Question: "What are likely to be the main impacts of artificial intelligence?" (5 August 2023)

(Words in *italics* are included in the vocabulary exercise at the end of the text.)

GPT-4 answer: "The impacts of artificial intelligence (AI) are vast and varied, cutting across numerous sectors of society. The potential benefits and challenges of AI are subjects of considerable debate, but many experts agree that AI is likely to have several significant impacts, which I will outline below.

Please keep in mind that my training only goes up until September 2021, and the situation may have changed in more recent years.

- 1. **Economic Impacts**: All has the potential to significantly boost economic growth by increasing efficiency and productivity. New industries could emerge, driven by All technologies and the data they generate. However, the *flip side* of this is that some jobs, particularly those that are routine or low-skilled, could be automated, leading to significant workforce displacement.
- 2. **Social Impacts**: All is likely to have profound social impacts. On the one hand, All has the potential to significantly improve quality of life by personalizing services and freeing up time spent on *mundane* tasks. However, the widespread adoption of All could also exacerbate societal inequalities. For example, those with the skills to use and understand All might benefit disproportionately, while those without such skills might be left behind.
- 3. **Ethical Impacts**: All has given rise to a *host* of ethical questions. For example, how should All systems be programmed to act in situations where human lives are at stake, such as in autonomous vehicles or healthcare? Who is responsible when an All system makes a mistake? How should the benefits and risks of All be distributed?
- 4. **Privacy and Security Impacts**: Al systems often rely on vast amounts of data, raising concerns about privacy and data security. Sophisticated Al algorithms could potentially be used to *infringe* on privacy or carry out cyberattacks. On the other hand, Al might also be used to improve cybersecurity defenses.
- 5. **Legal and Regulatory Impacts**: As AI becomes more prevalent, laws and regulations will need to adapt. This could involve everything from determining *liability* for AI actions to creating new privacy protections. International cooperation might be needed to regulate AI effectively, given the global nature of digital technologies.
- 6. **Impacts on Health and Healthcare**: Al could revolutionize healthcare through improved diagnostics, personalized medicine, more efficient drug discovery, etc. However, Al in healthcare also presents challenges related to data privacy, reliability of Al systems, and equity in access to Al-powered healthcare services.
- 7. **Environmental Impacts**: Al can be used to model and potentially *mitigate* the impacts of climate change, to optimize energy use in various industries, and to enable more sustainable agriculture. However, the data centers needed for powerful Al computations can also consume significant amounts of energy.
- 8. **Impact on Education**: Al could change the education landscape by personalizing learning, identifying gaps in learning and adapting teaching methods to individual students' needs. This could potentially lead to a more efficient learning process.

These are broad categories and within each, there's a wide spectrum of possible impacts. All is a rapidly evolving field and its impacts will depend on how the technology develops, how it's adopted, and how well we manage the associated challenges."

A/ This answer by GPT-4 is quite characteristic of the way ChatGPT answers general questions. What are some of the key characteristics of this text? (Suggested answers below.)

B/ Match the words on the left, with the definitions on the right.

1/ Flip side	a/ Here: a large number, a multitude
2/ Mundane	b/ To encroach on, to enter someone's space, to transgress (the law)
3/ Host	c/ An obligation, a responsibility, a debt.
4/ To infringe on	d/ To make less severe, to offset, to moderate
5/ Liability	e/ The reverse side, the other side (of a coin, of an argument, of a situation).
6/ Mitigate	f/ Everyday, ordinary, banal

Answers: A: 1/ The text is quite short (just over 500 words). 2/ It is written (surprisingly) in the first person – "I". 3/ The text notes that information created after September 2021 is not included, so the text may be out of date. 4/ The text then includes a number of summary sections (numbered here from 1 to 8). 5/ The conclusion is very general.

B: 1/e; 2/f; 3/a; 4/b; 5/c; 6/d.