

# Success in GCSE Computer Science

### <u>General Tips</u>

- If you haven't started revising yet, START NOW
- The exams will test everything on the course, so even when revising recent topics, mix it up with some older topics (that stops your revision getting stale)
- The exams work in fundamentally different ways:



- NOTE: Just because a topic is listed in the paper 1 Spec that does NOT mean it won't turn up in paper 2!
- The NEA no longer counts towards your final grade, but the skills you develop while completing it will help HUGELY when it comes to paper 2
- Computer Science covers a lot of ground which is also covered in other subjects, such as:



• Do not fall into the trap of thinking that the only relevant knowledge is the stuff taught in Computer Science lessons! You should see those other subjects as *LIBRARIES* of knowledge that you can *IMPORT* into your Computer Science brain (see what I did there?)

### Online Resources

There are many wonderful online resources, but be careful about turning to YouTube. There's a HUGE amount of virtually incomprehensible videos which may leave you more confused.

The Warriner Computer Science YouTube channel will feature tutorial videos to help with programming skills, and nearer to exam season there will also be a number of "learning livestreams" where you can tune in and ask for specific help on a variety of topics.

Mr. Smith is always contactable via the Google Classroom http://classroom.google.com to answer specific questions you may have, or via email on ka.smith@warriner.oxon.sch.uk

http://inventwithpython.com provides a multitude of free e-books which will help you brush up on your programming skills by showing you how to program simple games.

**BBC Bitesize** has some great Computer Science revision notes here:

https://www.bbc.com/bitesize/subjects/z34k7ty BBC

## **Invent with Python**

The **Computerphile** YouTube channel has lots of CompSci related videos which can help you out during revision, and other videos which are just super interesting.

http://www.triplesix.co.uk/ultraviolet is a codebreaking game designed as a revision exercise, which encourages knowledge recall, research skills and problem solving.

http://checkio.org is a game designed to aid your coding practice. There are a number of different challenges for a wide variety of skill levels.



















http://www.pythonchallenge.com/ is a site designed to improve your python and problem solving skills as you tackle a number of problems of increasing complexity using python to find the answers.



### <u>General Tips</u>

The latest version of Python is available from <a href="http://python.org">http://python.org</a>





The latest version of **PyCharm** is available from <a href="https://www.jetbrains.com/pycharm/">https://www.jetbrains.com/pycharm/</a>

The **Google Classroom** app is available for both iOS and Android devices, check the app store for your device.

If you run into problems installing any of the software, ask Mr. Smith for assistance or refer to the installation guides on the **Warriner Computer Science YouTube channel**.

#### <u>Rules to Live by:</u>

- 1. Don't Panic if you're stressed out it's difficult to learn.
- 2. Think things through CompSci is not a subject with quick answers. You may have to spend a long time thinking about how to solve a problem before you can actually attempt it.
- 3. Decompose problems break each problem into smaller chunks, break those chunks into smaller chunks, and then solve them gradually
- 4. Seek help If you're not sure about something, even if it's something you think should be simple, get in touch so that Mr. Smith can help you out. Remember, the only stupid questions are the ones you never asked.
- 5. Read more books. Doesn't matter if they're fiction, non-fiction, computer related or not; the more you read, the better your imagination gets, and the easier you'll find it to visualise problems. Here's one you can get for free: <u>https://craphound.com/littlebrother/download/</u>



And Remember...

You **don't** have to be a genius to get a GCSE in Computer Science. You just have to be **DETERMINED**