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**General Integrated Science Unit 1**

**Task 4: Body Systems and Reproduction**

**Assessment Type : Extended Response**

**Weighting : 7.5%**

**Time allowed for the task:**

* 1 week of school to research the topic and complete your ***notes*** at home
* 1 hour lesson to answer questions related to your research in class

**Australia’s Endemic Species:**

When Australia split from Gondwana it brought with it a unique set of plants and animals. Over time many ecosystems in Australia have seen major changes due mainly to the increasing number of humans present on the land. Despite this, some organisms have remained unchanged for millions of years. Other species have evolved so much that it is hard to tell who their ancestors were and, others have just become extinct. The reasons behind which organism survives is all down to variation. Your task is to investigate why some organisms evolve, others remain unchanged and some become extinct.

**Part A. Create a set of research notes on the following.**

You are going to research **three** organisms that show different evolutionary trends and then make a set of notes on the information you have researched.

1. Choose **one** organism from **each** group.
2. Research each organism to find out the following information:

* A description of the organism.
* Description of the organisms habitat, include location, climate, food etc.
* Describe the main things that the organism needs to survive.
* Explanation of how the organism reproduces.
* Description of the adaptations the organism has that enable it to survive in its habitat.

1. Research and then explain the circumstances that resulted in:

* the animal from **group A** becoming extinct.
* the organism from **group B** remaining unchanged for millions of years.
* the organism from **group C** evolving.

**Group A** – Diprotodon, Tasmanian Tiger (*Thylacine*), Giant Rat Kangaroo, Marsupial Lion (*Thylacoleo*)

**Group B** – Crocodile, Kangaroo, Mallee Fowl, velvet worm, Wollemia Pine

**Group C** – Platypus, Heat Resistant Coral, Vinegar fly, Thorny Devil (Moloch horridus), Salmon Gum.

**Part B. Research notes**

* These will be handed in prior to the assessment and will be marked on organisation, understanding of the concepts covered and coverage of the topic.

**Part C. In-class assessment will comprise of:**

* Specific questions based on the research notes you have made.

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| **Requirements for assessment** | **Due dates** |
| * Research notes | **Friday 4th May** |
| * In-class assessment | **Friday 4th May** |

**Validation Questions**

1. Explain whether humans had an impact for why your chosen organism from group A became extinct. Describe the impact that caused the organisms extinction. (5 marks)

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1. Describe one adaptation that has helped your chosen organism from group B survive unchanged for so long. (3 marks)

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1. Give one example of a change that your chosen organism from group C underwent that helped the species continue. Explain how it helped your organism survive. (4 marks)

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