

2026–2027 Competitive Events Guidelines

Computer Problem Solving



Computer Problem Solving challenges members to demonstrate their understanding of computer systems, including operating systems, networking, and hardware, through an objective test. This event encourages members to apply troubleshooting and analytical skills to solve technical problems commonly encountered in the IT field.



Educational
Alignments

Event Overview

Division	High School
Event Type	Individual
Event Category	Objective Test
Event Elements	50-minute test, 100-multiple choice questions

Event Information:

National Leadership Conference:

Timing Structure:

Test Duration: 50 minutes

Important Notes:

- **Internet Access:** Provided for testing time only.
- **Event Schedule Notes:**
 - Some events may begin before the Opening Session.
 - All schedules are posted in local time for the NLC host city.
 - Schedule changes are not permitted.

District Leadership Conference:

Testing will take place prior to the District Leadership Conference. Testing must occur at school under the supervision of an adult proctor. Check your DLC Call to Conference for specific instructions and deadlines.

State Leadership Conference:

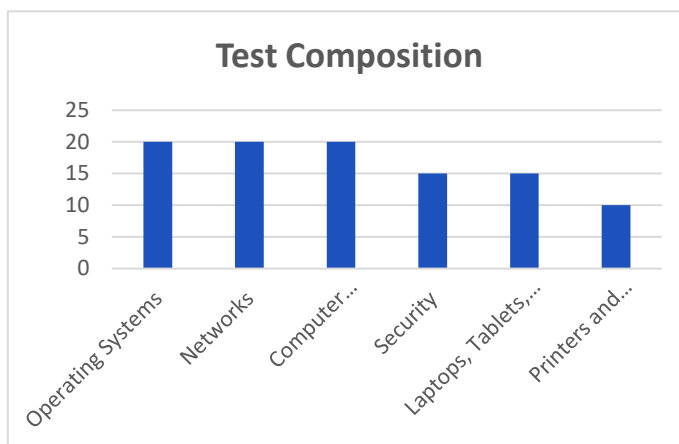
Any event with a test will have an online testing component on-site at the State Leadership Conference. Internet is provided; competitors must provide their own device. Colorado follows the NLC model for Event Administration and Scoring. Review the SLC Call to Conference for additional information.

*** Event specifics are continued below. Review the document in its entirety.

Knowledge Areas

- Operating Systems
- Networks
- Computer Hardware and Connectivity
- Security
- Laptops, Tablets, and Mobile Devices
- Printers and Peripherals

Test questions are based on the knowledge areas and objectives outlined for this event. Detailed objectives can be found in the study guide included in these guidelines.



National Leadership Conference

Required Competition Items

<u>Items Competitor Must Provide</u>	<u>Items FBLA Provides On-site</u>
• Sharpened pencil	• One piece of scratch paper per competitor

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- Fully powered device for online testing - Conference-provided nametag Photo identification - Attire that meets the FBLA Dress Code	- Internet access - Test login information (link & password provided at test check-in)
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Eligibility Requirements

To participate in FBLA competitive events at the National Leadership Conference (NLC), the following criteria must be met:

- **Membership Deadline:** FBLA national membership dues must be paid to the specific division by 11:59 p.m. Eastern Time on March 1 of the current school year.
- **Repeat Competitors:** Members may only compete in an event at the NLC more than once if they have not previously placed in the top 10 of that event at the NLC. If a member places in the top 10 of an event at the NLC, they are no longer eligible to compete in that event at future NLCs, unless the event has been modified beyond a name change. Chapter events are exempt from this procedure.
- **Conference Registration:** Members must be officially registered for the NLC and must pay the national conference registration fee to participate.
- **Official Hotel Requirement:** To be eligible to compete, competitors must stay within the official FBLA housing block.
- **State Entry Limits:** Each state may submit up to four entries per event.
- **Event Participation Limits:** Each member may participate in:
 - One individual or team event, and
 - One chapter event (e.g., *Community Service Project* or *Local Chapter Annual Business Report*).
- **Participation Requirement:** To be eligible for an award, each competitor must complete all components of the event at the National Leadership Conference.
- **Identification at Check-in:** Competitors must present valid photo identification (physical or digital) that matches the name on their conference name badge. Acceptable forms include a driver's license, passport, state-issued ID, or school ID.
- **Late Arrivals:** Competitors will be allowed to compete until such time that the results are finalized, or participation would impact the fairness and integrity of the event, as determined by Competitive Events staff. Five penalty points will be assessed for late arrivals in any competitive event.

