Week 0 – Assumed Background Knowledge

**Computer Science – Big Ideas**

Go to <https://edu.gcfglobal.org/en/computer-science/> for a very high level overview.

You can watch the videos OR read the pages, they are the same content, so the format is up to you.

**What is a computer?**

Go to <https://edu.gcfglobal.org/en/computerbasics/>

Jump to the bottom of the page and take the quiz. If you get 100%, you have the requisite background knowledge and can skip to the next section. If no, please go through the following sections:

What is a computer? (2)

Hardware Basics (3-5)

Software Basics (8-9)

Then try the quiz again.

**Internet Basics**

Go to <https://edu.gcfglobal.org/en/internetbasics/>

Jump to the bottom of the page and take the quiz. If you get 100%, you have the requisite background knowledge and can skip to the next section. If no, please go through the following sections:

What is the Internet? (1-2)

Getting Started (3-4)

Browsing the Internet (5-9)

Then try the quiz again.

**Binary and other bases**

Go to <https://www.youtube.com/watch?v=FFDMzbrEXaE>  
  
You may want to take some notes, as you will be expected to be able to do simple conversions and answer conceptual questions on bases in general. You can practice binary to decimal and decimal to binary conversions with the Cisco Binary Game at <https://learningnetwork.cisco.com/s/binary-game>

From Decimal to Binary

From Binary to Decimal

How many bits?

Octal

Hexadecimal

Create your own base

**Program Development**

Go to <https://www.codeconquest.com/what-is-coding/how-does-coding-work/>

High vs Low level languages

Compiled vs Interpreted