

5.2 Health Problems from IT Use

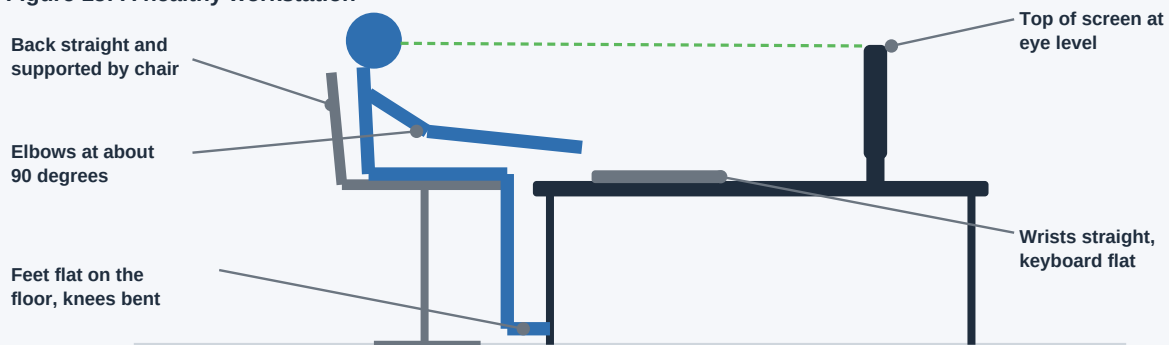
Syllabus 2026 - 2028

WHAT YOU NEED TO KNOW

- Health issues linked to prolonged use of IT equipment: repetitive strain injury (RSI), back problems, eye problems and headaches
- The causes of these health issues
- Strategies for preventing them

Using computers, phones and other IT equipment for long periods, especially with poor posture or a badly set up workspace, can harm the body. **Ergonomics** is the design of equipment and workspaces to suit the person using them, so that health risks are reduced.

Figure 15: A healthy workstation



Look away from the screen and move around regularly

Problem	Symptoms	Causes	Prevention
Repetitive strain injury (RSI)	Pain, stiffness, tingling or numbness in the wrists, hands, fingers and arms.	Doing the same small movements again and again, such as typing and using a mouse, for a long time without a break; wrists bent or resting on a hard edge; keys hit too hard.	Take regular breaks and stretch; keep wrists straight and use a wrist rest; use an ergonomic keyboard and mouse; type lightly; alternate tasks or use voice input.
Back problems	Back, neck and shoulder pain.	Sitting for long periods in a poor position; slouching; a chair with no back support; a screen or keyboard in the wrong place; carrying a heavy laptop.	Use an adjustable chair with back support; sit with the back straight and feet flat on the floor or a footrest; take breaks to stand and move; use a standing desk; carry a light bag.
Eye problems	Tired, sore, dry or blurred eyes (eye strain).	Looking at a screen for a long time without looking away; glare or reflection on the screen; screen too bright, too dim or too close; poor room lighting.	Take regular breaks and look into the distance (for example every 20 minutes); use an anti-glare screen or adjust the lighting and blinds; set brightness and text size; keep the screen an arm's length away; have regular eye tests.
Headaches	Pain in the head, often with eye strain or neck tension.	Eye strain, glare, poor posture that tenses the neck and shoulders, long hours without rest or water, loud noise.	Reduce glare and set the screen correctly; take breaks; sit with good posture; drink water; keep the room quiet and well lit; treat eye problems.

General strategies

- Take a short break at least once every hour, and move around

- Set up the workspace correctly: screen at eye level, keyboard and mouse close, feet supported
- Do not use devices in bed or in poor light
- Use adjustable furniture and equipment where possible
- Do stretching exercises and stay active

EXAM TIP

When asked for a prevention, give the **action** and the **reason**, for example 'take regular breaks, so the wrists and eyes can rest'. A cause must name the **IT activity**, such as 'typing for long periods without a break'.

Key terms

Term	Meaning
RSI	Repetitive strain injury; damage from repeated movements.
Ergonomics	Designing equipment and workspaces to suit the user.
Posture	The position in which the body is held.
Eye strain	Tired, sore eyes from long periods of close work.
Glare	Bright light reflecting on a screen.
Anti-glare screen	A filter or coating that reduces reflections.
Ergonomic keyboard	A keyboard shaped to keep the wrists in a natural position.
Sedentary	Spending a lot of time sitting.

Practice questions

Answer each question in full sentences. Command words used: State (give a short answer), Describe (say what it is like), Explain (give reasons), Analyse (break it down and examine it), Suggest (apply your knowledge to a situation), Compare and contrast (similarities and differences), Evaluate (weigh up and reach a judgement).

No.	Question	Marks
1	State two health problems that can be caused by using a computer for a long time.	[2]
2	Describe how repetitive strain injury (RSI) can be caused by using a computer.	[3]
3	Explain how an adjustable chair helps to prevent back problems.	[2]
4	Analyse why a school computer room might cause eye problems for learners.	[3]
5	Suggest two ways a learner could reduce headaches when using a computer.	[2]
6	Compare and contrast the causes of RSI with the causes of back problems.	[4]
7	Evaluate the strategies a school could use to protect the health of learners who use computers.	[6]

Total: 22 marks