Event Administration

- **Test Duration:** 50 minutes
- **Format:** This event consists of an online objective test that is proctored and completed on-site at the National Leadership Conference (NLC).
- **Materials:** Reference or study materials are not permitted at the testing site.
- **Calculators:** Personal calculators are not allowed; an online calculator will be available within the testing platform.
- **Question Review:** Competitors may flag questions within the testing platform for review prior to the finalization of results at the NLC.

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Scoring

- Each correct answer is worth one point.
- No points are deducted for incorrect answers.
- Tiebreakers are determined as follows: (1) The number of correct responses to 10 pre-selected tiebreaker questions will be compared. (2) If a tie remains, the number of correct responses to 20 pre-selected questions will be reviewed. (3) If a tie still remains, the competitor who completed the test in the shortest amount of time will be ranked higher.
- Results announced at the National Leadership Conference are considered official and will not be changed after the conclusion of the National Leadership Conference.

Penalty Points

- Competitors may be disqualified if they violate the Code of Conduct or the Honor Code.
- Five points are deducted if competitors do not follow the Dress Code or are late to the testing site.

Recognition

- The number of competitors will determine the number of winners. The maximum number of winners for each competitive event is 10.

Americans with Disabilities Act (ADA)

- FBLA complies with the Americans with Disabilities Act (ADA) by providing reasonable accommodations for competitors. Accommodation requests must be submitted through the conference registration system by the official registration deadline. All requests will be reviewed, and additional documentation may be required to determine eligibility and appropriate support.

Electronic Devices

- Unless approved as part of a documented accommodation, all cell phones, smartwatches, electronic devices, and headphones must be turned off and stored away before the competition begins. Visible devices during the event will be considered a violation of the FBLA Honor Code.

Sample Preparation Resources

- Official sample test items can be found in [CONNECT](#). These sample items showcase the types of questions that may be asked on the test and familiarize competitors with the multiple-choice item options.

Important FBLA Documents

- Competitors should be familiar with the [Competitive Events Operations Manual](#), [Honor Code](#), [Code of Conduct](#), and [Dress Code](#).

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Study Guide: Knowledge Areas and Objectives

Operating Systems (20 test items)

1. Explain the purpose and functions of operating systems
2. Describe primary operating system components (e.g., registry, virtual memory, file system)
3. Discuss file system characteristics and features (e.g., NTFS, FAT32, ExFAT)
4. Configure files and programs (e.g., compatibility mode, file compression, installation)
5. Discuss the characteristics of boot methods (e.g., POST, USB, Recovery)
6. Troubleshoot common operating system issues (e.g., blue screen of death, crashing, boot issues)
7. Discuss common operating system utilities (e.g., disk management, disk cleanup, system monitoring)
8. Explain considerations when upgrading an operating system
9. Use common command line tools for Windows and Linux systems (e.g., cd, mkdir, ipconfig, cat)

Networks (20 test items)

1. Explain how data is sent and received through a network (e.g., devices, protocols, IP and MAC addresses)
2. Describe different types of networks (e.g., LAN, WAN)
3. Describe the functions of common networking protocols (e.g., TCP/IP, UDP, SMTP, SSH)
4. Discuss IP addressing schemes and configurations (e.g., static, dynamic, public, private, IPv4, IPv6)
5. Describe wireless networking standards (e.g., 802.11xx) and equipment
6. Describe the characteristics of Ethernet (e.g., types, standards, capabilities)
7. Describe how DHCP and DNS assign, manage, and use IP addresses
8. Discuss the purposes and functions of common networking devices (e.g., modems, routers, switches)
9. Describe how IP and MAC addresses facilitate communication over networks

