
| **OVERALL STANDARD** | | | | |  |

**context**

This term students will gain an understanding of Health Related Fitness Components and how through exercise, these components can be improved and adapted to higher levels of physical activity.

In this unit, students will propose and evaluate a workout that targets muscular endurance and cardiovascular fitness. They will monitor heart rates to determine changes during activities of varying intensities.

**TASK**

**Background**

Performing regular physical activity is an extremely important aspect of maintaining physical fitness. *Australia’s physical activity and sedentary behaviour guidelines for young people (13–17 years)* recommends that individuals aged 13–17 years perform at least 60 minutes of ‘moderate to vigorous’ intensity activity every day.

For the purpose of this assessment, ‘moderate to vigorous’ intensity level will be achieved when your heart rate is maintained at approximately 70 per cent of its maximum as calculated by the formula: 70 per cent of (220 – your age in years).

**Task instructions**

You will propose and evaluate a 10-minute workout designed to:

* raise and maintain your heart rate at 70 per cent of its estimated maximum
* develop muscular endurance and cardiovascular fitness.

**Complete the following steps:**

|  |  |
| --- | --- |
| MHR = | 220 – your age |
| = | 220 – 14 |
| = | 206 beats per minute (bpm) |

1. Determine your maximum heart rate (MHR).
2. Determine your target heart rate (70 per cent of your MHR).

|  |  |
| --- | --- |
| Target HR = | MHR x 70/100 |
| = | 206 x 70/100 |
| = | 144 beats per minute (bpm) |

**Proposal**

1. Propose your 10-minute workout. Your workout must include at least two different exercises that:

* raise and maintain your heart rate in a steady state at 70 per cent of its maximum
* incorporate muscular endurance and/or cardiovascular fitness
* require minimal equipment
* can be performed individually, during class time and within the area designated by your teacher.

**Use the template** provided to complete your workout proposal and clearly detail the following:

**Time**

Propose how long you will perform each type of exercise. Simply state the period of time for each exercise — do not worry about repetitions and sets. The total workout time needs to add up to 10 minutes.

**Exercises**

Provide instructions for performing each exercise. You must include one or more diagrams to accompany each exercise. [If you propose to perform the same exercise more than once during your workout, you do not need to repeat the instructions/diagram(s)].

**Intention of exercise**

Describe/explain how your chosen exercises allow you to achieve the target heart rate. (You may refer to prior experiences)

Describe/explain how each exercise engages cardiovascular fitness and/or muscular end

**how to set it out:**

**Intro**

Exercise is important for the growth and maintenance of the body’s muscles. It helps make them stronger and more resilient. This includes limbs, core and the heart as muscles that exercise improves, especially the heart. When planning a well-rounded exercise program, it is important to understand physical fitness and how different training can impact the body in different ways. Types of exercise can be split into different types such as aerobic and anerobic. Aerobic exercise are short and a burst of energy released in a short period of time, this could include jumping and throwing. In the experiment the volunteer will do short exercises to maintain a high heartrate.

Remember it’s a formal piece of writing so you need to avoid words like I, we, our, you, my, your for your entire assignment just like a science report.

You want to start by saying why is exercise important? What are the benefits?

Need to have a topic sentence here before you jump into telling me about fitness components. E.g. When planning a well-rounded exercise program, it is important to understand physical fitness and how different training can impact the body in different ways. This can be done through understanding a term call fitness components.

Fitness components can be broken down into **two sub sections called health related fitness components and skill related fitness components** (tell me what the difference between the two are) once you’ve done that you can then tell me why fitness components are important when it comes to preparing a workout. Hint: knowing the fitness components help you to know what area of the body you need to work on. So, when you design a program you design it to train specific fitness components that are relevant to what you need. (don’t copy this but it’s here for you to use to help formulate your own response 😊

After you have done this you then need another topic sentence here that talks about Muscular endurance and cardiovascular fitness being the most commonly used fitness components. Then you need to talk about what Muscular endurance and cardiovascular fitness are and provide some examples. (page 32 of your booklets can help)

Aim:

The aim of this assignment is to maintain HR at 70% of Max HR to observe how the workout targets muscular endurance and cardiovascular fitness and how these exercises effect our HR.

