Name: _____ Date: _____ Score: _____

Surfshark Speed Test

Benchmarking Surfshark connection speeds including WireGuard protocol performance, 10 Gbps server infrastructure, Quick Connect routing, and latency optimization.

SURFSHARK SPEED TEST LEARNING OVERVIEW

LEARNER
STUDENT STATUS
Network Defender Track

SECURE
CONNECTION STATUS
Shielding data packets

ON
LEAK PROTECTION
DNS & IPv6 leak protection

Welcome! This activity packet guides you through Surfshark speed benchmarks. You will explore 10 Gbps server upgrades, WireGuard throughput performance, Quick Connect algorithms, and low ping optimizations.

WORKSHEET CHECKPOINTS

- [ ] **Part 1-4: Master VPN and network security configurations.**
- [ ] **Part 5-7: Solve crossword & word search puzzles.**
- [ ] **Part 8-9: Solve case studies & cipher challenge.**
- [ ] **Part 10: Review basic & advanced FAQ pages.**
- [ ] **Part 11: Explore 10 interesting real-world facts.**
- [ ] **Bonus: Think Fast challenge.**

Open the VPN.com Best VPNs Guide

URL: https://www.vpn.com/vpn/surfshark/speed-test/

Your Surfshark Speed Learning Roadmap

- Analyze the technical architecture and configuration rules of Surfshark Speed Test.
- Configure client settings to prevent IP, DNS, and WebRTC traffic leaks.
- Compare custom pricing, trial, and performance features against standard models.

SURFSHARK SPEED GUIDE INSTRUCTIONS

Answer the multiple choice and true/false questions, complete the fill-in-the-blank sentences using the word bank, match definitions, and solve the crossword and word search puzzles. Apply your knowledge to WireGuard benchmarks, Quick Connect, and 10 Gbps ports. Finish with the Bonus Activity: Think Fast.

WIREGUARD BENCHMARKS, QUICK CONNECT & LATENCY OPTIMIZATION

Surfshark achieves fast throughput through 10 Gbps port upgrades, WireGuard protocol optimization, and Quick Connect intelligent routing algorithms that minimize gaming latency and streaming buffering.

(INTRODUCTION)

Surfshark achieves fast throughput through 10 Gbps port upgrades, WireGuard protocol optimization, and Quick Connect intelligent routing algorithms that minimize gaming latency and streaming buffering.

READ EACH CHECKPOINT CAREFULLY AND SELECT OR WRITE THE CORRECT RESPONSE.

Checkpoint 1: Multiple Choice Challenge

1. **1. What is the port connection speed on upgraded Surfshark servers?**
   - A) 100 Mbps
   - B) 1 Gbps
   - C) 10 Gbps
   - D) 100 Gbps

2. **2. Which protocol is Surfshark's fastest on platforms other than macOS?**
   - A) OpenVPN TCP
   - B) WireGuard
   - C) IKEv2
   - D) OpenVPN UDP

3. **3. What one-click feature automatically connects to the fastest server?**
   - A) Quick Connect
   - B) Fast Hop
   - C) Speed Engine
   - D) Smart Ping

4. **4. How does server physical distance impact connection latency?**
   - A) No Impact
   - B) Increases Latency
   - C) Decreases Latency
   - D) Doubles Bandwidth

5. **5. What technology connects all Surfshark servers into a fast SDN?**
   - A) ShadowMesh
   - B) Surfshark Nexus
   - C) SpeedFlow
   - D) BypassRing

Checkpoint 2: True or False Challenge

6 Question 6

6. Surfshark has upgraded its server network with 10 Gbps ports in all major locations.

○ True ○ False

7 Question 7

7. WireGuard protocol provides significantly faster download speeds than OpenVPN TCP.

○ True ○ False

8 Question 8

8. Connecting to a VPN server always increases internet download speeds by 500%.

○ True ○ False

9 Question 9

9. Selecting nearby server locations results in lower ping times for competitive gaming.

○ True ○ False

10 Question 10

10. Surfshark places bandwidth caps on accounts connecting more than 5 devices.

○ True ○ False

Checkpoint 3: Key Term Insertion

Read each sentence below and fill in the blank with the correct term from the Word Bank.

