

# The Bridge to Post-16

## Summer Work



### A Level Computer Science - H446

This pack contains a programme of activities and resources to prepare you to embark on your Post-16 course in Computer Science in September.

It should be completed throughout the remainder of the Summer term and over the Summer Holidays to ensure you are ready to start your course in September.

**You MUST have this task completed before your first lesson in the subject**

The resources include:

1. The links to website where you can research the topics you will be exploring in the course and get a flavour of what you will be learning about in Post-16
2. Research task on AI
3. Suggested scaffolding / therapies to help you if you are struggling with the task

Overall, we suggest you spend around 3 hours of total work working through the tasks for Computer Science.

Therefore, in total, across your 3 subjects you should be completing 9 hours of Summer Work.

## A LEVEL COMPUTER SCIENCE – SUMMER TASK (AI)

**TASK 1** – Watch the following programme: BBC Four - The Secret Rules of Modern Living: Algorithms

**TASK 2** - Research Question (500 words)

**“How is Artificial Intelligence used in everyday life?”**

- Write a 500-word answer explaining how AI is used in the real world.
- Keep it clear and simple and use the scaffolding below to help you.

### Support

**What do I include?**

Your answer should include:

1. What is AI?

- A simple definition
- What it means for a computer to be “intelligent”

## 2. Real-Life Examples (at least 3)

- Explain how AI is used in everyday life, for example:
- Voice assistants (e.g. Siri, Alexa)
- Recommendation systems (e.g. Netflix, YouTube)
- Self-driving cars
- Chatbots
- Facial recognition

## 3. How It Works (Basic Explanation)

- AI uses data
- AI can learn patterns
- It makes decisions or predictions
- (Keep this simple – no coding needed)

## 4. Advantages and Disadvantages

Include at least:

- 2 benefits (e.g. faster, more efficient)
- 2 risks (e.g. job loss, privacy concerns)

## 5. Conclusion

Do you think AI is a good thing?

- Explain your opinion

## Suggested Structure

- Paragraph 1 → What is AI
- Paragraph 2–3 → Examples
- Paragraph 4 → How it works
- Paragraph 5 → Pros & cons
- Paragraph 6 → Conclusion

## Success Criteria

- ✓ Clear explanation
- ✓ Real-life examples
- ✓ Uses key terms (AI, data, patterns, decision)

- ✓ Balanced argument
- ✓ Around 500 words

Please email me your finished report to: [r.trubshaw@johntaylorfreeschool.co.uk](mailto:r.trubshaw@johntaylorfreeschool.co.uk) BEFORE 1<sup>st</sup> September.

Useful Websites

Make yourself familiar with the spec before you start the course:

AS and A Level - Computer Science - H046, H446 - OCR H446 OCR Qualification webpage