

FBLA MS Exploring Technology*

Computer Literacy (10 test items)

1. Use browsers to navigate the web
2. Troubleshoot common computer problems (e.g., freezing, overheating, Wi-Fi connection)
3. Discuss the importance of software updates, patches, and security
4. Discuss file management
5. Identify basic computer components (e.g., CPU, GPU, RAM, SSD)
6. Discuss common software applications (e.g., word processing, spreadsheet, editing)
7. Identify basic security features (e.g., firewall, permissions, antivirus)

Computational Thinking (10 test items)

1. Discuss the purpose of functions
2. Interpret basic blocks of code
3. Write algorithms in English to solve basic problems
4. Use abstraction to simplify complex problems

Digital Citizenship, Ethics, and Safety (10 test items)

1. Describe the responsible use of social media
2. Discuss ethical considerations in online environments
3. Describe basic digital security measures (e.g., passwords, authentication, VPNs)
4. Identify common scams and attacks (e.g., phishing, scam emails, viruses)
5. Discuss basic media literacy skills (e.g., locating credible sources, creating responsible content, identifying misinformation)

* Sources: These learning outcomes are based on content from the K-12 Computer Science Standards, ISTE Standards: For Students, Ohio's Learning Standards for Technology, and Exploring Technology Education.

Networks and the Internet (10 test items)

1. Describe the basic architecture of the internet
2. Describe the equipment needed to connect to the internet
3. Describe how devices connect over a network
4. Interpret binary and hexadecimal numbers
5. Explain the importance of encryption in networking

Modern Technologies (10 test items)

1. Identify the uses of AI in business
2. Discuss the use of big data in business
3. Discuss the use of cloud services (e.g., AWS, SaaS, Google Drive)
4. Explain ethical concerns related to AI

References

- Computer Science Teachers Association. *K-12 Computer Science Standards*.
<https://members.csteachers.org/documents/en-us/46916364-83ab-4f51-85fb-06b3b25b417c/1/>
- ISTE. *ISTE Standards: For Students*. <https://iste.org/standards/students>
- Office of Superintendent of Public Instruction. *Washington Educational Technology K-12 Learning Standards*. <https://ospi.k12.wa.us/sites/default/files/2023-08/grades-6-8-edtech-standards-2018.pdf>
- Ohio Department of Education. *Ohio's Learning Standards for Technology*.
<https://education.ohio.gov/getattachment/Topics/Learning-in-Ohio/Technology/Ohios-Learning-Standards-for-Technology/The-2017-Ohio-Learning-Standards-in-Technology.pdf.aspx?lang=en-US>
- West Virginia Department of Education. *Exploring Technology Education*. <https://wvde.us/wp-content/uploads/2021/04/Exploring-Technology-Education.pdf>
- Code. <https://code.org/en-US/students>