1. The modern, high-throughput protocol providing top speeds is _____ tunneling.
2. High-bandwidth server hardware is provisioned with _____ port connections.
3. Users find a fast nearby node quickly by clicking _____ mode.
4. The overall data transfer capacity of your internet link is the _____ channel.
5. Round-trip millisecond response time critical for online gaming is _____ rating.
6. The volume of data successfully transmitted per second is _____ metric.

VOCABULARY WORD BANK

BANDWIDTH LATENCY NEXUS QUICK CONNECT SERVER LOAD TEN GIGABIT THROUGHPUT WIREGUARD

Write your answers here:

1.
2.
3.
4.
5.
6.

Checkpoint 4: VPN & Network Concept Match

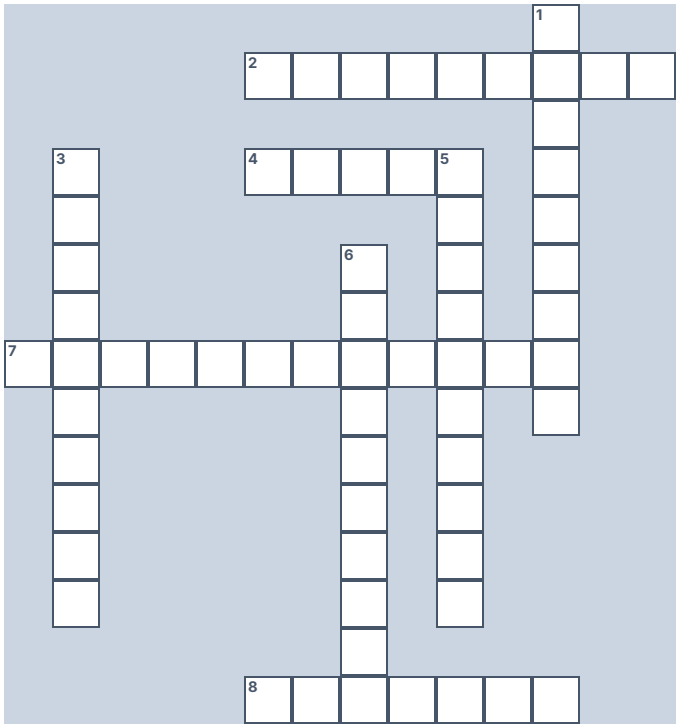
DEFINITION MATCHING

Match each vocabulary term on the left with its correct definition on the right by writing the corresponding letter (A-H) in the fillable input box.

☐	1. WIREGUARD	A	An automated algorithm connecting users to the optimal server in milliseconds.
☐	2. TEN GIGABIT	B	A lightweight, modern tunneling protocol providing maximum connection speeds.
☐	3. QUICK CONNECT	C	The total transmission capacity of an internet connection.
☐	4. BANDWIDTH	D	The real-time percentage of server computational and bandwidth capacity in use.
☐	5. LATENCY	E	A software-defined network optimizing packet routing across global server nodes.
☐	6. THROUGHPUT	F	High-capacity 10 Gbps network ports installed across major global datacenters.
☐	7. NEXUS	G	The measured volume of payload data transferred per unit time.
☐	8. SERVER LOAD	H	The time delay in milliseconds required for network packets to travel round-trip.

Checkpoint 5: Crossword Puzzle

Solve the crossword puzzle by typing letters into the active white boxes. The numbers correspond to the clues below.



ACROSS CLUES

2. A lightweight, modern tunneling protocol providing maximum connection speeds (9)

4. A software-defined network optimizing packet routing across global server nodes (5)

7. An automated algorithm connecting users to the optimal server in milliseconds (12)

8. The time delay in milliseconds required for network packets to travel round-trip (7)

DOWN CLUES

1. The total transmission capacity of an internet connection (9)

3. The measured volume of payload data transferred per unit time (10)

5. The real-time percentage of server computational and bandwidth capacity in use (10)

6. High-capacity 10 Gbps network ports installed across major global datacenters (10)

Checkpoint 5 Alternative: Accessible Crossword Clues

Screen-reader and keyboard users can type the crossword answers directly in the text fields below.