Method:

1. Attach heart rate monitor to volunteer
2. Record baseline heart rate
3. Instruct volunteer what exercise they must perform
4. Ask volunteer for heart rate every 30 seconds
5. Continue to instruct and ask for heart rate until the test has ended

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| --- | --- | --- | --- |
| **Proposed workout** | | | |
| **Name:** | | **Target HR:** \_\_\_\_\_\_\_\_\_ **bpm** | |
| **Time** (min) | **Exercise** | | **Intention of exercise** |
| 2 | Running back and forth 50 metres | | To increase initial heart rate to a higher BPM quickly  For each exercise you need to tell me what section of the body it’s targeting or what muscle group. Then you need to tell me what component of fitness it is utilizing here and finally why it was chosen to be placed at this particular spot in the circuit.  Avoid the use of personal words I, my, we, our, your. |
| 2 | Situps | | Maintain initial heartrate |
| 0.5 | Break | | To rest volunteer to prevent tiring |
| 2 | Burpee | | To increase heartrate after break |
| 0.5 | Break | | To rest volunteer to prevent tiring |
| 3 | Star jumps | | To finish with a simple heartrate exercise |

Results:

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Heart rate recordings (beats per minute)** | | | | | | | | | |
| 0.5 min | 1 min | 1.5 min | 2 min | 2.5 min | 3 min | 3.5 min | 4 min | 4.5 min | 5 min |
| 116 | 141 | 142 | 142 | 142 | 134 | 121 | 113 | 103 | 103 |
| 5.5 min | 6 min | 6.5 min | 7 min | 7.5 min | 8 min | 8.5 min | 9 min | 9.5 min | 10 min |
| 102 | 101 | 101 | 99 | 98 | 140 | 142 | 141 | 142 | 142 |

Figure 1: Heartrate of 10 minute Exercise

Discussion

Figure 1 shows that the heartrate of the volunteer was not consistent over the 10-minute period and fluctuated from the correct heartrate of 144bpm and below the target. The bpm of 144 was maintained for a total of 4 minutes and 30 seconds out of the ten minutes. The highest recorded heartrate was 142bpm and the lowest 98 not including the base heartrate. These results indicate that the experiment was unsuccessful because it only recorded the target heartrate 45% of the time. The results are accurate to the accuracy of the heartrate monitor used which is quite accurate. If done again the experiment would be more successful if less aerobic exercise was used as this tires the volunteer quickly. Sit-ups also caused issues in the exercise as after the run exercise the volunteer could not do sit-ups for the full duration causing the heartrate to drop.

So this section here is all about telling me why these things happened and using your data or information in your intro to justify it.

**What does your collected data tell you? Tell me what the highest and lowest recorded heart rates were. Did the circuit maintain the 144 target?**

**Evaluate the effectiveness of your proposed workout. Why it did or did not work. Use data to justify this. So here you are pretty much going through whether or not you think your workout was successful and using the data you record to help support what you say**.

What you want to say here is that the results obtained from the workout indicate that the workout was a success or not a success with an average heart rate of \_\_\_\_. This average heart rate was acquired using a combination of upper and lower body exercises that targeted the fitness components of muscular and cardiovascular endurance.

**What influenced the outcome? (again what caused you to get the results you did. Was it the types of exercises you used? Was it the length of time you performed each exercise?**

So what you want to say here is that your results obtained were successful or unsuccessful because you either had a good balance of muscular endurance and cardio based activities or you didn’t . Having a good balance between these two fitness components allows the body to maintain a steady heart rate so if you don’t have a good balance then the heart rate isn’t steady. The muscular endurance activities look to maintain a steady heart rate because the requirement for oxygen is low whereas the cardio activities look to raise the heart rate because the demand for oxygen is high causing the heart to beat faster.

**How could it be done again? What would you modify?**

* **So here this is where you tell me what changes you could make to improve the session. Maybe you could insert different types of exercises to target different components of fitness. Maybe you could insert more breaks to level the heart rate out? Maybe you could perform the exercises at a lower intensity.**
* **Whatever you decide to do you need to tell me why.**

**Conditions**

* Assessment undertaken independently
* Assessment completed during own time
* In class time will be provided
* Students are able to seek assistance from their teacher
* Response is multimodal

Suggested length is 400–600 words, or three minutes.

**Submit THE FOLLOWING:**

* Final copy of assign. with cover sheet (**name, subject, topic, teacher, due date)** including:
* All sections of the task sheet must be completed
* A copy of your research task must be typed in Calibri, size 12 and 1 ½ line spacing
* Research notes and draft also submitted – not stapled to report. This is to clearly show  
  evidence that the research process has been followed and as proof that the work you   
  submit is your own and not plagiarized.