

OCR Cambridge Technicals in Sport (Level 3)

Summer Work

Instructions:

This worksheet should be completed to the best of your ability via Microsoft Word. The completed worksheet should be ready to electronically submit via teams on day 1 of lessons.

Tips:

1. The quality of your work will be assessed as part of your enrolment process.
2. This work will also be used during one of your induction period activities, so try to make your answers as comprehensive as possible.
3. Please reference any information sources used via this link: <https://www.mybib.com/tools/harvard-referencing-generator>
4. Please remember to add your name and sign the worksheet as appropriate.
5. Please read AI policy below.

STUDENT NAME:

- 120 Credit complete Task 1, 2 & 4
- 180 Credit complete Tasks 1, 2, 3 & 4

Important Notice: Academic Integrity Policy

The use of AI tools (e.g., ChatGPT, Google Gemini, Copilot, etc.) to complete coursework, assignments, or assessments is strictly prohibited unless specifically allowed by your teacher or assignment instructions.

Using AI to produce written work or answers **without proper attribution** or permission is considered a **breach of academic integrity** and will result in:

- Failed submission
- Disciplinary action
- Resubmission of work in plus time.

What You Can Do:

- ✓ Use AI tools for **idea generation, proofreading, or research support** – but only if approved by your teacher
- ✓ Always **complete written tasks in your own words**
- ✓ **Ask for help** if you're unsure about assignment requirements

What You Must Not Do:

- ✗ Copy and paste AI-generated responses and submit them as your own
 - ✗ Use AI tools to complete entire tasks or essays
 - ✗ Misrepresent AI-written content as your original work
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Remember: Your learning, progress, and qualifications depend on your own effort and honesty. Misuse of AI undermines both your education and your future.

If you are unsure about what is allowed, **speak to your teacher before using AI tools** for any coursework.

Task 1

The table on the following page is based on the physiological data related to an elite cyclist & a fit individual during a cycle ergometer test.

The cycle ergometer test is a stationary bike test which progressively and incrementally increases cycling resistance until exhaustion or until the test ends at 40 minutes.

- Compare & analyse the data of the two cyclists in terms of key physiological responses to the ergometer test at the following points:
- At rest prior to the test
- 6-11 mins
- 26-31 mins
- 38-45 mins including cool down
- Finally, provide a summary of the performance of both athletes throughout the test
- Word count – 1000-1500 words
- Format – written report

*Lactate refers to total of lactic acid accumulation during the test

	Subject A – Elite level cyclist					Subject B – ‘fit’, healthy individual			
	Age: 17 (male) Height: 180cms Weight: 64 BMI: Body fat %: 6.7%					Age: 17 (male) Height: 179cms Weight: 68 BMI: Body fat %: 13.8%			
Resting heart rate	48bpm					68bpm			
Start of Cycle Ergometer Test									
TIME & SPEED	Heart Rate ave.	Breathing Rate ave.	Rate of Perceived Exertion (RPE)	*Lactate (mmols)		Heart Rate ave.	Breathing Rate ave.	Rate of Perceived Exertion (RPE)	*Lactate (mmols)
0-5mins 10mph	64	18	8	1.6		88	23	10	2.0
6 – 8 12mph	71	21	9	1.7		110	33	12	2.2
9-11 14mph	83	28	10	2.0		130	38	14	2.4
12-14 16mph	106	33	11	2.1		158	51	15	2.7
15-20 18mph	123	41	12	2.3		175	64	17	3.0
21-25 20mph	146	48	14	2.8		188	76	18	4.9
26-28 22mph	155	50	14	3.8		198	88	19	5.5
29-31 24mph	167	51	14	5.3		Subject B reached exhaust at 27.52mins			
32-34 26mph	172	53	15	6.6		COOL DOWN from 28-33 mins @ 10mph. See scores below			
35-37 28mph	177	58	16	8.4					
38-40 30mph	183	62	16	9.6					
	COOL DOWN					COOL DOWN			
40-45m 10mph	78	23	7	3.8		110	40	9	5.5

Task 2 – Current Issues in Sport

Form an **opinion** and **debate** how **two different sports** are impacted by **climate change at elite and recreational level**. In your answer, consider both **environmental** and **socio-economic** factors affecting each sport. Additionally, **suggest** potential **adaptations** that sports organizations could implement to **mitigate** these impacts to make it **more sustainable**.

Structural support for your essay:

Introduction:

- Introduce the reader to your work.
- Introduce the topic issue
- Define what climate change is.

Debating paragraphs:

- Research 2 sports which are majorly affected by climate change.
- Include statistics and figures that show the effect of this issue
- Look into areas as to how the sports are planning to combat these issues
- Once you've researched these initiatives debate as to whether they are reducing the impact of climate change.

Summary opinion:

- Form an opinion in your final paragraph as to how you think sports will continue to be affected by climate change.
- Afterwards suggest ways in which the sports can effectively mitigate the impact of their sport to climate change

Use these articles to support and allow you to form an opinion:

- [F1: Can it go green? | BBC News](#)
- [FIFA Announces 2030 And 2034 World Cup Plans Amongst Climate Concerns](#)
- <https://www.youtube.com/watch?v=ndfGkheP7H4> – PSG acknowledgment of unnecessary private jet
- <https://www.youtube.com/watch?v=DOYBhoFU3vg> – Can surfing become sustainable?
- [Sports Going Green: 3 Forces Behind Sustainability Trend And 6 Areas Of Improvement](#)

Task Structure:

- Essay format
- Word count - 1500 – 2000 words
- Introduction identifying purpose of the task (approximately 100 words)
- Please comment on the carbon footprint of your selected sports.
- Debate – for and against, forming your own opinion at the end to summarise.

Task 3 – Understanding Fitness Components, FITT Principles, and Training Adaptations

Introduction

Task Introduction:

In this worksheet, you will explore the **key elements of fitness training**, including:

- The **components of fitness**
- The **FITT principles**
- **Training adaptations**

You will describe what each of these are, how they apply to sport, and how they help improve performance.

Criteria:

- Accurately define and describe all key terms
- Provide relevant training and sporting examples
- Clearly explain the effects on performance

Section 1: Fitness Components

1. What are the components of fitness?

(Write a definition and list both health-related and skill-related components.)

2. How do the components of fitness affect sporting performance?

3. Give an example of how each fitness component can be improved through training.

Fitness Component	How it can be trained/improved	Sporting Example
Cardiovascular Endurance		
Muscular Strength		
Flexibility		
Agility		
Speed		
Balance		

Section 2: FITT Principle

1. What does FITT stand for, and what is it used for in fitness training?

2. Define and describe each element of FITT. Provide a training example for each.

FITT Principle	Definition	Training Example
Frequency		
Intensity		
Time		
Type		

Section 3: Training Adaptations

1. What are training adaptations?

2. How are training adaptations achieved?

3. How do these adaptations help performance?

4. Give an example of a specific training adaptation and how it benefits an athlete.

Signature:

Date:

Thank you for completing your Summer Work.

Please remember to bring a saved electronic copy!