ACROSS CLUES

2 Across: A lightweight, modern tunneling protocol providing maximum connection speeds (9 letters):

4 Across: A software-defined network optimizing packet routing across global server nodes (5 letters):

7 Across: An automated algorithm connecting users to the optimal server in milliseconds (12 letters):

8 Across: The time delay in milliseconds required for network packets to travel round-trip (7 letters):

DOWN CLUES

1 Down: The total transmission capacity of an internet connection (9 letters):

3 Down: The measured volume of payload data transferred per unit time (10 letters):

5 Down: The real-time percentage of server computational and bandwidth capacity in use (10 letters):

6 Down: High-capacity 10 Gbps network ports installed across major global datacenters (10 letters):

Checkpoint 6: Hidden Word Search

Find the 8 key vocabulary terms hidden in the grid below. Words can be horizontal, vertical, or diagonal.

A H D O D F H S I D R Q M E I

R T Z S F Q V E F A W A Q O N

T D S U X E N R P T I X Q K R

I I U S D N Y V B F R S X W J

B W A R Z Y Y E L G E I M T R

A D J M L T O R H Q G Q H H Z

G N A O V G U L B Y U R Y R B

I A H L Z G J O O P A N W O C

G B M Z Y G Y A O W R U K U V

N P B N V T M D G V D D Y G U

E Q U I C K C O N N E C T H K

T R B X Z Y M R Q X I P D P A

D J L A T E N C Y Q V W W U L

J H T H G B E I K T S V R T Z

E H E S C A L Q C Z M K V R U

VOCABULARY WORD LIST

WIREGUARD TENGIGABIT QUICKCONNECT BANDWIDTH LATENCY
THROUGHPUT NEXUS SERVERLOAD

Checkpoint 6 Alternative: Accessible Vocabulary Matching

Match each of the 8 vocabulary terms from the Word Search to its correct definition by writing the letter (A-H) in the blank space.

VOCABULARY TERMS

- **A. WIREGUARD**
- **B. TENGIGABIT**
- **C. QUICKCONNECT**
- **D. BANDWIDTH**
- **E. LATENCY**
- **F. THROUGHPUT**
- **G. NEXUS**
- **H. SERVERLOAD**

DEFINITIONS & MATCH FIELDS

_____ 1. A software-defined network optimizing packet routing across global server nodes.

_____ 2. The measured volume of payload data transferred per unit time.

_____ 3. A lightweight, modern tunneling protocol providing maximum connection speeds.

_____ 4. An automated algorithm connecting users to the optimal server in milliseconds.

_____ 5. High-capacity 10 Gbps network ports installed across major global datacenters.

_____ 6. The real-time percentage of server computational and bandwidth capacity in use.

_____ 7. The time delay in milliseconds required for network packets to travel round-trip.

_____ 8. The total transmission capacity of an internet connection.

Checkpoint 7: Scrambled Word Challenge

Unscramble the letters below to reveal key Virtual Private Network (VPN) concepts and terms. Write your answers in the input boxes provided.

1. UGEIWARDR
2. TUKCQECINN OC
3. ELNYTCA
4. XSUNE
5. BGTEGAITIN
6. TDADIBWHN
7. HOTHGPUTUR
8. AVRDSEELOR

Bonus Activity: Think Fast

3 ITEMS FROM EACH CATEGORY. FIRST PERSON TO COMPLETE THE LIST WINS.

1	Units for measuring internet speed			
2	Things you do when a video stutters			
3	Words related to speed			
4	Things that can slow a VPN down			
5	Data a VPN should never store			
6	Tips for getting a lower ping			
7	Things to check before buying a VPN			
8	Devices you would install Surfshark on			
9	Apps you would use together with Surfshark			
10	Streaming services you watch			
11	VPN protocols you know			
12	VPN services other than Surfshark			
13	Activities that need high speed			
14	Games or apps that need low latency			
15	Ways to test your internet speed			

Checkpoint 8: VPN & Network Case Studies

Apply the concepts you have learned to solve the real-world scenarios below.

CASE STUDY 1: 4K ULTRA-HD STREAMING OPTIMIZATION

👷

Scenario: A family streams 4K video content on 3 smart TVs concurrently and experiences occasional buffering.

Discussion Question: Which protocol and server selection settings should be applied to maximize streaming throughput?

