

ASSESSMENT TASK 1 : PRELIMINARY BIOLOGY

MANGROVE ECOSYSTEMS - FIELD STUDY REPORT

1. Complete all sheets from the field trip.

P2 - Applies the processes that are used to test and validate models, theories and laws of Science, with particular emphasis on first hand investigations in Biology.

20 marks

2. Research 2 animals and 2 plants that live in the mangrove ecosystems (include specific adaptations for this type of ecosystem). (4 pages, not including pictures)

P7 - Describes the range of organisms in terms of specialization for a habitat.

20 marks

3. Construct food chains and webs for the mangrove ecosystems and **discuss** possible relationships between organisms.

P8 - Analyses the interrelationships of organism within the ecosystem.

20 marks

4. Present an overall report of the field trip including

(a) A purpose and hypothesis.

5 marks

(b) Methods for estimating abundance and distribution for certain species.

5 marks

(c) Methods for testing abiotic characteristics
(equipment how it was used, what it is measured in)

5 marks

(d) Results for abundance, distribution and abiotic characteristics presented in tables and graphically.

5 marks

P11 - Identifies and implements improvements to investigation plans.

(e) Discussion of what factors affect the distribution and abundance of certain species within the mangrove ecosystem (using the information collected about abiotic features as well as your research). (constantly refer to info 1-2 pages)

P14 - Draws valid conclusions from gathered data and information

15 marks

(f) Outline the reliability and validity of the data collected during the field trip.

P12 - Discusses the validity and reliability of data gathered from first hand investigations and secondary sources.

5 marks

Marking Rubric for Field Trip - Killalea State Park

1.

OUTCOME					TOTAL
P2	5 Marks Basic completion of prac work	10 marks Tests theories using prac work	15 marks Basic validation of prac work	20 marks Advanced testing and validation using prac work	/20

2.

OUTCOME					TOTAL
P7	5 Marks Describes at least 1 animal and plant	10 marks Describes at least 1 animal and plant and related to mangrove ecosystems	15 marks Describes 2 animals and plants	20 marks Describes 2 animals and plants and relates to mangrove ecosystems	/20

3.

OUTCOME					TOTAL
P8	5 Marks Identifies relationships using 1 food and web chain	10 marks Identifies relationships using 2 food chains and webs	15 marks Describes some re'ships in the mangrove s	20 marks Analyses re'ships in the mangrove s	/20

4.(a),(b),(c),(d)

OUTCOME					TOTAL
P11	5 Marks Identifies a purpose and hypothesis	10 marks Describes and presents information of distribution and abundance	15 marks Describes and presents information on abiotic factors	20 marks Information presented in appropriate formats work.	/20

4.(e)

OUTCOME				TOTAL
P14	5 Marks Summarises results	10 marks Summaries results + some general knowledge of mangrove ecosystems	15 marks Draws valid conclusions using research and data gathered in the field	/15

4.(f)

OUTCOME						TOTAL
P12	1 Mark Basic completion of prac work.	2 marks Tests theories using prac work.	3 marks Basic validation of prac work.	4 marks Advanced testing and validation using prac work.	5 marks Discusses validity and reliability	