**Independent Research Marking Rubric**

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| --- | --- |
| **Description** | **Mark** |
| **An ecological description of the Great Western Woodlands** |  |
| **Max 2 marks from each category. Any 8 of:**  Location and Age:   * 16,000,000 hectares – 9 million of that is Woodland * Stretches from Ravensthorpe, up to north of Southern Cross and across to just east of Kalgoorlie. * Formed 2400-3700 million years ago   Soil:   * Formed originally from magma * Many greenstones (gold, nickel, copper, etc) make soil mineralised and richer * Many salt lakes   Climate:   * Temperate * At interzone between Australia’s moist, cooler south-west corner and it’s desert interior * In the ‘transitional rainfall zone’ – receives between 300-600mm of rain/year * In an arid zone   Flora:   * Trees less tall than those of forests * Open canopy that allows most sunlight to hit the ground * High biodiversity * Mixture of Woodland, Mallee, Grassland and Shrubland vegetation type * >20% of Australia’s flowering plant species (~3,314 species of flowering plant). This is due to having such a variety of soil/land type * Estimated that half of the flowering plants are endemic to South-West Australia   Fauna:   * ~49 species of mammal, 14 species of frog, 138 species of reptile and 215 species of bird * Mostly invertebrates | **1-8** |
| **Examples of species that live in the Great Western Woodland** |  |
| **½ mark per example, max 2 from each category:**   * Woma Python, Carpet python, western bearded dragon, bluetongue, Cockatoo’s, Falcon’s, Whipbird, Dingo, Chuditch, Wallaby, Greater Bilby, Bat, Dibbler, any other acceptable answer * Ecualyptus, Acacia’s, Salmon Gum’s, Dundas Blackbutt’s, Dundas Mahogany, etc | **1-2** |
| **A brief history of how humans have impacted the Great Western Woodland, including both pre-European history and modern history** |  |
| **Max 3 from each time:**  Pre-European History:   * Aboriginal occupation has been dated to at least 22,000 years/Ten distinct Aboriginal language groups whose lands lie within or include parts of the Great Western Woodlands * Burning off of land – lead to plants adapting to reproduce with fire (i.e Grasstree) * Specialised hunting practises – ensured sustainable consumption of animals * Digging of deep wells to access water   Modern History:   * The demand for wood for use in mining and water condensing put major strain on Woodland * By 1900 the timber around Kalgoorlie had been cut out. * Introduction of sheep, goats and cattle, with hard hooves, damaged the Mulga woodlands because the hooves broke through the soil surface resulting in extensive soil erosion during periods of heavy rainfall. * Name ‘Great Western Woodlands’ given in 2004 by researchers from ANU * A team of Ngadju people are putting new land management and conservation skills to practice * Currently used for tourism, with walking trails and lots of bird watching | **1-6** |
| **Describe the current threats to the Great Southern Woodland** |  |
| Any 3 of the following – 1 mark for threat, second mark for explanation.   * An increasing number of large, high intensity wildfires (1) 🡪 have resulted in woodland areas being burnt too frequently to allow proper ecological recovery (1) * Introduced pests (1) 🡪 weeds suffocate native plants and alter fire behaviour, while feral animals like donkeys, goats, camels, foxes and cats damage habitats and kill and maim native fauna (1) * Large-scale infrastructure developments such as roads, powerlines and barrier fences (1) 🡪 present a serious threat of extensive clearing and fragmentation of the Woodlands (1) * Lack of recognition (1) 🡪 means the wider WA community remains unaware of the incredible natural beauty and cultural richness of the area, holding back the development of sustainable industries such as carefully planned tourism (1). | **1-6** |
| **What is currently being done to conserve and manage the Great Western Woodland?** |  |
| **Any t**hree **of the following:**   * Biodiversity and Cultural Conservation Strategy 2010   + was released to provide a framework to manage the Great Western Woodlands and to ensure the long-term protection of its natural and cultural values.   + Written by a group representing the interests of Indigenous people, conservation, pastoralism, mining, tourism and local government * Goldfields-Esperance Development Commission 2016   + Published its ‘Economic Blueprint’ which stated acknowledged the significance of the Woodlands  Indigenous land managementRe-establishing Aboriginal land management practices such as fire managementTackling feral animals and weedsEstablishing tourism ventures and reviving traditional cultural practices | **1-3** |
| **How did the social, economic and cultural beliefs of the Industrial Age impact peoples’ use of the Great Western Woodland?** |  |
| **Any 4 of the following:**   * Little to no appreciation for sustainability/ignorance to * Emphasis moved to self rather than community/collective * Australia was valued primarily for its natural resources and how they could benefit the British Empire * Large demand for resources because of growing population * Increased emphasis on economic progression/development * Mining generates wealth * Capitalism * Maslow’s Hierarchy of Needs (alludes to idea of limited choice with limited wealth) * Little to no appreciation for Indigenous histories/customs * Materialism * Little to ethical considerations * ‘Nature’ not as appreciated as towns   **2 marks for:**   * Must link that usage of Great Western Woodlands was unsustainable (1) because new communities/development was more highly valued than sustainability/ethical usage/Indigenous land value (1) | **1-6** |
| **How could the Kalgoorlie citizens of the 1800’s have had both a healthy woodland and also enough wood to support their growing mining community?** |  |
| * 3 marks - Presents clear and logical argument that is supported by evidence. * 2 marks – Presents argument that is not well-supported by evidence. * 1 mark - Presents statements of ideas with some development of an argument. | **1-3** |
| **Bibliography** |  |
| * 2 marks -Includes at least 4 different references. Uses mostly appropriate sources of information * 1 mark - Includes less than 4 different references. Uses some appropriate sources of information | **1-2** |
| **Initial brainstorm and breaking down questions** |  |
| * 2 marks **-** Student attempts to fill in information for all questions. Student identifies two simple research questions based on each main question * 1 mark - Student attempts to fill in information for some questions. Student identifies at least one simple research question based on some main question | **1-2** |
| **TOTAL** | **38** |

