Wyggeston & Queen Elizabeth I College

Physics

Get ready for a successful start!

What will I study?	Physics opens doors to some of the most exciting, cutting-edge, rewarding jobs in the world. From cancer treatment to tackling climate change, gaming to robotics and artificial intelligence, physics and physicists are on the front line, helping to shape the future. At a time when jobs are changing, physics offers a vast and expanding range of career paths.
Who teaches this course?	Ali Panju
What resources or equipment will I need?	A scientific calculator (e.g., Casio FX range)
Reading List	• 6 easy pieces - Richard Feynman • How to teach Quantum Physics to your dog - Chad Orzel • https://www.iop.org/careers-physics/your-future-with-physics
How can I extend my learning?	Research your possible future careers after studying physics using the Institute of Physics website: https://www.iop.org/careers-physics/your-future-with-physics/career-paths

Taster Activity: To be completed and brought to your first lesson

Resources needed to complete the activity:	Access to the internet
Estimated time to complete the activity:	1 hour
Taster Activity:	In Physics we analyse the universe from the very small to the very large. **1. The very small** The smallest things in the universe are sub-atomic particles. These are particles that are smaller than an atom. a) Research and find the names of 5 sub-atomic particles. b) Find out which of these are fundamental particles. c) Choose one of your particles and find out when and how it was discovered. 2. **The very large** a) Galaxies are some of the largest structures in the universe. Find out the three types of galaxies. b) Find the names of one example of each type of galaxy. Choose one of these galaxies and research about it. You should consider how large it is, how far away and any other information you can about your chosen galaxy.