 Coded for Success Online

Student work plan

**Learning intention:**

To understand the genetic screening process.

**Success criteria:**

* Demonstrate a clear understanding of the terms genotype, phenotype, gene, allele, homozygous and heterozygous.
* Explain how the differences in DNA sequence within a gene results in different traits.
* Identify the role of gel electrophoresis in organising and predicting DNA fragment size.
* Calculate using a probability table, the genotypes and phenotypes of different genetic crosses.
* Express phenotype ratio as a percentage and as a fraction.

**Instructions for students**

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| **Instructions** | **Time required** | **Links** |
| **Introduction Task**   1. Download the introduction task, save to your device and then select view and select edit document. 2. Complete the introduction task electronically. Use any resources that you have available. 3. Submit the task to your teacher to provide feedback | **Allow up to 1 hour** | [**Introduction task**](http://media.biolab.vic.edu.au/media/Coded4Success/codedintrotask.docx) |
| **Main Task.**   1. Download the digital workbook, save to your device and then select view and select edit document. 2. Watch the video provided (recommend with headphones). 3. Complete question 1. 4. Download the results page and complete task. Use these results to complete the results section of your digital workbook. 5. Complete the remainder of your workbook. Use the genetic cross example provided to assist you when completing question 6. 6. Submit your workbook to your teacher for feedback. | **Allow up to 1.5 hours** | [**Digital workbook**](http://media.biolab.vic.edu.au/media/Coded4Success/codedworksheet.docx)  [**Scientific method video**](http://media.biolab.vic.edu.au/media/Coded4Success/coded.mp4)  [**Gel electrophoresis results**](http://media.biolab.vic.edu.au/media/Coded4Success/codedresults.docx)  [**Genetic cross example**](http://media.biolab.vic.edu.au/media/Coded4Success/codedcrossexample.pdf) |
| **Further Task**   1. Download the further task and print a hard copy. 2. Complete the further task, scan and submit to your teacher for feedback. | **Allow up to 1 hour** | [**Further task**](http://media.biolab.vic.edu.au/media/Coded4Success/codedfurther.docx) |