



ORANGE HIGH SCHOOL

ASSESSMENT TASK

Year 8 Science Semester 1, 2020

Assessment Task

The aim of this assessment is to plan and conduct a first-hand practical investigation on the effect of exercise on the body. You have to show the skills that you have learnt in class when conducting a practical investigation.

In class you would have gained some background knowledge of the body systems. You will create a proper scientific investigation to link a body system to exercise.

Outcomes Assessed

- identifies questions and problems that can be tested or researched and makes predictions based on scientific knowledge SC4-4WS
- collaboratively and individually produces a plan to investigate questions and problems SC4-5WS
- processes and analyses data from a first-hand investigation and secondary sources to identify trends, patterns and relationships, and draw conclusions SC4-7WS
- presents science ideas, findings and information to a given audience using appropriate scientific language, text types and representations SC4-9WS

Use the following scaffold to guide you through the steps required to complete a proper scientific investigation.

Student Name: _____

Teacher: _____

Title: Write a title that tells the reader what you are doing

Aim: What are you trying to achieve in this investigation? Try to include the 2 things that you are going to measure.

Literature Review (Optional, you don't have to do this). (Extension activity for 5 extra marks)

Research 5 key points that relate to the investigation that you are doing. List the source of your information.

Abstract: An abstract is a summary of the investigation that you have completed. This should be done after you have finished the investigation.

Hypothesis: Written as an IF THEN statement

If(variable you change and measure)

Then(the other variable that you measure)

Variables that are controlled:

Method: Write down the method (the steps) to complete investigation.

(Must be in steps, third person, how you measured the variables, how many times you repeated the experiment and past tense).

Results: Create a table and a graph to show your results in a visual format.

Discussion:

Describe the trends in your graph. What was the shape of the line of best fit?

How did you make sure that your measurements were accurate? Did you make a mistake or could you have done it better? Is there a machine that could measure the body function, if so describe the machine

How did you ensure that your practical was reliable? Did you or someone else repeat the practical and get similar results. Describe the similarities in the results.

Did you make any errors in your measurement or calculations? What things could you have done to make the investigation better?

Why is it important that people understand the results that you obtained?

Conclusion: How did the results relate to your hypothesis?

Year 8 Assessment Marking Rubric

	Extensive A	Thorough B	Sound C	Basic D	Elementary E	No attempt
Title			Indicates information about the investigation	Some relevance to the investigation	A title was attempted	
			3	2	1	0
Aim			2 parts of the investigation included in scientific terms	2 parts included but in general terms	Have written an aim	
			3	2	1	0
Literature review (optional for bonus marks)	Literature review completed and extensively examine the investigation	Literature review has a thorough understanding of the investigation	Written in general terms and related to the topic	A brief description of something related to the topic	An attempt at summarising the information is made	
	5	4	3	2	1	0
Abstract (optional for bonus marks)	Abstract uses the information gathered to make a summary of their investigation	Abstract has summarised some of the investigation	Restated what they found out	Attempts to write about their experiment	Write a simple statement about the investigation but not related to their results	
	5	4	3	2	1	0
Hypothesis			is an IF... then statement, links IV and DV using some scientific language	links IV and DV using some scientific language	Some errors may be present, IV or DV is mentioned	
			3	2	1	0
Method	Method contains all five aspects below: Third person Past tense Includes repetition Logically sequenced steps scientific language	Method contains at least four of the aspects; no tense errors or use of "I, we"	Method contains at least three of the aspects one or two tense errors or use of "I, we"	Method contains at least two of the aspects	Method is attempted, many errors, at least one of the five aspects is present.	
	5	4	3	2	1	0

Results	Both table and graph included. Both are completed extensively with few errors	Both table and graph included. Some mistakes with labels, graph skills	Both table and graph included but there are many mistakes in both	Only a table or a graph is completed with few mistakes	Table or a graph is included with mistakes	
	10 -9	8-7	6-5	4-3	2-1	0
Discussion	Each section is discussed extensively and related to the investigation conducted	Each section is completed but some areas are lacking in detail about the investigation	Each section is completed but there are many areas that are missing or not related to the question	An attempt at some of the sections and the information is related to the topic investigated	An attempt at answering questions is done with some responses related to the topic	
	10 -9	8-7	6-5	4-3	2-1	0
Conclusion	Conclusion clearly shows there investigation reached or didn't the aim of the investigation	Conclusion repeats the aim of the investigation with some additional evidence	Conclusion repeats the aim of the experiment	An attempt to summarise the investigation in general terms	Some attempt to make a conclusive statement	
	5	4	3	2	1	0

Total mark

Feedback from teacher
