**St Mary’s Catholic School**

**Year 11 into Year 12 Bridging Work**

**Recommended Reading List for Year 12**

**MATHS/FURTHER MATHS**

*To prepare you for your Sixth Form studies, the reading list below includes a variety of books, articles and other material to read and use, to broaden your knowledge, and to enrich your understanding of Mathematics.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Read / Watch** | **Link if this is available online** | **Tasks to complete**  | **Any additional notes** |
| Why I fell in love with monster prime numbers | <https://www.youtube.com/watch?v=B4xOFsygwr4&feature=youtu.be> | Watch the short video  |  |
| The Mathematics of love | <https://www.youtube.com/watch?v=yFVXsjVdvmY&feature=youtu.be> | Watch the short video |  |
| An interesting video on the coronavirus curve | <https://www.numberphile.com/videos/the-coronavirus-curve> | Watch the video and then try creating some of your own curves and models on geogebra including the 2D to 3D whats going on activity | <https://www.geogebra.org/> |
| Download the free “Summaze” Apps from MEI | <https://play.google.com/store/search?q=summaze&c=apps&hl=en_GB> | Work through the activities on Summaze and Summaze 2If you want more – Summaze Adventure is a great add-on |  |
| Listen to podcasts/ watch videos from numberphile | [numberphile.com/podcast](https://www.numberphile.com/podcast)<https://www.youtube.com/user/numberphile> | A number of podcasts and videos that feature historic mathematics to current breakthroughs. **Pick any that are of interest to you**  |  |
| Plus Magazine | <https://plus.maths.org/content/> | Read as many articles as you like, of particular interest maybe those on the maths of Covid-19 | Articles, podcasts and puzzles on everyday maths |
| Doodling, maths and paper folding video series from Vi Hart  | <https://www.youtube.com/results?search_query=vi+hart> | Watch any video that **peaks your interest**. |  |
| Podcast series that investigate mathematical problems and statistics: | <https://www.bbc.co.uk/programmes/p02nrss1/episodes/downloads> | Subscribe, sit back and enjoy; there are some particularly interesting talks on statistics around Covid-19 |  |
| <http://www.flyingcoloursmaths.co.uk/category/podcasts/> |  |
| <http://relprime.com/> |  |
| ***Books that need to be purchased or borrowed from a local library/e-library*** | <https://nrich.maths.org/books> | Read the synopsis for each book in this extensive list to see which one(s) appeal to **your interests** the most ☺ |  |
| ***Further Mathematicians…*** |
| Adventures with complex numbers | <https://nrich.maths.org/complexadventure> | Try the activities, watch the videos and read the articles |  |
| Article on complex numbers and their younger cousins, the quaternions and octonions. | <https://plus.maths.org/content/os/issue32/features/baez/index> | Read the article and then try the tasks from Nrich |  |