**Group Project Marking Rubric**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **A** | | | **B** | | **C** | | **D** | | | |
|  | **4** | | **3.5** | **3** | **2.5** | **2** | **1.5** | **1** | **0.5** | |
| **An ecological description of the Great Western Woodlands** | Describes the Great Western Woodland, in detail, using appropriate scientific language. | | | Describes the Great Western Woodland using scientific language. | | Briefly describes the Great Western Woodland using some scientific language but lacks detail. | | Briefly describes, with some inaccuracies, the Great Western Woodland, using everyday language | | | |
|  | 4 |  | | 3 |  | 2 |  | 1 | |  | |
| **How humans have impacted the Woodland.** | Describes, in detail, the history of the area. | | | Describes the history of the area. | | Briefly describes the history of the area but lacks detail. | | Briefly describes, with some inaccuracies, the history of the area. | | | |
|  | 4 |  | | 3 |  | 2 |  | 1 | |  | |
| **Conservation of the Great Western Woodland** | Describes, in detail, the current conservation efforts using appropriate scientific language. | | | Describes the current conservation efforts using scientific language. | | Briefly describes the current conservation efforts using some scientific language but lacks detail. | | Briefly describes, with some inaccuracies, the current conservation efforts using everyday language | | | |
|  | 4 |  | | 3 |  | 2 |  | 1 | |  | |
| **Social, economic and cultural beliefs of the Industrial Age impact peoples’ use of the Great Western Woodland?** | Presents clear and logical arguments that are supported by evidence. | | | Presents arguments or statements that are not well-supported by evidence. | | Presents statements of ideas with some development of an argument. | | Presents statements of ideas with limited development of an argument. | | | |
|  | 4 |  | | 3 |  | 2 |  | 1 | |  | |
| **How have healthy woodland and growing mining community.** | Presents clear and logical arguments that are supported by evidence. | | | Presents arguments or statements that are not well-supported by evidence. | | Presents statements of ideas with some development of an argument. | | Presents statements of ideas with limited development of an argument. | | | |
|  | 4 |  | | 3 |  | 2 |  | 1 | |  | |
| **Contribution to group.** |  | | |  | |  | |  | | | |

**General Comments: /24**

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