

## Your grade: 90%

Your latest: 90% • Your highest: 90% • To pass you need at least 80%. We keep your highest score.

Next item →

1. Which of the following best describes the purpose of a Cisco switch?

1 / 1 point

- ☐ Send packets between different networks (router)
- ☐ Filter IP packets (firewalls)
- ☒ To facilitate efficient data transfer between devices
- ☐ Interconnect wireless devices (access point)

✓ **Correct**

Correct! Switches are designed to facilitate efficient data transfer between devices. For more information, please review the Introduction to Switching Lecture in Module 2 Lesson 1.

2. Which type of Cisco router interface is commonly used to connect to a local area network (LAN)?

1 / 1 point

- ☒ Ethernet interface
- ☐ WAN interface
- ☐ VLAN
- ☐ Serial interface

✓ **Correct**

Correct! Ethernet Interfaces are used to connect to local networks. They are the most used interface type and are identified by names such as GigabitEthernet0/0. For more information, please review the Introduction to Cisco Router Interfaces and Configurations lecture in Module 2 Lesson 2.

3. Why is it important to configure the switch hostname during basic switch operations?

1 / 1 point

- ☒ Easier to identify and manage the switch
- ☐ Configure settings that apply to the entire switch
- ☐ To acquire access to advanced configuration commands
- ☐ To manage the switch remotely

✓ **Correct**

Correct! One of the first configurations to consider is setting the switch hostname. Use the "hostname" command followed by the desired hostname to assign a unique name to the switch. This makes it easier to identify and manage the switch in the network. For more information, please review the Configuring Basic Switch Operations lecture in Module 2 Lesson 1.

4. Which router interface configuration parameter is used for network segmentation?

1 / 1 point

- ☒ VLAN assignment
- ☐ IP address
- ☐ Speed and duplex
- ☐ Subinterface

✓ **Correct**

Correct! VLANs (Virtual Local Area Networks) are used for network segmentation. You can assign a VLAN membership to an interface using commands like "switchport access vlan 10."

5. Which of the following common routing issues occurs when packets take longer paths to reach their destinations?

1 / 1 point

- ☐ Misconfigured routes
- ☐ Routing loops
- ☐ Routing black holes

☒ Suboptimal routing

✓ **Correct**

Correct! Suboptimal routing occurs when packets take longer paths to reach their destinations than necessary, leading to increased latency and inefficient resource utilization. For more information, please review Common Routing Issues and Solutions lecture in Module 2 Lesson 2.

6. Which of these are benefits of dynamic routing?

1 / 1 point

- ☐ Low network overhead
- ☒ Ideal for large and complex networks
- ☐ Less adaptive to network changes
- ☐ Uses manual configuration of routes

✓ **Correct**

Correct! The benefits of dynamic routing include being ideal for large, complex networks, as well as automatic exchange of routing information, higher network overhead and adapting to network changes dynamically. For more information, please review the Introduction to Static and Dynamic Routing Protocols lecture in Module 2 Lesson 2.

7. Which capability of Cisco switches allows the switches to be interconnected to form a single logical switch?

1 / 1 point

- ☒ Stacking
- ☐ Redundancy
- ☐ Quality of Service
- ☐ Power over Ethernet

✓ **Correct**

Correct! Switches with stacking capabilities can be interconnected to form a single logical switch. For more information, please review the Features and Capabilities of Switches lecture in Module 2 Lesson 1.

8. What is the next step in the troubleshooting model after identifying the root cause?

0 / 1 point

- ☒ Implementing the solution
- ☐ Defining the problem
- ☐ Developing a plan of action
- ☐ Analyzing information

✗ **Incorrect**

Incorrect. For more information, please review the Cisco Troubleshooting Model lecture in Module 2 Lesson 2.

9. Layer 2 Cisco switches are capable of:

1 / 1 point

- ☐ Ensuring error-free transmission.
- ☒ Understanding and interpreting ethernet frames.
- ☐ Performing deep packet inspection.
- ☐ Exchanging packets between different networks.

✓ **Correct**

Correct! Layer 2 switches are capable of understanding and interpreting Ethernet frames. For more information, please review the Introduction to Switching Lecture in Module 2 Lesson 1.

10. The 'implement the solution' step in the troubleshooting model includes:

1 / 1 point

- ☒ Executing the plan of action and making the necessary changes to the network configuration or routing protocols.
- ☐ Collecting relevant data and information about the network topology and routing protocols in use.
- ☐ Examining the collected data to identify any patterns, anomalies or discrepancies.
- ☐ Formulating a plan to address the identified issue.



**Correct**

Correct! Implementing the solution means executing the plan of action and making the necessary changes to the network configuration or routing protocols. For more information, please review the Cisco Troubleshooting Model lecture in Module 2 Lesson 2.