Year 8 Mid KS3 Assessment

Computing

Methods of Revision Suggestions:	Website Link:
Mind map	http://tinyurl.com/37xezntd
Quizlet (allows you to create flashcards) Sign up using your school email address	http://tinyurl.com/37dubdjk
Padlet (revision board) – Sign up using your school email address	http://tinyurl.com/ysjaahr5
Power Point/Notes	http://tinyurl.com/mprnrj4w

Each section will consist of a range of multiple-choice questions, short answer questions. There will also be some extended answer questions in the Year 8 section of the exam.

Year 7 (30 Marks)

This section of the assessment will cover the following topics from Year 7.

E-safety
- Phishing
- Malware
- Computer Worm
- Trojan
- Spyware
- Online Grooming
- Cyber Bullying

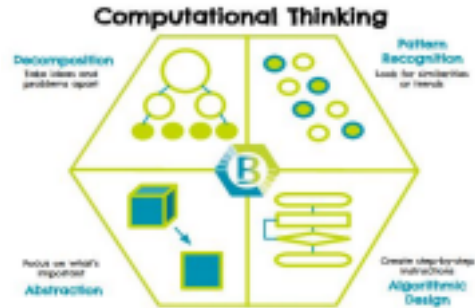Malware Protective measures
- Firewall

o   OS updates

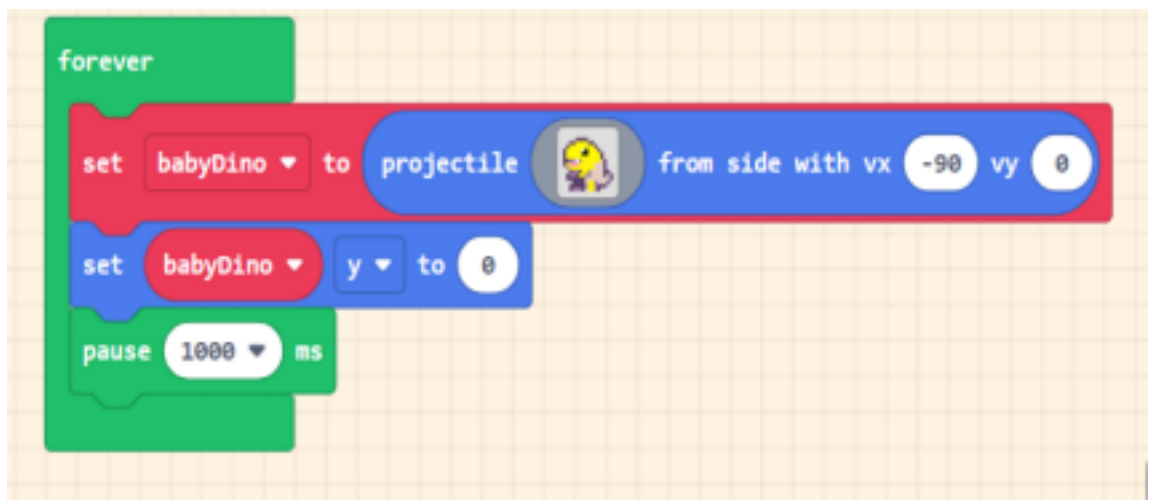Security of websites

Website to support your revision: http://tinyurl.com/295rzny5

Programming
o   Computational Thinking

Computational Thinking

o   Make Code – What is a variable? Why do we use variables?
o   **Predict** what these lines of code are going to do.
o   What is the name given to the **"Forever" block?**
o   What is the name given to **"BabyDino" block?**

o   What is random in programming?

Website to support your revision: http://tinyurl.com/y98cic7a

Spreadsheets
o   Formula (+,-,*,/)
o   Logical Operators
o   Formatting (bold, merge and centre)
o   Functions (SUM, MIN, MAX)

Operator	Description
==	Equal to
<	Less than
>	Greater than
<=	Less than or equal to
>=	Greater than or equal to
~=	Not equal to

Website to support your revision: http://tinyurl.com/29wsraan

Computer Systems and Hardware

• Define a computer, using examples i.e. laptop, desktop and an embedded computer. • Identify internal computer components and their purpose e.g,. motherboard and CPU
  • Identify examples of input devices (keyboard, mouse, webcam) and output devices (monitor, printer and speakers)
  • Describe the purpose 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)
  • Characteristics of secondary storage (cost, durability, reliability, speed)

Website to support your revision: http://tinyurl.com/4ebpnaft

Other Helpful Resources:

  1) Internal computer components: https://tinyurl.com/ycksthcn
  2) Input and output: https://tinyurl.com/3hz8b4he
  3) RAM and ROM: https://tinyurl.com/5xymcby7

Year 8 (20 Marks)

This section of the assessment will cover the following topics from Year 8
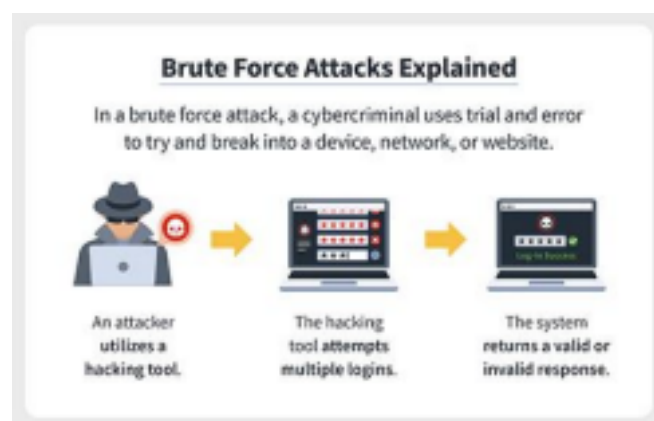
Computer Security

Hacking Attacks (DDOS, Brute Force, Zero day)

Black hat, white hat, grey hat hacker

Computer Misuse Act

Copyright Designs and Patent act

Digital Footprint

DDoS ATTACK

Brute Force Attacks Explained

In a brute force attack, a cybercriminal uses trial and error to try and break into a device, network, or website.

An attacker utilizes a hacking tool. → The hacking tool attempts multiple logins. → The system returns a valid or invalid response.

Website to support your revision- Copyright, Designs and Patents Act:
https://tinyurl.com/2n9zyycn

Website to support your revision Computer Misuse Act: http://tinyurl.com/y3ch49pj

Computer Networks

What is a network (define)?

Topologies (Ring, Star and Bus) *Advantages and disadvantages*

Internet and WWW

Network Hardware (Router, Hub, Switch)

LAN/WAN – Advantages and Disadvantages (including examples)

Website to support your revision: http://tinyurl.com/38jcy98a

Website to support your revision: https://tinyurl.com/mv88zbde

A common misconception....

Internet — A global network of computers connected together.

Worldwide Web — Collection of websites accessed on the internet.

Undersea cables

Sir Tim Berners-Lee