

Year 12 Transition

Welcome to The Island VI Form

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| KS5 Subject: | Computer Science |
| Objectives for Transition Tasks: | |
| <ul style="list-style-type: none">• Investigate an area of Computing Technology• Understand the CPU | |
| Watch: | Independent Task (to be submitted): |
| <p>Understand the CPU</p> <p>Watch the videos below, then produce a fully annotated diagram on a single sheet of A4 / A3 paper which shows how the CPU works.</p> <p>ALU, CU, Registers and Buses Fetch-Decode-Execute CPU Performance</p> | <p>Emerging Technology</p> <p>In this task you get to investigate any area of emerging computer technology which interests you.</p> <p>You can pick any area which interests you, but examples could be:</p> <ul style="list-style-type: none">• Artificial intelligence• Robotics• Automated self driving cars• Quantum computing <p>In no more than ONE side of A4 summarise the area you have chosen under the following four headings:</p> <ol style="list-style-type: none">1. What is it?2. What are the possible Social, Moral, Cultural and Ethical benefits of this technology on society3. What are the possible Social, Moral, Cultural and Ethical risks of this technology on society4. My conclusion on this technology and what it will mean for our world 10 years from now |
| Read: | Staff Contact |
| <p>Learning Programming</p> <p>Von Neumann</p> <p>Harvard Architecture</p> | <p>gavin.gray@medina.iow.sch.uk</p> |

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Aim Higher Task:

Investigate the 'Knight's Tour' problem.
What techniques in programming would be used for a computer to solve the problem?

DEADLINE FOR TRANSITION TASK: Please bring to your first lesson in September.