

## A LEVEL COMPUTER SCIENCE

EXPLAIN HOW INCREASING AVAILABILITY OF COMPUTER POWER REQUIRES SOCIETY TO MAKE CHOICES ABOUT ACCEPTABLE USES OF NEW TECHNOLOGIES

The Three Laws of Robotics (according to who?) These came from fiction but how relevant are they becoming?

1. A robot may not injure a human being or, through inaction, allow a human being to come to harm.
2. A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.
3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws.

**TASK: This is an essay task that requires you to research, discuss, identify advantages and disadvantages and justify any opinions you put forward. You should be aiming for 1500 to 2000 words.**

- You will need to think about the personal, social, economic and moral issues raised by more and more advanced use of technology and A.I.
- What is A.I.? Machine learning? Automation? Give examples what are the enabling technologies? Pros? Cons? Your opinions?
- Because we have the technology to do something does that mean we should? If not why not?
- In a world of increasing automation what role will be left for humans? What may be the possible consequences?
- In a world increasingly dependent upon technology how do you foresee the future for yourself, your children and grandchildren?
- **Should Scientists develop machines with greater artificial intelligence?** <http://www.youtube.com/watch?v=HwBmPiOmEGQ>
- Are our personal freedoms under threat?

