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| **Instrument Number 4** | | | **Term 2 2022** | |
| **Student Name** |  | **Handout Date** (Week Beginning) | | 30/05/2022 |
| **Teacher Name** |  | **Interim Check Date** | | 6/06/2022 |
| **Unit Number/Name** | Earth Science and Ecology | **Rough Draft Date** | | 9/06/2022 |
| **Due Date** | | **16/06/2022** |

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| **Assessment Technique** | Assignment | | | |
| **Time/Length** | 3 Weeks | | | |
| **Assessment Conditions** | Summative | | | |
| **Seen/Unseen** | Seen | | | |
| Materials handed out prior to assessment? | No | Yes | **Conditions** |
| Research Materials |

|  |  |
| --- | --- |
| **Choose an item.** | **Grades** |
| Science Understanding |  |
| Science Inquiry |  |
| **Choose an item.** |  |

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| **Differentiation: If assessment conditions have been adjusted details are provided below** |
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| **Acknowledgement of assessment responsibility** |  |
| I understand the consequences of plagiarism/cheating and confirm this is my own work. | |
| **Student Signature:** | **Date:** ……………………………… |

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| B:\Common\_NEW MSHS LOGO\NEW LOGO - B&W\BW-Shield Only white outline.png | **Maroochydore State High School**  **Standards Matrix for Year** 9 **Science Ecology and Earth Science** |

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| --- | --- | --- | --- | --- | --- |
| Assessable Elements | A | B | C | D | E |
|  | | | | |
| Science Understanding |  | *Part C*  Comprehensively **explained** the effect of the introduced species on an Australian ecosystem: | *Part A and B*  **Listed** and **described** at least one Structural, one Behavioural, and one Functional adaptation | *Part A and B*  **Listed** and **described** Structural, Behavioural, or Functional adaptation. | **Explained** which of the terms (invasive, introduced and/or pest species) matches their species. |
| Science Understanding |  | Included a diagram of an Australian food web, correctly labelled and used it to correctly **explain** the influence of the introduced species. | **Explained** the 3 different types of adaptations. | **Explained** one of the 3 different types of adaptations. |
| Science Understanding |  | Research provided accurate information on when, where, why the species was introduced | Comprehensively **described** the animal using all the criteria outlined and included a **diagram/picture** of the animal. | **Described** the animal using some of the criteria outlined and included a **diagram/picture** of the animal. |
| Science Understanding |  | **Identified** where it is found, population size and control measures. | (Scientific name, appearance, size, habitat, food source, predators, reproduction, life span, unusual features) | (scientific name, appearance, size, habitat, food source, predators, reproduction, life span, unusual features) |
| Science Inquiry |  | Presented in correct and accurate scientific language and representations in a sophisticated format. | Presented information using scientific and everyday language in an appropriate format | Used everyday language and representations when communicating findings and ideas to audiences |  |

**Teacher feedback:**

**Introduction:**

Since European settlement many species have been introduced into Australia. These introduced species range from the large (eg camel) to the microscopic (eg myxoma virus). Many species were introduced for a specific purpose while others were introduced by accident. It is evident today that many of these introduced species have had a major impact on our native flora, fauna and environment.

**Task:**

To **present** a case study of one species introduced to Australia. Completing your case study involves 5 steps

* Choose a species to do your case study.
* Task A
* Task B
* Task C
* Presentation of the parts you have completed. Your presentation may be in the form of a Power Point (\*8 Slides), a poster (\*A2) or a movie (\*5 minutes). \**guideline only*

You are required to acknowledge sources used by including a bibliography in Harvard format.

1. **CHOOSING YOUR SPECIES**

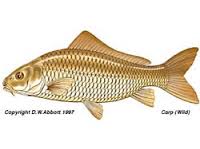
Choose **one** animal from the table below *(If you know of another introduced species not listed, consult with your teacher before researching it.)*.

Every person in the class must choose a different introduced species.

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| --- | --- | --- | --- | --- |
| **Mammals** | | **Fish** | **Birds** | **Other** |
| Red Fox  Dromedary (Camel)  Water Buffalo  Feral Goat  Feral Cat  Brumby | Feral Donkey  Feral Pig  Feral Deer  Black Rat  Brown Rat  Ferret  House mouse | Carp  Brown Trout  Rainbow Trout  Tilarpia  Mosquitofish | Common Mynah bird  Common Pigeon  Eurasian Blackbird  Eurasian Skylark  Eurasian Tree Sparrow  House Sparrow | Common House Gecko  Western honey bees  European Wasps  Black-Striped Mussel  Asian Mussel  European Shore Crab  Northern Pacific Sea star  Fire Ants  Cane Toad |

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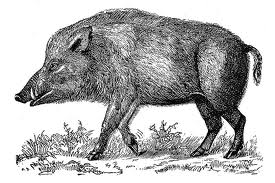
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1. **Task A –** This task provides a description of your chosen species.

* **Decide** which term/s (invasive, introduced and pest) matches your species and **explain why**.
* **State** the correct scientific name and scientific class of the species.
* **Describe** the appearance, size, habitat, food source, predators, reproductive characteristics, life span, and any additional and unusual features of your species. Include a clear picture
* *Record of all sources used in your Bibliography*

1. **Task B –** This task explains the specific adaptations of your species.

* **List** the animal’s adaptations that help make it successful in Australia.
* Give an example from your list ofeach type of adaptation. (The three types of adaptation are: **structural**, **behavioural**, and **physiological.)**
* Each of your three adaptations should be accompanied by a two or three sentence explanation of how that adaptation provides an advantage for the animal in Australia.
* *Record all sources used in your Bibliography*

1. **Task C -** This section describes the effect of the species within Australia

Present information on:

* When was the species introduced?
* Where was the species originally from?
* Where is the species found in Australia now (in your presentation include a map that shows where it is found)?
* Why was the species introduced into Australia?
* What is a reasonable estimate of the population of the species in Australia?
* What measures are currently being used to try to control the numbers of this species?
* Include a **diagram** of an **Australian** **food web** which the introduced species has become part of. Use this food web to answer the following question.
* Does your species have a positive or negative effect on the Australian environment? Provide evidence to support your opinion. The use of appropriate words to describe a food web (such as trophic level, competitor, consumer, producer, etc.) is an important part of your answer.
* *Record all sources used in your bibliography*