

**Preparing for Transition from Key Stage 4 to Key Stage 5**

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| **Subject** | **Qualification** |
| **Medical, Health and Science Pathway**  **(Science, ICT & Health)** | **Three single A Level equivalent vocational subjects** |
| **Recommended Reading Materials** | **Recommended Websites** |
| **Science**   * Spill over - David Quammen * Darwin’s Island - Steve Jones   **ICT**   * [www.bbc.co.uk/news/technology](http://www.bbc.co.uk/news/technology) * [www.forbes.com/technology](http://www.forbes.com/technology)     **Health & Social Care**   * BTEC Level 3 National Health and Social Care: Book 1 – 9781292126012 * BTEC Level 3 National Health and Social Care: Book 2 – 9781292126029 | **Science**  Evolution 101 -<https://evolution.berkeley.edu/evolibrary/article/evo_01>  Newton’s Laws- <https://www.youtube.com/watch?v=kKKM8Y-u7ds>  **ICT**  [http://www.barclays.co.uk/DigitalEagles/Barclays CodePlayground/P1242686640999](http://www.barclays.co.uk/DigitalEagles/Barclays%20CodePlayground/P1242686640999)  <https://education.microsoft.com/>    **Health & Social Care**   * Dementia Friends – Alzheimer's Society: <https://www.dementiafriends.org.uk/> * The World according to Kids: <https://holycross.planetestream.com/Default.aspx?search=the%20world%20according%20to%20kids&pagesize=20&page=1> |
| **Preparation Tasks** | **Recommended Research** |
| * **Science** * Research how Scientists changed their mind about the nature of light. Is it a Wave or a collection of particles? * The cell is a unifying concept in biology, you will come across it many times during your two years of A level study. Prokaryotic and eukaryotic cells can be distinguished based on their structure and ultrastructure. In complex multicellular organisms' cells are organized into tissues, tissues into organs and organs into systems. During the cell cycle genetic information is copied and passed to daughter cells. Daughter cells formed during mitosis have identical copies of genes while cells formed during meiosis are not genetically identical. * **ICT** * Identify a small business in your local area. Identify how they would benefit from having social media presence. * **Practice animation skills by using one of the following open source software:** * Synfig * Blender * Animaker * Follow the online tutorials      * **Health & Social Care** * Start to investigate the roles and responsibilities of these professions: * Doctors. Nurses. Social Workers. Occupational Therapists. Youth Workers. Health Care Assistants. * <https://www.jobs.nhs.uk/>to find information about the different careers available in health and social care. | * **Science**   <http://www.cellsalive.com/index.htm> - Cells alive!  <http://www.thestargarden.co.uk/Newtons-theory-of-light.html> - thestargarden   * **ICT** * Think about how technology has evolved over the past 20 year. Focus on areas of society such as education, transportation and retail. * Begin to think about your career path and what degrees or apprenticeships might appeal to you and the skills you will need.      * **Health & Social Care** * The Portrayal of Health & Social Care Within the Media * It is important to make the public realise about the issues which are prevailing in society relating to health and social care. One way to do this is through the media. |
| **Recommended trips or visits this Summer** | |
| * **Science** * Natural History Museum * Hunterian Museum * **ICT** * Microsoft Store * Apple Store * **Health & Social Care** * Disney Land Paris | |
| **Tasks to Complete** | |
| * **Science** * Research and write an assay explaining how Scientists have changed their mind about the nature of light. Is it a Wave or a collection of particles? Make sure you explain both models and present all the evidence supporting each model, including Young’s double slit experiment. * Produce a one-page revision guide to share with your class in September summarizing each of the following topics: * Cells and Cell Ultrastructure * Prokaryotes and Eukaryotes * Mitosis and Meiosis * **ICT** * Design an app for students and staff at CTK * What are some of the key features to ensure it is inclusive of all users?      * **Health & Social Care** * Do some research into the topics mentioned above. * Make sure you have all the equipment you might need to start college: bag, file, paper and pens, highlighter etc. | |