|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1. B | 1. B | 1. A | 1. C | 1. B | 1. A |
| 1. C | 1. B | 1. B | 1. B | 1. D | 1. C |
| 1. B | 1. A | 1. D | 1. B | 1. B | 1. A |

**GEISC TASK 4 MARKING KEY**

**/35**

|  |  |
| --- | --- |
| **State one example of a physiological adaptation.**   * Any acceptable example | **1** |
| **Describe why species need to reproduce**   * To carry on the species/to pass on their genetic information | **1** |
| **Describe why it is important for a species to have variation between organisms.**   * Because the more varied a species is, the more likely it will be able to survive changes in the external environment. | **1** |
| **Suggest two reasons why Panda's are endangered, and explain why these reasons make them endangered**   * Any two of the following:   + No defensive traits   + High caloric requirements   + Low reproductive rate   + Poaching   + Deforestation/ lack of food   + Lack of shelter   + Any other acceptable answer * Must then link: these things make it more likely that the Panda's will die before reproducing or before their young are able to care for themselves, therefore the number of Pandas decreases. | **3** |
| **Based on your answer to Question 10, state two adaptations to improve the survivability of Panda's.**   * **Any two of:** * Produce more offspring * Develop better camouflage * Come tree-dwelling * Develop defensive traits * Eat a larger variety of food * Any other acceptable reason | **2** |
| **Explain why the males of a species may look physically different to the females of a species.**   * Must say ‘sexual selection’ * Explanation of sexual selection making males look different * E.g. Females prefer certain traits in the males, and therefore the males with those traits are more likely to reproduce and pass their traits on to the next generation, making the males have certain traits that the females do not. | **2** |
| **The process of adaptation takes many generations. If humans are changing the natural environment instead of nature, predict the impact that this will have on species survival.**   * It will lead to more species going extinct or becoming endangered * Because they are unable to adapt to the environmental changes quickly enough. | **2** |
| **State two disadvantages of sexual reproduction.**  **Any two of:**   * Requires a lot of energy * Takes a long time * Requires two partners | **2** |
| **Explain what would happen to the number of black peppered moths compared to the white moths over time**   * Over time, the number of black peppered moths would increase compared to the number of white peppered moths. * This is because the white peppered moths are easier for predators to see, and so they are more likely to be eaten compared to the black peppered moths. * Therefore, the black peppered moths will produce more offspring, which increases their abundance. | **3** |