



Task 1: Zoo – Vertebrate Classification Research Task

Due Date: Term 2, Week 2, Thursday 8th May at 3:00 pm

Task Distributed: 5th March 2025

Unit: Classification

Task Type: Research assignment

Task Weighting: 20%

Outcomes: SC4-14LW, SC4-7WS, SC4-9WS

Task Description

PART 1 – PRE-EXCURSION PRIOR RESEARCH - Complete the following checklist **BEFORE** the Taronga Zoo excursion

Pre-Excursion Questions

1. Define the main FEATURES of the following groups of organisms
 - a) A mammal
 - b) An amphibian
 - c) A fish
 - d) A reptile
 - e) A bird
2. Access the **Taronga Zoo Sydney Website** (<https://taronga.org.au/sydney-zoo/animals>). Scroll down and click on 'Our animals'. Using the list below and the range of categories (Reptiles/Amphibians, Marine animals, African animals, Australian animals, Asian Animals, Other animals), select and identify 1 bird, 1 reptile and 1 mammal found at the zoo. For each record the following information:
 - a) Scientific name
 - b) Scientific classification
 - c) Habitat (2-3 sentences)
 - d) Insert an image for each of your chosen organisms

PART 2 - AT THE TARONGA ZOO

Using your map find each of your 3 organisms. Record the information provided by the zoo on the plaques at the exhibit. Carefully observe your organisms and record three detailed structural or behavioural observations for each.


PART 3 - AFTER THE EXCURSION

1. Use the information you collected prior to the zoo and at the zoo to create a word-processed report that contains a summary of information on each of your three animals.
2. Assume one of your animals has now been placed on the endangered animal list. Design and create a new

enclosure for Taronga Zoo to house and breed your endangered animal. You can present this as a poster, pamphlet, video or PowerPoint to present to Taronga Zoo.

You must include:

- a) A visual representation (plan or picture) of your enclosure
- b) Appropriate living conditions (For example, space, temperature, light, food, etc.)
- c) Public viewing considerations
- d) Paragraph/s to explain why you have included these features in your enclosure.

Checklist – Have you?	Completed 
Answered pre-excursion questions	
Used science language, correct punctuation, sentences and paragraphs	
Picked a mammal, bird and reptile from the Zoo website	
Recorded information on each of your animals	
Included an image of each animal with your research	
Printed a map of the Zoo	
Circled on your map where your three animals are found	
Saved your pre-excursion work so you can access it after the excursion	
Printed your work to take it with you	

NESA Glossary of Key Words

Understand the verb associated with the task. The verb will provide an understanding of the detail needed to successfully answer the question.

- **Classify** Arrange or include in classes/categories
- **Describe** Provide characteristics and features
- **Explain** Relate cause and effect; make the relationships between things evident; provide why and/or how
- **Justify** Support an argument or conclusion
- **Propose** Put forward (for example a point of view, idea, argument, suggestion) for consideration or action

Check the NESA Glossary of Key Words for further guidance <https://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/hsc/hsc-student-guide/glossary-keywords>

Details of Submission

- Students are to submit their research task as a hard copy to their Science Teacher on the due date AND upload the task onto the Google Classroom for digital archiving. If they have constructed a physical model or a poster as part of their report, they should include photographs within their digital copy.
- Students should use headings and/or sub-headings in their tasks to help organise their research and ensure they address the necessary sections required.
- Late submissions will lose marks at the rate of 10% per day overdue to a maximum of 50% loss. All students MUST submit their assignments, regardless of how late.
- A marking criterion is attached to the end of this document detailing how marks will be allocated. In order to achieve top marks, please be sure to refer to the marking criteria prior to starting, during and again before submitting your assessment task.

Teacher Feedback and Student Self-Reflection

- The task will typically be returned to students within 14 days of the due date.
- At this time feedback including information on how to improve will be provided through mechanisms such as marking criteria, and/or written comments.
- Students can clarify or seek further feedback by speaker with their teacher or the assessment marker.
- You will also receive feedback on your literacy performance based on the criteria in the school's literacy marking rubric. The marks achieved for literacy will account for between 10% – 20% of the maximum task value.

Upon return of the task, students will also be expected to complete a self-reflection.

At the time students receive their assessment mark and teacher feedback, students will be required to complete a self-reflection worksheet. Self-reflection is an important part of the learning process as it provides an opportunity to reflect on the strength of their performance, as well as areas that have been identified requiring development in future tasks.

How does this link to my learning?

- Classification is based on observation. Students will apply their knowledge of classification and their observation skills to classify three animals that they observe at Taronga Zoo. Furthermore, students will communicate their ideas and knowledge by creatively designing an enclosure that improves on the existing enclosure at Taronga Zoo.
- Students will strengthen skills in the areas of making scientific observations, collection and processing of first hand information, research, and presentation of findings.
- This task will be used to determine the school report component describing level of success related to the NSW Education Standards Authority (NESA) 7-10 Science syllabus outcome: "presents science ideas, findings and information to a given audience using appropriate scientific language, text types and representations (SC4-9WS)"

Assessment Procedures

All students should be fully aware of the School Assessment Procedures for their year group. These were provided at the beginning of the school year and are available off the school website under the Learning Tab for each year group.