Computer Hardware and Connectivity (20 test items)

1. Describe computer components (e.g., CPU, motherboard, GPU)
2. Describe expansion cards (e.g., graphics cards, sound cards, NIC)
3. Discuss considerations when purchasing or upgrading a computer
4. Describe computer storage devices (e.g., SSD, HDD, external drives)
5. Explain peripheral cables and connectors (e.g., RJ45/11, USB, thunderbolt)
6. Describe the characteristics of network cables (e.g., cat 5e, coaxial, fiber)
7. Apply troubleshooting methodologies to identify and solve common hardware problems
8. Discuss symptoms and causes of computer power issues (e.g., lights, fans, circuit fault)

Security (15 test items)

1. Discuss the purposes and characteristics of protective measures (e.g., access control, permissions, auditing, event logging)
2. Discuss digital security threats (e.g., viruses, malware, spyware)
3. Discuss antivirus and firewall configurations
4. Discuss the danger of social engineering and ways to prevent it
5. Discuss common cyber attacks and vulnerabilities (DoS, DDoS, phishing, SQL injection, malware, etc.)
6. Discuss types of security threats (e.g., internal or external, footprinting, spoofing)

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7. Differentiate between confidentiality, integrity, and availability
8. Describe types of vulnerabilities and how to address them (e.g., non-compliance, zero-day)
9. Discuss Wi-Fi Protect Access features, versions, and characteristics

Laptops, Tablets, and Mobile Devices (15 test items)

1. Describe preventive care of laptops and mobile devices (e.g., battery, charging, heat, cleaning)
2. Discuss hardware differences between laptops, mobile devices, and desktops (e.g., RAM, CPU, efficiency, power supply)
3. Discuss cross-device data synchronization (e.g., cloud, USB, Wi-Fi)
4. Describe the capabilities, limitations, and requirements for Bluetooth
5. Troubleshoot connectivity issues on laptops and mobile devices
6. Discuss wireless connectivity methods for laptops and mobile devices (e.g., 5G, Hotspot, LTE)
7. Discuss replacement and upgrade of laptop components (e.g., RAM, adapter, battery, adapter cards)
8. Explain common hardware and power issues in laptops and mobile devices

Printers and Peripherals (10 test items)

1. Discuss printer hardware and consumables
2. Identify ports, interfaces, and cables used by printers
3. Troubleshoot printer connection issues (e.g., not responding, printer not found)
4. Determine causes of print quality issues (e.g., faded, blank, speckled, striped pages)
5. Explain basic maintenance of laser, inkjet, and thermal printers
6. Discuss printer sharing methods (e.g., PC host, network, Ethernet)
7. Customize print jobs with preferences and settings (e.g., trays, duplex, modes)

References

Association for Computing Machinery. *Information Technology Curricula 2017*.

<https://www.acm.org/binaries/content/assets/education/curricula-recommendations/it2017.pdf>

CompTIA. *CompTIA A+ Certification Exam Core 1 Objectives*. [https://partners.comptia.org/docs/default-source/resources/comptia-a-220-1101-exam-objectives-\(3-0\)](https://partners.comptia.org/docs/default-source/resources/comptia-a-220-1101-exam-objectives-(3-0))

CompTIA. *CompTIA A+ Certification Exam Core 2 Objectives*. [https://partners.comptia.org/docs/default-source/resources/comptia-a-220-1101-exam-objectives-\(3-0\)](https://partners.comptia.org/docs/default-source/resources/comptia-a-220-1101-exam-objectives-(3-0))

Codecademy. *Introduction to IT*. <https://www.codecademy.com/learn/introduction-to-it>

GFC Global. *Computer basics*. <https://edu.gcfglobal.org/en/computerbasics/basic-parts-of-a-computer/1/>

GeeksforGeeks. *Computer fundamentals*. <https://www.geeksforgeeks.org/computer-science-fundamentals/computer-fundamentals-tutorial/>