CASE STUDY 2: LOW-LATENCY ESPORTS GAMING

👷

Scenario: A competitive gamer wants VPN DDoS protection without suffering high ping spikes in multiplayer matches.

Discussion Question: How should the gamer select a Surfshark server location to ensure the lowest latency?

Checkpoint 9: Decrypting the Cipher

A network engineer secures routing channels and client tunnels. Use the Letter-to-Number key below to decrypt the message by writing the matching letters in the blank spaces.

LETTER-TO-NUMBER ENCRYPTION KEY

A=1 B=2 C=3 D=4 E=5 F=6 G=7 H=8 I=9 J=10 K=11 L=12 M=13

N=14 O=15 P=16 Q=17 R=18 S=19 T=20 U=21 V=22 W=23 X=24 Y=25 Z=26

23	9	18	5	7	21	1	18	4		16	18	15	20	15	3	15	12
	4	5	12	9	22	5	18	19		6	1	19	20	5	19	20	
4	15	23	14	12	15	1	4		16	5	18	6	15	18	13	1	14	3	5
								19	16	5	5	4	19				

Decoded message:

TIP: EACH NUMBER REPRESENTS THE POSITION OF THAT LETTER IN THE ALPHABET (E.G. 1 = A, 2 = B, 26 = Z).

Checkpoint 10: Basic VPN FAQs (Part A)

Review the most common questions and answers regarding Virtual Private Networks (VPNs) and tunneling.

Q1: What speeds can I expect with Surfshark?

In VPN.com's speed tests, Surfshark averaged 695 Mbps on a gigabit line (as of September 2026). [7]

Q2: What is the fastest protocol on Surfshark?

WireGuard is fastest on most devices; on macOS, Surfshark's Dausos protocol is faster.

Q3: Does Surfshark use 10 Gbps servers?

Yes, Surfshark has upgraded its entire primary server network with 10 Gbps port interfaces. [8]

Q4: How does Quick Connect choose a server?

Quick Connect evaluates real-time latency, physical distance, and server load to select the fastest node.

Q5: Does Surfshark slow down internet speed?

All VPNs add some overhead from encryption and distance, but 10 Gbps ports help limit the loss.

Checkpoint 10: Basic VPN FAQs (Part B)

Review the most common questions and answers regarding Virtual Private Networks (VPNs) and tunneling.

Q6: Can Surfshark increase my connection speed?

If your ISP throttles specific traffic like streaming or torrents, Surfshark will bypass the throttle.

Q7: How do I lower ping while gaming with Surfshark?

Connect to a server located in the same city or region as the game's official multiplayer servers.

Q8: Does server load affect connection speed?

Yes, servers with lower load percentages generally provide faster and more consistent speeds.

Q9: Is speed limited when connecting multiple devices?

No, Surfshark does not throttle bandwidth or limit speeds regardless of connected device count.

Q10: Why is OpenVPN TCP slower than WireGuard?

OpenVPN TCP requires packet delivery confirmations and heavier CPU cryptography overhead.

Checkpoint 10: Advanced VPN FAQs (Part C)

Explore advanced technical aspects of VPN tunneling protocols, mobile client integrations, and enterprise deployment.

Q1: How does Surfshark Nexus improve network speed?

Nexus optimizes routing through a software-defined mesh network, avoiding congested internet transit paths. [4]

Q2: Does Surfshark support MTU optimization for WireGuard?

Surfshark doesn't document this; in general, a correct MTU size prevents fragmentation.

Q3: What is the speed impact of MultiHop (Double VPN)?

MultiHop routes through two servers, adding latency; VPN.com measured a 20-40% speed drop.

Q4: How does CleanWeb ad blocking improve browser speed?

By blocking ad scripts and tracking pixels, web pages require significantly less data download.

Q5: Can I test Surfshark speeds on Linux using CLI tools?

Yes, you can run speedtest-cli or iperf3 while connected through the Surfshark Linux CLI.

Checkpoint 10: Advanced VPN FAQs (Part D)

Explore advanced technical aspects of VPN tunneling protocols, mobile client integrations, and enterprise deployment.

Q6: Does Bypasser help preserve bandwidth for heavy apps?

Yes, routing non-critical high-bandwidth applications outside the VPN frees up tunnel capacity.

