

Computing Year 8 Mid KS3 Assessment

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

- \circ Phishing
- \circ Malware
- o Computer Worm
- o Trojan
- \circ Spyware
- $\circ \quad \text{Online Grooming} \\$
- Cyber Bullying

Malware Protective measures

o Firewall

Security of websites

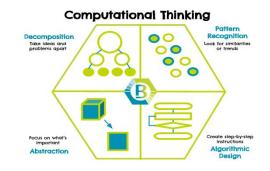
- OS updates
- e measures

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



Programming

• Computational Thinking



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

set	babyDino 🔹 to projectile 🔛 from side w	vith vx -90 vy 0
set	babyDino 🔻 y 🔻 to 🔞	
paus	se 1000 v ms	

- What is random in programming?
- What is iteration?
- o Identifying selection

Website to support your revision: http://tinyurl.com/y98cjc7a

		Operator	Description
Sprea	adsheets	==	Equal to
0		<	Less than
0	Formatting (bold, merge and centre)	>	Greater than
\circ Functions (SUM, MIN, MAX	Functions (SUM, MIN, MAX)	<=	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: <u>https://tinyurl.com/ycksthcn</u>
- 2) Input and output: <u>https://tinyurl.com/3hz8b4he</u>
- 3) RAM and ROM: <u>https://tinyurl.com/5xymcby7</u>

Year 8 (25 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



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.



tool attempts

multiple logins.

hacking tool.

utilizes a

The system returns a valid or invalid response.

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



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

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)

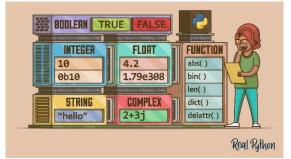
Difference between a hub and a switch

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

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

Programming

What is a function in Python? Understanding the difference between syntax and logic errors Data types (Boolean, String, Integer, Float/Real) Website to support your revision: <u>https://tinyurl.com/5yju5dyr</u> Website to support your revision: <u>https://tinyurl.com/2dj8kp98</u>



A common misconception...

Worldwide Web

Collection of websites accessed on

the internet.

Sir Tim Berners-Le

to://ww

Internet

A global network of computers

connected together.

Indersea cable