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| CONTAMINATED MEAT SAMPLE  A A C G A A T T C A T T A C G A A T T C C T A A T G T G  T T G C T T A A G T A A T G C T T A A G G A T T A C A C | G L U E  1 |

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| CONTAMINATED MEAT SAMPLE  A A C G A A T T C A T T A C G A A T T C C T A A T G T G  T T G C T T A A G T A A T G C T T A A G G A T T A C A C | G L U E  2 |

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| CONTAMINATED MEAT SAMPLE  A A C G A A T T C A T T A C G A A T T C C T A A T G T G  T T G C T T A A G T A A T G C T T A A G G A T T A C A C | G L U E  3 |

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| CONTAMINATED MEAT SAMPLE  A A C G A A T T C A T T A C G A A T T C C T A A T G T G  T T G C T T A A G T A A T G C T T A A G G A T T A C A C |  |

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| MEAT SAMPLE 1  A A C G A A T T C A T T A C G C A T T C C T A A T G T G  T T G C T T A A G T A A T G C G T A A G G A T T A C A C | G L U E  1 |

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| MEAT SAMPLE 1  A A C G A A T T C A T T A C G C A T T C C T A A T G T G  T T G C T T A A G T A A T G C G T A A G G A T T A C A C | G L U E  2 |

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| MEAT SAMPLE 1  A A C G A A T T C A T T A C G C A T T C C T A A T G T G  T T G C T T A A G T A A T G C G T A A G G A T T A C A C | G L U E  3 |

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| MEAT SAMPLE 1  A A C G A A T T C A T T A C G C A T T C C T A A T G T G  T T G C T T A A G T A A T G C G T A A G G A T T A C A C |  |

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| MEAT SAMPLE 2  A A C G A A T T C A T T A C G A A T T C C T A A T G T G  T T G C T T A A G T A A T G C T T A A G G A T T A C A C | G L U E  1 |

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| MEAT SAMPLE 2  A A C G A A T T C A T T A C G A A T T C C T A A T G T G  T T G C T T A A G T A A T G C T T A A G G A T T A C A C | G L U E  2 |

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| MEAT SAMPLE 2  A A C G A A T T C A T T A C G A A T T C C T A A T G T G  T T G C T T A A G T A A T G C T T A A G G A T T A C A C | G L U E  3 |

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| MEAT SAMPLE 2  A A C G A A T T C A T T A C G A A T T C C T A A T G T G  T T G C T T A A G T A A T G C T T A A G G A T T A C A C |  |

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| MEAT SAMPLE 3  A A C G A A G T C A T T A C G A A T T C C T A A T G T G  T T G C T T C A G T A A T G C T T A A G G A T T A C A C | G L U E  1 |

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| MEAT SAMPLE 3  A A C G A A G T C A T T A C G A A T T C C T A A T G T G  T T G C T T C A G T A A T G C T T A A G G A T T A C A C | G L U E  2 |

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| MEAT SAMPLE 3  A A C G A A G T C A T T A C G A A T T C C T A A T G T G  T T G C T T C A G T A A T G C T T A A G G A T T A C A C | G L U E  3 |

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| MEAT SAMPLE 3  A A C G A A G T C A T T A C G A A T T C C T A A T G T G  T T G C T T C A G T A A T G C T T A A G G A T T A C A C |  |

### Naming restriction enzymes

The name given to a restriction enzyme is taken from the name of the bacteria the enzyme was obtained from. For example, EcoRI comes from the bacteria *Escherichia coli*. The first letter being the genus and the second and third letters are taken from the species. A fourth letter, if present, indicates the strain of the bacteria. Some bacteria contain several different restriction enzymes hence the number, expressed as a Roman numeral, refers to the order in which the enzyme was isolated.

Genus Strain

EcoRI

Species Isolation order

It is not necessary for you to learn the names of restriction enzymes.

Using the restriction enzyme template below, locate the restriction site(s) for the meat samples, including the contaminated sample.

Restriction enzyme (EcoRI)

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| --- |
| X  G A A T T C  C T T A A G  X |

X = cut along dotted line

Adapted from Yvonne Van Der Ploeg

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