Q7: How does IPv6 traffic handling affect connection throughput?

Surfshark safely manages IPv6 traffic without speed degradation across its global infrastructure.

Q8: What tier-1 bandwidth transit providers does Surfshark use?

Surfshark does not publish its provider list; it says all servers have 10 Gbps ports.

Q9: Does using Static IP servers result in faster speeds?

Static IP servers keep the same IP; speed still depends on distance and server load.

Q10: Can router VPN installations achieve full gigabit speeds?

Only high-performance routers with modern multi-core ARM CPUs can maintain 100+ Mbps VPN speeds.

Part 11: 10 Real-World VPN Facts & Insights

Review real-world facts regarding VPN encryption speeds, protocol audits, mobile connectivity, and enterprise remote work.

1. VPN INSIGHT

1. Surfshark server network infrastructure features high-capacity 10 Gbps port connections globally. [1]

2. VPN INSIGHT

2. In VPN.com's speed tests, nearby WireGuard servers held above 600 Mbps on gigabit fiber. [7]

3. VPN INSIGHT

3. Quick Connect calculates geographic distance, routing latency, and server utilization in real time.

4. VPN INSIGHT

4. Surfshark enforces zero bandwidth limits, allowing unlimited downloading and streaming data volume.

5. VPN INSIGHT

5. Bypasser split tunneling optimizes connection speed by directing high-bandwidth apps locally. [6]

6. VPN INSIGHT

6. CleanWeb speeds up page loading by preventing third-party ad banners and trackers from downloading.

7. VPN INSIGHT

7. Nexus SDN routing directs traffic across the fastest available inter-server fiber backbone links.

8. VPN INSIGHT

8. Connecting to proximate server nodes preserves optimal ping times for competitive multiplayer games.

9. VPN INSIGHT

9. All Surfshark servers are RAM-only, and in September 2026 it began testing a few 100 Gbps servers in Amsterdam. [3]

10. VPN INSIGHT

10. Surfshark runs over 4,500 servers with 10 Gbps ports in 100 countries (as of September 2026). [1]

Technical References & Sources

The study guide and interactive puzzles are compiled from global technical standards, specifications, and regulatory frameworks.

SCHOLARLY & INDUSTRY REFERENCES

[1] Surfshark. (n.d.). Surfshark VPN servers: location list.
https://surfshark.com/servers

[2] Surfshark. (n.d.). Surfshark VPN protocols: Dausos, WireGuard, OpenVPN, IKEv2.
https://surfshark.com/features/surfshark-vpn-protocols

[3] Surfshark. (n.d.). What is Surfshark: about us, our products, & our story.
https://surfshark.com/about-us

[4] Surfshark. (n.d.). Surfshark Nexus technology – elevating VPNs to the next level.
https://surfshark.com/features/nexus

[5] Surfshark. (n.d.). What is double VPN and when to use it.
https://surfshark.com/features/multihop

[6] Surfshark. (n.d.). What is VPN split tunneling and how does it work?
https://surfshark.com/features/bypasser

[7] VPN.com. (n.d.). Surfshark Review: Unlimited Devices, Unbeatable Value.
https://www.vpn.com/vpn/surfshark/

[8] Surfshark. (2024). Surfshark upgraded to 10Gbps servers.
https://surfshark.com/blog/surfshark-upgrades-to-10gbps-servers

[9] Surfshark. (2026). A new standard for VPN speed: introducing 100Gbps servers.
https://surfshark.com/blog/surfshark-launches-100gbps-servers

[10] Bonica, R., et al. (2020). RFC 8900: IP Fragmentation Considered Fragile.
https://www.rfc-editor.org/rfc/rfc8900

Answer Key: Checkpoint 1 - Multiple Choice

1 **Server Port Connection Speed** PORT BANDWIDTH — **Correct Answer: C**

TEACHING NOTE

Surfshark upgraded its global server network to 10 Gbps network ports across all key locations to reduce bandwidth bottlenecks during peak load.

2 **Question 2** — **Correct Answer: B**

TEACHING NOTE

WireGuard is Surfshark's fastest protocol on most platforms; only on macOS is the newer Dausos protocol faster.

