



Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

✓ TCP vs UDP ✓ Port numbers ✓ Three-way handshake ✓ Reliability mechanisms



Section A • Concept Check

• BEGINNER

4 × 1 = 4

1

Reliable, ordered delivery is:

☐ A. TCP ☐ B. UDP ☐ C. ICMP ☐ D. ARP

3

The handshake is:

☐ A. SYN, SYN-ACK, ACK ☐ B. HI, YES, GO

☐ C. REQ, REP, FIN ☐ D. 1,2,3,4

2

Low-overhead, connectionless is:

☐ A. UDP ☐ B. TCP ☐ C. FTP ☐ D. SSH

4

Well-known ports range:

☐ A. 0-1023 ☐ B. 1024-2000 ☐ C. 5000+

☐ D. any



Section B • Problem Solving

• INTERMEDIATE

2 + 3×3 = 11

5

HTTP(S) uses ports 80 and _____

6

DNS uses port _____

7

Why does DNS use UDP mostly but TCP sometimes?

8

What do sequence numbers achieve?

9

TCP vs UDP for online gaming – why UDP?



Section C • Challenge

• CHALLENGE

5

10

What is a socket 192.168.1.5:443?

Reflection — the most useful thing I learned: _____

A ___/4 B ___/11 C ___/5 Total ___/20

Teacher's Signature

Parent's Signature

✂ ANSWER KEY – FOLD OR CUT BEFORE HANDING OUT

1-A 2-A 3-A 4-A | 5 443 6 53 7 = Small fast queries via UDP; large/zone transfers via TCP

8 = Reordering and loss detection 9 = Fresh data beats late retransmits; low latency wins | 10

= Endpoint = IP + port identifying one conversation