1. Which best describes data "integrity"?

   ☐ a person controls who sees their personal data

   ☐ only authorised people can access the data

   ☐ the data is accurate and complete (not corrupted)

   ☐ the data is encrypted

2. Which measures protect a standalone PC that is never networked? Select **all** that apply.

   ☐ a strong password and a locked screen

   ☐ audit logs of network log-ins

   ☐ a backup to separate media kept off-site

   ☐ up-to-date antivirus software

   Tick every correct option.

3. Checking that a month entered is between 1 and 12 is a:

   ☐ format check

   ☐ presence check

   ☐ range check

   ☐ check digit

4. Privacy is about a person controlling who sees their personal data, while security is about stopping unauthorised access.

   ☐ True ☐ False

5. A firewall mainly:

   ☐ backs up the data to an off-site server

   ☐ filters network traffic by rules, blocking unwanted connections

   ☐ encrypts the hard disk so stolen data is unreadable

   ☐ scans files for viruses and removes them

6. An extra digit computed from the others to catch a mistyped number (as on ISBNs and card numbers) is a _____ digit.

   _____

7. Why must a school keep its computer **system** secure, not only its data? Select **all** that apply.

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   ☐ an intruder could install malware on it

   ☐ a secure system makes the stored data more accurate

   ☐ a compromised system can be used to attack other systems

   Tick every correct option.

8. A code from a phone app is an example of which authentication factor?

   ☐ something you know

   ☐ something you guess

   ☐ something you have

   ☐ something you are

9. Why can validation still let bad data through?

   ☐ validation always rejects correct data

   ☐ data can be the right format but factually wrong (e.g. "Bob" for "Bib")

   ☐ validation needs the internet

   ☐ validation only works on numbers

10. Malware that encrypts your files and demands payment for the key is called _____.

    _____

1. **the data is accurate and complete (not corrupted)**

   Integrity = accurate and complete. Security = blocking unauthorised access; privacy = control over personal data.

2. **a strong password and a locked screen; a backup to separate media kept off-site; up-to-date antivirus software**

   Malware still arrives on USB sticks and downloads, and disks still fail, so password, antivirus and backups apply. Network log-in auditing is a networked-PC measure.

3. **range check**

   A range check confirms a value lies within sensible limits.

4. **True**

   They overlap but differ: security blocks intruders; privacy is control over personal data; integrity is about accuracy.

5. **filters network traffic by rules, blocking unwanted connections**

   A firewall controls which network traffic is allowed in or out, by a set of rules.

6. **check**

   A check digit is recomputed from the rest and compared, catching most single-digit and transposition errors.

7. **it could be locked with ransomware; an intruder could install malware on it; a compromised system can be used to attack other systems**

   System security is the first line of defence: a compromised machine attacks, steals and can be held to ransom. Accuracy is integrity, a different property.

8. **something you have**

   A token/phone code is ”something you have”. Two-factor combines it with a password (”know”) or biometric (”are”).

9. **data can be the right format but factually wrong (e.g. ”Bob” for ”Bib”)**

   Validation checks the form, not the truth – a correctly formatted but wrong value passes.

10. **ransomware**

    Ransomware encrypts the victim’s files and demands a ransom for the decryption key.