3 **One-Click Quick Connect** SERVER OPTIMIZATION — **Correct Answer: A**

TEACHING NOTE

Quick Connect evaluates latency, geographic distance, and server load in real-time to connect users to the optimal high-speed server automatically.

4 **Geographic Distance Latency** DISTANCE LATENCY — **Correct Answer: B**

TEACHING NOTE

Greater physical distance between user and server increases fiber transit delay (RTT ping), directly increasing latency across the tunnel.

5 **Software-Defined Nexus Network** NEXUS SDN — **Correct Answer: B**

TEACHING NOTE

Surfshark Nexus connects the entire server fleet into an interconnected Software-Defined Network (SDN), optimizing traffic routing dynamically.

Answer Key: Checkpoint 2 - True or False

6 Question 6

Correct Answer: True

TEACHING NOTE

Surfshark says its servers are equipped with 10 Gbps ports, which supports fast speeds on gigabit connections.

7 WireGuard vs OpenVPN Performance

PROTOCOL COMPARISON

Correct Answer: True

TEACHING NOTE

WireGuard's lightweight codebase delivers significantly higher download throughput and lower packet latency than OpenVPN TCP.

8 VPN Speed Multiplication Myth

SPEED MECHANICS

Correct Answer: False

TEACHING NOTE

A VPN adds encryption overhead and transit distance; it cannot multiply baseline ISP bandwidth unless bypassing active ISP throttling.

9 Server Proximity for Gaming

GAMING LATENCY

Correct Answer: True

TEACHING NOTE

Connecting to proximate VPN servers minimizes round-trip ping times, providing low-latency performance for competitive online gaming.

10 Uncapped Multi-Device Bandwidth

FAIR USE POLICY

Correct Answer: False

TEACHING NOTE

Surfshark enforces zero bandwidth or speed caps, allowing unlimited devices to stream, download, and browse simultaneously.

Vocabulary Keys & Grading Rubric

Instructor Grading Rubric: Award 1 point for each correct matching (8 points total) and context term (6 points total).

CHECKPOINT 4: CONCEPT MATCH KEY

B 1. WIREGUARD	F 2. TEN GIGABIT	A 3. QUICK CONNECT	C 4. BANDWIDTH
H 5. LATENCY	G 6. THROUGHPUT	E 7. NEXUS	D 8. SERVER LOAD

CHECKPOINT 3: KEY TERM KEY

1 WIREGUARD	2 TEN GIGABIT	3 QUICK CONNECT	4 BANDWIDTH
5 LATENCY	6 THROUGHPUT		

CHECKPOINT 6 ALTERNATIVE: VOCABULARY MATCH KEY

1 G – NEXUS	2 F – THROUGHPUT	3 A – WIREGUARD	4 C – QUICKCONNECT
5 B – TENGIGABIT	6 H – SERVERLOAD	7 E – LATENCY	8 D – BANDWIDTH

DISCUSSION NOTES FOR INSTRUCTORS

Key Terms:
Check that students can explain WIREGUARD, TEN GIGABIT and QUICK CONNECT in their own words and give an example of each.

Case Studies:
Ask students to support their recommendations with facts from the worksheet rather than assumptions.

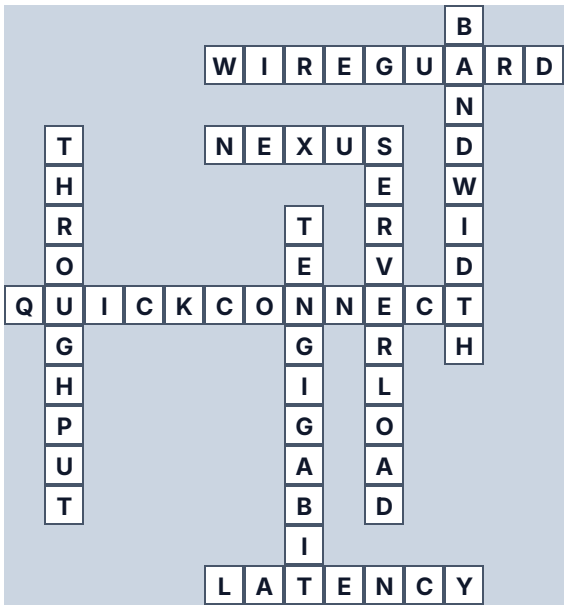
Source Evaluation:
Have students verify at least one claim against the worksheet references, and discuss why figures, prices and rules can change over time.

