



End of Year Exams: Revision Guidance

Circulation	Year 9 Students
Title	Yr9 End of Year Exam Revision
Purpose	To provide revision information for End of Year Exams

Year 9

Your end of year exam will cover all the topics covered this year shown in the list below. Additional revision resources and tasks can be found on your class charts homework and on your MS Teams notebook (keyword section)

REVISION LIST

- **Units of Measurement** (Bit, Byte, Kilobyte, Megabyte, Gigabyte, Terrabyte)
- **Data Representation** – Converting Binary to Denary, Converting Binary to Denary, Binary Addition, Converting Hexadecimal to Denary, Converting Hexadecimal to Binary, Converting Binary to Hexadecimal, Converting Denary to Hex, Converting Hex to Denary.
- **Data Representation** – Understanding how Images, Sound and Characters are stored as Binary:
 - Images (Resolution, Colour Depth)
 - Sound (Sample Rate, Bit Depth)
 - Logic Gates (AND, OR, NOT gates)
 - Drawing logic circuits
 - Completing truth tables
- **Algorithms**
 - Understanding and recognizing the terms: Sequence, Selection (IF/ELSE statements) and Iteration (for loops and while loops)
 - Creating algorithms/programs to solve problems.
 - Tracing algorithms/programs to solve problems.
- **Hardware**
 - Understanding and recognizing the difference between hardware and software.
 - Understanding the purpose of the CPU and different hardware
 - Memory – Understanding RAM, ROM, Virtual Memory and Cache memory
 - Storage – Understanding secondary storage and the different characteristics when choosing secondary storage devices.

Revision Resources:

- Teams Notebook – Keyword notebook and Task Notebook
- Programming constructs [The three basic programming constructs](#)
 - Sequence - [Sequence - Programming constructs](#)
 - Selection - [Selection - Programming constructs](#)
 - Count controlled iteration - [Count-controlled iteration](#)
 - Condition controlled iteration - [Condition-controlled iteration](#)
- Data Representation:
 - Images [Representing images](#)

- Sound [Representing sound](#)
 - Units of Measurement (Bit, Byte, Kilobyte, Megabyte, Gigabyte, Terabyte)
 - Converting Binary to Denary <https://www.youtube.com/watch?v=q7nZbAUTSC4>
 - Converting Denary to Binary <https://www.youtube.com/watch?v=70IM1qAD5u4>
 - Binary Addition <https://www.khanacademy.org/math/algebra-home/alg-intro-to-algebra/algebra-alternate-number-bases/v/binary-addition>
 - Converting Hexadecimal to Denary [Converting Hexadecimal to Denary - YouTube](#)
 - Converting Denary to Hexadecimal [Converting Denary to Hexadecimal - YouTube](#)
 - Converting Hexadecimal to Binary [Converting Hexadecimal to Binary - YouTube](#)
 - Converting Binary to Hexadecimal [Converting Hexadecimal to Binary - YouTube](#)
 - Binary Logic
 - [Types of logic gates](#)
 - [Combining Logic Gates](#)
- Algorithms:
- Sequence - [Sequence - Programming constructs](#)
 - Selection - [Selection - Programming constructs](#)
 - Count controlled iteration - [Count-controlled iteration](#)
 - Condition controlled iteration - [Condition-controlled iteration](#)
 - Creating algorithms/programs to solve problems.
 - Tracing algorithms/programs

The exam will be 45 mins long.