MARKING CRITERIA

NAME: _____

	Outcome	Component	Limited	Basic	Sound	High	Outstanding	Total
<p>PRE – EXCURSION RESEARCH</p> <p>SC4-14LW relates the structure and function of living things to their classification survival and reproduction</p> <p>SC4-7WS processes and analyses data from a first-hand investigation and secondary sources to identify trends, patterns and relationships, and draw conclusions</p>		Defines the features of a mammal	Not Included	Only one feature defined	TWO features defined	THREE OR MORE features defined		
			0	1	2	3		
		Defines the features of an amphibian	Not Included	Only one feature defined	TWO features defined	THREE OR MORE features defined		
			0	1	2	3		
		Defines the features of a fish	Not Included	Only one feature defined	TWO features defined	THREE OR MORE features defined		
			0	1	2	3		
		Defines the features of a reptile	Not Included	Only one feature defined	TWO features defined	THREE OR MORE features defined		
			0	1	2	3		
		Defines the features of a bird	Not Included	Only one feature defined	TWO features defined	THREE OR MORE features defined		
			0	1	2	3		
		Correctly identifies a bird, reptile and a mammal	Not Included	Only ONE correctly identified	TWO Correctly identified	All THREE correctly identified		
			0	1	2	3		
		Correctly identifies animal's scientific name	Not Included	Only ONE animal identified with their scientific name	TWO Correctly identified with their scientific name	All THREE identified with their scientific name		
			0	1	2	3		
		Correctly identified animal's scientific classification	Not included	Only ONE animal is classified	TWO animals correctly classified	All three animals correctly classified		
			0	1	2	3		
		Correctly identifies the habitat of each chosen animal	No habitat mentioned	Only ONE animal has information on their habitat	TWO animals have information on their habitat	All THREE have information on their habitat		
			0	2	4	6		
	Correctly inserts an image of each of the chosen animals	Not Included	Insert ONE image of a chosen animal	Inserts images of TWO animals	Inserts image of all THREE animals			
		0	1	2	3			

AT TARONGA ZOO	SC4-7WS processes and analyses data from a first-hand investigation and secondary sources to identify trends, patterns and relationships, and draw conclusions	Records information on chosen animals from plaques at the zoo	Not Included	Records information for only ONE animal chosen	Records information for TWO of their chosen animals	Records information for all THREE of their chosen animals		
			0	1	2	3		
	Makes observations of their chosen animals at the zoo	No Observations	Makes observations of only ONE animal at the zoo	Makes observations of TWO of their chosen animals at the zoo	Makes observations of all THREE of their chosen animals at the zoo			
		0	1	2	3			

	Outcome	Component	Limited	Basic	Sound	High	Outstanding	Total	
AFTE R THE ZOO	SC4-14LW relates the structure and function of living things to their classification survival and reproduction	Detailed report containing interesting facts on each of the chosen THREE animals	Not Included	Report contains information on only ONE of the chosen animals	Report contains information on TWO of the chosen animals	Report contains information on all THREE of your chosen animals.			
			0	1	2	3			
		Visual Representation of your enclosure	Not Included	Simplistic visual representation included	Detailed visual representation included	Detailed and creative visual representation included			
			0	1	2	3			
		SC4-9WS presents science ideas, findings and information to a given audience using appropriate scientific language, text types and representations	Enclose contains appropriate living conditions	Not Included	TWO appropriate living conditions included	THREE appropriate living conditions included	FOUR appropriate living conditions included		
				0	1	2	3		
		Public Viewing Considerations	Not Included	Simplistic public viewing access/area	Detailed public viewing access/area	Detailed and creative public viewing access/area			
			0	1	2	3			
		Explanation of enclosure inclusions	Not Included	Explanation of some of the enclosure features	Explanation of most of the enclosure features	Explanation of all of the enclosure features			
			0	1	2	3			
			Correctly submits assessment on time	Does not submit all components of their assessment on time.	Submits all components of their assessment on time.				
				0	1				
				LITERACY		/5			
				TOTAL		/60			

Literacy Rubric

LITERACY MARKING CRITERIA	Descriptors				
	0	0.25	0.5	0.75	1
Vocabulary Uses technical vocabulary to explain concepts and/or range of precise and appropriate words for effect	- Symbols or drawings	- Only simple and nontechnical words are used.	- Some precise and technical words are used.	- Sustained use of precise and technical words.	-Sustained, consistent and fluent use of precise and technical words.
Punctuation Use of correct and appropriate punctuation for effect and to aid in reading of the text	- No or minimal evidence of correct sentence punctuation (less than 25%)	- Limited evidence of correct sentence punctuation (at least 25%)	- Some correct sentence level punctuation (at least 50%).	- Mostly correct sentence level punctuation (80%) and <i>at least two</i> examples of other punctuation.	-Writing contains accurate use of all applicable punctuation.
Sentences Intentionally constructs a variety of sentences to match purpose and audience	- No evidence of sentences - Drawings, symbols, a list of words OR text fragments	- At least one sentence is used correctly.	- Some correct formation of sentences. (at least 50%)	- Most sentences (80%) are correct but are largely unsophisticated.	- All sentences are correct including sophisticated sentences.
Paragraphs Paragraphs are used to effectively structure information and partition events and ideas	- No correct use of paragraphing - may be a block of text or random breaks	- Ideas are separated, provides at least ONE correct break between ideas - Paragraphs may contain some unrelated ideas	- At least ONE paragraph is well structured and develops an idea	- All paragraphs are focused on one idea or a set of like ideas but may not be linked effectively.	- Paragraphing creates flow, connectivity and supports argument.
Text Structure Uses features of the appropriate text type	- No evidence of structural components of the appropriate text type	- Minimal evidence of the structural components of the appropriate text type.	- Some evidence of the structural components of the appropriate text type.	- Substantial evidence of the structural components of the appropriate text type.	- Coherent and controlled use of the appropriate structural components of the text type.