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| **1.6 The evolution of: industrial and autonomous robotics, autonomous vehicles, virtual and augmented reality, artificial intelligence and machine learning and internet-enabled hardware** |
| * Learners should be aware of the main impacts on society, the economy and culture of the following developments in digital technology that have evolved over time:   + industrial robots   + autonomous robots   + autonomous vehicles   + virtual reality   + augmented reality   + Artificial Intelligence (AI)   + machine learning   + internet-enabled hardware including the Internet of Things (IOT). |

Specification points:

Skills audit:

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| **Criteria** |  |  |  |
| I know what is meant by: artificial intelligence, machine learning, training data and neural networks. |  |  |  |
| I can identify a range of AI technologies and I understand the impact these have on individuals and society. |  |  |  |

Teacher feedback:

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Student response:

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**Exam-style questions**

Artificial Intelligence is currently being used in DNA analysis. Forensic scientists can now detect and process low-level, degraded, or otherwise unviable DNA evidence that could not have been used just a few years ago.

A member of the Criminal Investigation Department (CID) in a UK police force has suggested that “DNA should be provided at birth” to help tackle crime.

Discuss a wide range factors that must be considered if everyone was to provide their DNA at birth and stored in a national DNA database. In your answer you might consider the following:

* Ethical issues
* Legal issues
* Local communities
* Government

**[QWC]**

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**[8]**