

**Year 12 General Biology**

**Miss Cunningham**

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| **Task 6: Extended Response – Genetic Variation** | | | Weighting  10% |
| Marks Received | Marks Available | Percentage | |
|  | 10 |  | |

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Time Allowed: 30 minutes

**Task 6: Extended Response – Genetic Variation**

**Student Instructions:**

This extended answer is 10 marks and worth 10% of your semester grade. You cannot use notes and the response will be completed under test conditions in 30 minutes based on the research you have made in the previous lesson.

**Extended Response Question:**

Genetic variation is a prerequisite for evolution. Mutation is one source of genetic variation and meiosis is another. Genetic diversity in specific species within a population is due to mutation and meiosis. In the answer section below, **identify** and **explain** how meiosis and mutation produce genetic variation, **explaining** how these processes contributed to natural selection and **providing** a detailed example.

Please use the space below for your answer:

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**End of Assessment**