Computer Science Reading List Year 11 – Preparing for Sixth Form Computer Science

By far the best way to prepare for Year 12 Computer Science is to develop your confidence as a programmer in Python or JavaScript using an online resource such as Code Academy or W3C see below. A great understanding or computer Architecture will also help and "How Do It Know" is a clear and accessible way to develop your knowledge in this area.

A great book for practical coding in python, from beginner to intermediate level, is Learning to Program in Python – it takes you right through the basics. We have some copies in the department so get in touch with me and it may be possible to post one out.

Learning to Program in Python by PM Heathcote. PG Online https://www.pgonline.co.uk/resources/computer-science/gcse-aqa/learning-to-program-in-python/

I have also looked for some books that are fun and inspirational. Hopefully they will prompt you to read around the subject and remind you why you have chosen to study this fascinating, beautiful subject that impact's in every area of our lives; especially at the moment. Take care and enjoy reading Mrs Thomas

Computational Fairy Tales by Jeremy Kubica. ISBN: 978-1477550298

A romp through the principles of computational thinking, illustrating high-level computer science concepts, the motivation behind them, and their application via the medium of a fairy tale. Aimed at secondary school students. "Bonkers, but very enjoyable."

Python Crash Course, 2nd Edition: A Hands-On, Project-Base d Introduction to Programming Paperback – May 3, 2019 by Eric Matthes (Author) ISBN-10: 1593279280

The best selling Python book in the world. A fast-paced, no-nonsense guide to programming in Python. This book teaches beginners the basics of programming in Python with a focus on real projects.

But How Do It Know? - The Basic Principles of Computers for Everyone Clark Scott (Author) ISBN-10: 0615303765

But How Do It Know? Really explains how computers work. They are far simpler than anyone has ever permitted you to believe. It contains everything you need to know, and nothing you don't need to know. No technical background of any kind is required.

http://www.buthowdoitknow.com/

The Code Book: The Secrets Behind Codebreaking, By Simon Singh, Category: Teen & Young Adult Nonfiction

ISBN-10: 0385730624

In his first book since the bestselling Fermat's Enigma, Simon Singh offers the first sweeping history of encryption, tracing its evolution and revealing the dramatic effects codes have had on wars, nations, and individual lives. From Mary, Queen of Scots, trapped by her own code, to the Navajo Code Talkers who helped the Allies win World War II, to the incredible (and incredibly simple) logistical breakthrough that made Internet commerce secure, The Code Book tells the story

How to Think Like a Computer Scientist by Peter Wentworth, Jeffrey Elkner, Allen B. Downey, and Chris Meyers

http://openbookproject.net/thinkcs/python/english3e/

Learn Python or a SECOND LANGUAGE using a structured online course or book

Languages: Code Academy https://www.codecademy.com/

C++, Java script etc.