# Year 8 Recall Checklist September 2022

#### Section A: E-Safety

- Identify the definition of online grooming and cyberbullying, be able to give advice to someone who is being cyber bullied or at risk of being groomed.
- Be able to Identify a URL (web address).
- and state common features of a secure website i.e. https and padlock.
- Describe common types of malware: virus, worm, trojan horse and spyware
- Identify methods of prevention i.e. antivirus, not clicking links..

E-safety: <u>https://tinyurl.com/2p8ksmrw</u> URLs: <u>https://tinyurl.com/2s3kedjx</u> Malware: <u>https://tinyurl.com/4crtyykx</u>

#### Section B: Computer Systems

- Define a what is meant by a computer.
- Define what is meant by an embedded computer.
- Identify different types of computers
- Identify internal computer components and their purpose e.g,. Motherboard, RAM, hard drive
- Define the purpose of an input and output device.
- Describe the purpose of the cpu.
- Describe the purpose and characteristics of RAM and ROM in a computer system
- State the type of secondary storage device i.e. optical (cd, dvd), magnetic (hard disk), solid state (memory sticks and hard disks)
- Identify and describe the characteristics of secondary storage (cost, durability, reliability, speed)

Internal computer components: <u>https://tinyurl.com/ycksthcn</u> Input and output: <u>https://tinyurl.com/3hz8b4he</u> RAM and ROM: <u>https://tinyurl.com/5xymcby7</u> Secondary storage: <u>https://tinyurl.com/3fpcnfs2</u> (Oak Academy)

### Section C: Data Representation

- Define why computers use binary (switches, on/off)
- Know that binary is known as Base 2 (0 and 1) and decimal is Base 10 (10 numbers)
- Convert decimal numbers to binary and vice versa.
- Order the units of measurement from smallest to largest i.e. bit, nibble, byte, kilobyte, megabyte, gigabyte, terabyte, petabyte

Binary conversion: <a href="https://tinyurl.com/y3ekf734">https://tinyurl.com/y3ekf734</a>

Units of measurement: <u>https://tinyurl.com/5xu4s4d7</u>

## Section D: Computational thinking and programming

• Define using examples computational thinking i.e. algorithms, decomposition, pattern recognition and abstraction.

Identify blocks used in Scratch e.g iteration, variables, selection, sequence.
Computational thinking: <u>https://tinyurl.com/2p949ed5</u>
Scratch tutorials: <u>https://tinyurl.com/2p9h4ew8</u>