

Criterion A – Knowledge & Understanding

To achieve well in this criterion, you are expected to use the **correct** statistical display to represent the data in question, ensure all calculations are correct and are **appropriate** to the situation. As well, you are expected to draw conclusions showing **insight** from each of your statistical representations.

Levels	Descriptor	Indicators
0	The student does not reach a standard described by any of the descriptors given below.	<ul style="list-style-type: none"> Work is not handed in
1 - 2	The student demonstrates minimal mathematical knowledge and attempts to use different forms to represent mathematical ideas.	<ul style="list-style-type: none"> I have attempted to present data in a statistical display. I have tried to use more than one type representation (diagrams, tables, calculations, etc) throughout my work.
3 – 4	The student demonstrates partial knowledge and understanding of the subject material. The student uses a limited range of forms to represent mathematical ideas.	<ul style="list-style-type: none"> I have presented some of the data using a correct statistical display. I have done some simple calculations correctly. I have used a limited amount of representations in my work.
5 – 6	The student demonstrates sufficient knowledge and understanding of the subject material to make deductions . The student uses a variety of forms to represent mathematical ideas.	<ul style="list-style-type: none"> I have presented the data using appropriate statistical displays most of the time, although here may be some errors. I have done simple calculations correctly and attempt more complicated calculations. I have used a variety of representations in my work. I have drawn superficial conclusions in response to most questions based on my displays or analysis.
7 - 8	The student demonstrates a broad knowledge and a good understanding of the subject material, and makes deductions with some insight . The student moves between different forms of representation in most situations .	<ul style="list-style-type: none"> I have presented the data using appropriate statistical displays throughout this task. I have done simple and complicated calculations correctly. I have used a variety of representations in my work. I have drawn conclusions that are supported by my work to most questions that show a deeper understanding of the data.
9-10	The student demonstrates a thorough knowledge and a comprehensive understanding of the subject material and is able to make deductions with insight even in unfamiliar situations . The student moves confidently between different forms of representation.	<ul style="list-style-type: none"> I have presented the data using the most appropriate statistical displays throughout this task. I have used displays and calculations to draw conclusions that show a thorough understanding of the data. I have used data that is not provided to fully consider Question 5 and to reach a meaningful conclusion.
	Student's Comment:	
	Teacher's Comment:	

Criterion C – Communication

To achieve well in this criterion, you are expected to present your work **clearly** and use **appropriate** mathematical notation and terminology throughout this task. Diagrams must be **fully labeled** with appropriate captions given. Technology has been used **resourcefully** to present the information in your work.

Level	Descriptor	Indications
0	The student does not reach a standard described by any of the descriptors given below.	<ul style="list-style-type: none"> I have not met any of the descriptors below.
1 – 2	The student recognizes and uses basic mathematical symbols and language. An attempt is made to verbalize when investigating problems set in familiar contexts. The student presents some mathematical information clearly.	<ul style="list-style-type: none"> I have labeled some of my diagrams or tables correctly (title, scale, variable). I have attempted to explain my reasoning or conclusions using basic mathematical language.
3 – 4	The student recognizes and uses a range of mathematical symbols and language. The lines of reasoning are verbalized and the solutions to problems are explained . Mathematical information is presented clearly and logically .	<ul style="list-style-type: none"> I have correctly labeled my diagrams and tables. I have shown my calculations clearly. I have explained my reasoning or conclusions appropriately, using proper mathematical language.
5 – 6	The student recognizes and uses a wide range of mathematical symbols and language. The student verbalizes effectively and explains solutions to problems clearly . The student chooses and uses the most appropriate technology to present mathematical information clearly and logically.	<ul style="list-style-type: none"> I have correctly labeled my diagrams and tables. I have shown my calculations clearly and provided relevant explanations. I have clearly explained my reasoning and conclusions, using proper mathematical language. I have used proper mathematical notation and terminology throughout this task. I have chosen to use the proper technology to present my information.
	Student's comment:	
	Teacher's comment:	

Criterion E – Personal Engagement

Level	Descriptor
0	The presentation and quality of my work is poor .
1	The presentation and quality of my work is good .
2	The presentation and quality of my work is excellent .

Criterion D: Reflection and Evaluation

To achieve well in this criterion, you must consider each of the following **three** aspects in the context of the Olympics. Please note that we will not address **reliability** of findings in this task.

1. You must clearly explain why you selected the statistical representation(s) that you used to investigate each question.
2. You must consider (but not necessarily use) other ways to investigate one or more questions.
3. You must thoroughly address the **significance** of your findings. This means to describe any **implications** of your results in terms of past and future Olympic events. This could be achieved in a well thought out paragraph or two at the end of the task.

Levels	Descriptor	Indications
0	The student does not reach a standard described by any of the descriptors given below.	<ul style="list-style-type: none"> I have not met any of the descriptors below.
1 - 2	The student attempts to justify the method used and to evaluate the reliability of findings.	<ul style="list-style-type: none"> I have attempted to explain why I chose to use the statistical representations or calculations in my work.
3 - 4	The student justifies the method and the majority of processes used. The student evaluates the reliability of findings with some success.	<ul style="list-style-type: none"> I have explained why I chose each statistical representation. I have justified my use of mean, median, mode, standard deviation, or IQR each time they are used.
5 - 6	The student presents a reasoned justification for the method and processes, and provides an evaluation of the significance and reliability of findings. The student suggests other approaches to solving the problem, where relevant.	<ul style="list-style-type: none"> I have given a reasoned explanation why I chose each statistical representation. I have suggested at least one other appropriate approach to investigating one of the questions. I have evaluated the significance of my findings, particularly with respect to the Beijing Olympics and the future of gold medal results.
7 - 8	The student presents a concise , reasoned justification for the method and processes and, where relevant, considers fully the range of approaches which could have been used, including the use of technology. The student makes a thorough evaluation of the significance and reliability of findings.	<ul style="list-style-type: none"> I have given a concise, reasoned explanation why I chose each statistical representation. I have suggested alternative approaches to more than one question. I have thoroughly evaluated the significance of my findings, particularly with respect to the Beijing Olympics and the future of gold medal results.
	Student's Comment:	
	Teacher's Comment:	