Name: …………………………………………………….   Date: …………………………

Chapter 8 & 9 questions:

Q1. A student has handed in her homework. One of the incorrect answers she gave was that encryption could be used to stop an unauthorised person accessing a computer system.

(a) Explain what is meant by encryption and why it is used.

[4]

(b) Identify a method which would help to prevent unauthorised access to a computer.

[1]

Q2. An office worker is about to open an attachment but is worried it might contain a computer virus.

Explain what is meant by a computer virus.

[2]

Q3. John has realised that his younger sister is using social media websites. During her use she may reveal personal data.

(a) Explain what is meant by personal data.

[4]

(b) Describe the strategies that John would suggest to his sister so that she can minimise the potential dangers whilst using social media websites.

[6]

Q4. Using computers can lead to a number of physical safety issues.

Describe four of these types of issue.

[4]

Q5. Tick whether the following refer to moderated or un-moderated forums

	moderated	un-moderated
All posts are held in a queue.		
Posts are not policed.		
This forum reduces the chance of offensive messages.		
This forum stops several postings of the same topic.		

[2]

Q6. Computers can be subject to hacking.

Explain what is meant by hacking and the effect it can have on the data or the computer.

[2]

Q7. A technician has told Moira that her computer might have a virus.

Describe three reasons why the technician might think this.

[3]

Q8. List the effectiveness of different methods which could be used to prevent unauthorised access to a laptop computer.

[8]

Q9. Complete the following sentences.

(a) A piece of programming code which maliciously deletes files is called

……………………………… …………………………… ……………………………………………………………………… **[1]**

(b) The scrambling of data to make it unreadable by unauthorised users is called

……………………………… …………………………… ……………………………………………………………………… **[1]**

(c) An internet protocol for delivering private messages using cryptography is called

……………………………… …………………………… ……………………………………………………………………… **[1]**

(d) An attachment to an electronic message used to verify the identity of the sender is called

……………………………… …………………………… ……………………………………………………………………… **[1]**

Q10. Describe four methods you could use to minimise the likelihood of receiving spam emails.

[8]

Q11. John is working on a school History project and saves his work. He is told by one of his teachers that the school network has been infected by a computer virus.

   (a) Explain what is meant by a computer virus and give examples of how a computer virus can affect a computer.

[4]

   (b) John copies his History project from the school network onto his home computer using a pen drive. There are many ways his home computer can become infected by a computer virus. Describe **three** ways in which John could protect his home computer from being infected.

[3]

   (c) The computer virus has attached itself to a file that John does not want to delete. Describe what John should do to remove the threat of the computer virus infecting other files.

[2]

Q12. A teacher is allowing her students to use the internet, including emails, to find information for a Geography project.

(a) Describe **three** strategies that students should use to stay safe when on the World Wide Web.

[3]

(b) Describe **three** strategies that students should use to stay safe when sending and receiving emails.
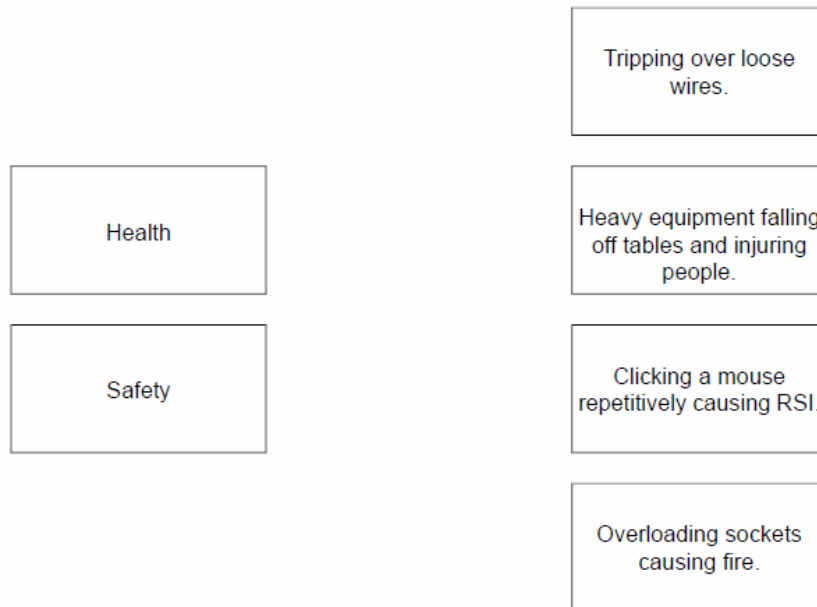
[3]

Q13. Students in a class are undertaking research for a school project. Much of the research is being carried out using the internet.

Other than e-safety issues, discuss the benefits and drawbacks of students using the internet to carry out the research.

[8]

Q14. There are a number of health and safety issues associated with the use of computers.
Draw arrows from the terms Health or Safety to the matching issue. Use a maximum of four arrows.

	Tripping over loose wires.
Health	Heavy equipment falling off tables and injuring people.
Safety	Clicking a mouse repetitively causing RSI.
	Overloading sockets causing fire.

[4]

Q15. A programmer is developing a presentation of a new ICT solution for a conference and needs to consider the audience.
(a) Using examples, explain why presentations and ICT solutions have to take into account the type of audience.

[4]

(b) The programmer is concerned that the software used for the presentation will be copied by the participants during the conference.
Describe how the software could be protected from illegal copying.

[4]