



Address Resolution

Chapter: CCNA Networking • Level ★★★ • Time: 30 min

SCORE

___ / 20

Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

✓ Why ARP exists ✓ ARP request/reply ✓ ARP table ✓ IPv6 neighbor discovery



Section A • Concept Check

• BEGINNER

4 × 1 = 4

- 1 ARP maps:

☐ A. IPv4 to MAC ☐ B. MAC to port

☐ C. IP to DNS ☐ D. URL to IP
- 2 An ARP request is sent as:

☐ A. broadcast ☐ B. unicast ☐ C. multicast only

☐ D. email
- 3 The ARP reply is sent as:

☐ A. unicast ☐ B. broadcast ☐ C. flood

☐ D. anycast
- 4 IPv6 replaces ARP with:

☐ A. Neighbor Discovery (NDP) ☐ B. ARPv6

☐ C. RARP ☐ D. DNSSEC



Section B • Problem Solving

• INTERMEDIATE

2 + 3×3 = 11

- 5 show ip _____ displays the ARP cache (Windows: arp -a).
- 6 ARP spoofing is a _____ attack risk.
- 7 Walk through pinging a local host for the first time.

- 8 Why is ARP a security weak spot?

- 9 What is a gratuitous ARP?



Section C • Challenge

• CHALLENGE

5

- 10 ARP vs DNS in one line?

🧠 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 arp 6 man-in-the-middle/security 7 = No ARP entry - broadcast ARP request - reply with MAC - frame sent - ping proceeds 8 = Replies are unauthenticated - spoofing redirects traffic 9 = Unsolicited announcement of own IP-MAC (updates/dup detection) | 10 = DNS: name to IP; ARP: IP to MAC on the local link

