

### 3.6.1.2 Malicious code

## Lesson plan and printable activities

#### **Materials needed**

- 1. 3.6.1.2 <u>Lesson</u> PowerPoint.
- 2. 'What is malware?' cartoon strip.
- 3. 'Malicious code taboo' game.

#### Starter activity (5 minutes)

1. Slide 2: Activity – Thought shower

Students should go onto Wordle.net and select 'create'. They should think of as many words as possible associated with the term 'malicious code'.

2. Slide 3: Check key words that students have included in their Wordle. Leading on from the key words that the students feedback, ask if they know what 'malware' is.

**Differentiation:** Students make the definition for the term 'malware', sentence starters or a gap fill could be given for students who need additional support.

**3. Slide 4:** Discussion and questions leading into the topic. There is a video link on malware for students to confirm the definitions that they have created.

#### Main activities (35 minutes)

- 1. Slide 5: Introduction to the objectives of the lesson.
- 2. Slide 6: Forms of malware that students need to know about are listed in the notes section, with some supporting links.
- 3. Slide 7: Activity What is malware?

Students should develop a cartoon strip for the forms of malware. This can either be printed for students to write on, or they can edit their own Word documents. Students should find images to represent each section of the cartoon strip. The cartoon strip will also need students to add notes about preventing the form of malware.

**Assessment opportunity:** Assess the completion of the cartoon strip.

**Alternatives:** Depending on the ability of the class, the teacher may wish to give students a brief outline of the four forms of malware that need to be covered (using the notes section from slide 6 or independent research).

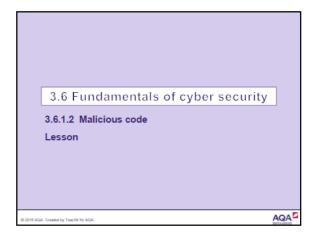
**Extension opportunity:** Students research and read up on other forms of malware, such as ransomware, and also research antivirus software and its limitations.

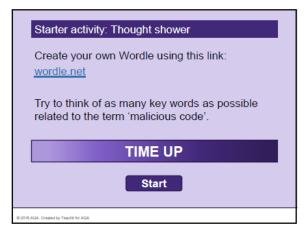
### Plenary (5 minutes)

#### 4. Slide 8: Activity – Malicious code taboo

Students must describe the word at the top of the card, but they cannot use the five words listed below. The audience must guess the word they are describing. A time limit could be added to give an element of competition. This is a good activity to consolidate the learning that has taken place and would be good to use again at revision time. Students could hot seat and have one person at the front of the class that attempts all cards, or cards could be duplicated and the task could be completed in small groups. Another alternative would be to create teams, eg Team A versus Team B.

#### Lesson





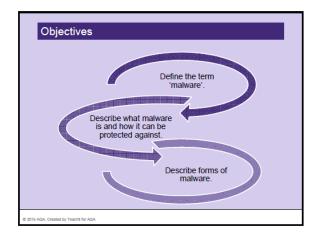
Starter activity

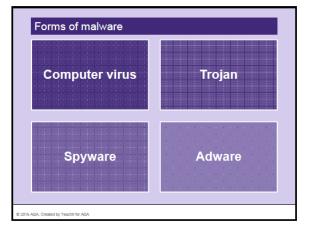
What key words did you include in your Wordle?

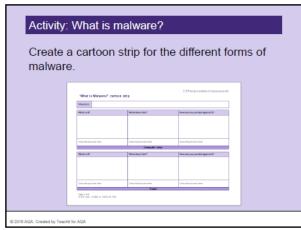
What is 'malware'?

Could you make a definition for the term 'malware'?









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Ple	enary: Malicious code taboo	
	ess the word that the person is describing – y must not use the five words on their card!	

# 'What is malware?' cartoon strip

|--|--|

What is it?	What does it do?	How can you protect against it?	
Describe pictures here	Describe pictures here	Describe pictures here	
Computer virus			

What is it?	What does it do?	How can you protect against it?	
Describe pictures here	Describe pictures here	Describe pictures here	
Trojan			

# 3.6 Fundamentals of cyber security

What is it?	What does it do?	How can you protect against it?	
Describe pictures here	Describe pictures here	Describe pictures here	
Spyware			

What is it?	What does it do?	How can you protect against it?	
Describe pictures here	Describe pictures here	Describe pictures here	
Adware			

## Malicious code taboo

Malware	Trojan	Adware
Software	Malware	Advert
Intrusive	Access	Pop-ups
Computer	Disguise	Software
Virus	Software	Program
Worms	Install	Downloads
Virus	Spyware	Antivirus Software
Code	Information	Detect
Corrupt	Gather	Prevent
Destroy	Covert	Remove
Computer	Record	Viruses
Malicious	Software	Malicious