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| **6th Form Preparation work for**  **Physics**  **Week 1 and 2** | **Read** the information on Units and Homogeneity. Follow the link. There are useful website links within the document to develop your understanding further.  [Units & Homogeneity](https://strobertofnewminster-my.sharepoint.com/:w:/g/personal/wylam_g_strobertofnewminster_co_uk/EV8BuGa7KZ9PkGs61nI9wicBvq_ttvf8IABW_OL2cKXIYw?e=JFZsB9)  *St Robert’s Shared Area*  ***Time: 30 min*** | **Complete** the task on Units and Homogeneity of equations. Follow the link below.  [Units & Homogeneity Task Sheet](https://strobertofnewminster-my.sharepoint.com/:w:/g/personal/wylam_g_strobertofnewminster_co_uk/EW_lYpcZOL9Ck6tRMBZkxIIB-BUwchf48OdZsJz545qDjg?e=6ZFOpy)  *St Robert’s Shared Area*  ***Time: 1hr*** | **Read** the two articles about the feasibility of a space elevator. They explore the idea of a link between the Earth and space, an ‘elevator’, that would improve space exploration. This will develop your skills to both support and argue against a hypothesis.  [Space Elevator](https://www.sciencenewsforstudents.org/article/can-we-build-space-elevator-tall-tower-or-giant-rope)  *Science News for Students*  [Space Elevator PDF](https://strobertofnewminster-my.sharepoint.com/:b:/g/personal/wylam_g_strobertofnewminster_co_uk/Ec85Y7cqWmZEulCgM1klAN8BVqkRPiWel4ygQQqA1JPw7w?e=J1PQZt)  *Physics Review*  ***Time: 1hr*** |
| **Listen** to this podcast about some pressing physics questions like: why do some parts of the moon appear darker than others; what is the large hadron collider for and what can quantum computers do for science?  [Dr Karl: The Moon, Particle Physics and..](https://www.bbc.co.uk/programmes/p07tyjvw)  *5 Live Science Podcast*  ***Time: 1hr*** | **Watch** the TED talks. Five mind-bending questions from Physics. Each one lasts between 15 to 20 minutes.  [Mind-bending questions from physics](https://www.ted.com/playlists/475/mind_bending_questions_from_ph)  *TED Talks*  ***Time: 1hr 20 min*** | **Read** the information on Scalars and Vectors. Use the website links within the document to develop your understanding further.  [Scalars & Vectors](https://strobertofnewminster-my.sharepoint.com/:w:/g/personal/wylam_g_strobertofnewminster_co_uk/EcOV9R-SdZFChlpr5JLeNKIBCIRGpr89oqg_rzIHtyXd4w?e=VlHqDE)  *St Robert’s Shared Area*  ***Time: 30 min*** | **Complete** the task sheet on Scalars & Vectors. Follow the link below.  [Scalars & Vectors Task Sheet](https://strobertofnewminster-my.sharepoint.com/:w:/g/personal/wylam_g_strobertofnewminster_co_uk/EScQUxViAupGv1NTIrCWGX4B9H-omE2KugBOR0-r8a_cJA?e=JhGxf2)  *St Robert’s Shared Area*  ***Time: 1hr 10 min*** |
| **Complete** a profile on Isaac Newton and Christian Huygens. Include information on their background, their individual theories on light and what evidence they gathered. Compare the two theories and explain the significance of their theories on science.  ***Time: 1 hour*** | **Listen** to this podcast about Paul Dirac, a Bristolian theoretical physicist, ranked alongside Einstein by his peers, who won a Nobel for his work on quantum mechanics.  [Paul Dirac](https://www.bbc.co.uk/programmes/m000fw0p)  *In Our Time*  ***Time: 50 min*** |  |  |