Puzzles Keys & Instructor Notes

WORD SEARCH SOLUTION

A	H	D	O	D	F	H	S	I	D	R	Q	M	E	I
R	T	Z	S	F	Q	V	E	F	A	W	A	Q	O	N
T	D	S	U	X	E	N	R	P	T	I	X	Q	K	R
I	I	U	S	D	N	Y	V	B	F	R	S	X	W	J
B	W	A	R	Z	Y	Y	E	L	G	E	I	M	T	R
A	D	J	M	L	T	O	R	H	Q	G	Q	H	H	Z
G	N	A	O	V	G	U	L	B	Y	U	R	Y	R	B
I	A	H	L	Z	G	J	O	O	P	A	N	W	O	C
G	B	M	Z	Y	G	Y	A	O	W	R	U	K	U	V
N	P	B	N	V	T	M	D	G	V	D	D	Y	G	U
E	Q	U	I	C	K	C	O	N	N	E	C	T	H	K
T	R	B	X	Z	Y	M	R	Q	X	I	P	D	P	A
D	J	L	A	T	E	N	C	Y	Q	V	W	W	U	L
J	H	T	H	G	B	E	I	K	T	S	V	R	T	Z
E	H	E	S	C	A	L	Q	C	Z	M	K	V	R	U

CROSSWORD SOLUTION



INSTRUCTOR GUIDE FOR CROSSWORD SOLUTIONS

ACROSS CLUES

2 Across: WIREGUARD A lightweight, modern tunneling protocol providing maximum connection speeds (9 letters)

4 Across: NEXUS A software-defined network optimizing packet routing across global server nodes (5 letters)

7 Across: QUICKCONNECT An automated algorithm connecting users to the optimal server in milliseconds (12 letters)

8 Across: LATENCY The time delay in milliseconds required for network packets to travel round-trip (7 letters)

DOWN CLUES

1 Down: BANDWIDTH The total transmission capacity of an internet connection (9 letters)

3 Down: THROUGHPUT The measured volume of payload data transferred per unit time (10 letters)

5 Down: SERVERLOAD The real-time percentage of server computational and bandwidth capacity in use (10 letters)

6 Down: TENGIGABIT High-capacity 10 Gbps network ports installed across major global datacenters (10 letters)

Scrambled Words & Cipher Solution Key

Grading key for the vocabulary word unscramble activity and Secret Cipher Challenge.

WORD UNSCRAMBLE KEY

1. UGEIWARDR — **WIREGUARD**
2. TUKCQECINNOC — **QUICKCONNECT**
3. ELNYTCA — **LATENCY**
4. XSUNE — **NEXUS**
5. BGTEGAITIN — **TENGIGABIT**
6. TDADIBWHN — **BANDWIDTH**
7. HOTHGPUTUR — **THROUGHPUT**
8. AVRDSEELOR — **SERVERLOAD**

SECRET CIPHER CHALLENGE KEY

"WIREGUARD PROTOCOL DELIVERS FASTEST DOWNLOAD PERFORMANCE SPEEDS"

Case Studies Solution Key

A CASE STUDY 1: 4K ULTRA-HD STREAMING OPTIMIZATION

Instructor Solution

GRADING RUBRIC & SOLUTION GUIDELINES

- Scenario Analysis: A family streams 4K video content on 3 smart TVs concurrently and experiences occasional buffering.
- Focus Question: Which protocol and server selection settings should be applied to maximize streaming throughput?
- Recommended Strategy & Solution: Use WireGuard on every device and Quick Connect to reach the nearest low-load 10 Gbps server.

B CASE STUDY 2: LOW-LATENCY ESPORTS GAMING

Instructor Solution

GRADING RUBRIC & SOLUTION GUIDELINES

- Scenario Analysis: A competitive gamer wants VPN DDoS protection without suffering high ping spikes in multiplayer matches.
- Focus Question: How should the gamer select a Surfshark server location to ensure the lowest latency?
- Recommended Strategy & Solution: Pick a WireGuard server in the same city as the game server to cut routing hops and ping.