



Build a Small Network

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

SCORE

___ / 20

Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

✓ Small network design ✓ Device selection ✓ Verification toolkit ✓ Troubleshooting methodology



Section A • Concept Check

• BEGINNER

4 × 1 = 4

- 1 First troubleshooting step:

☐ A. identify the problem ☐ B. reboot everything

☐ C. replace cables ☐ D. reinstall OS
- 2 Verify the local stack with:

☐ A. ping 127.0.0.1 ☐ B. ping 8.8.8.8 ☐ C. tracer

☐ D. arp -d
- 3 Redundancy in small networks adds:

☐ A. availability ☐ B. latency

☐ C. cost only, no benefit ☐ D. loops always
- 4 Growing needs should drive:

☐ A. scalable design choices

☐ B. random purchases ☐ C. more cables only

☐ D. colors



Section B • Problem Solving

• INTERMEDIATE

2 + 3×3 = 11

- 5 ipconfig shows a host's IP, mask and _____
- 6 Bottom-up troubleshooting starts at the _____ layer.
- 7 User cannot reach the web – your first 3 checks?

- 8 ping IP works, browsing fails – diagnosis?

- 9 Name the 6 troubleshooting steps.



Section C • Challenge

• CHALLENGE

5

- 10 What to consider when picking a small-biz router?

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 gateway 6 physical 7 = Local IP/gateway (ipconfig), ping gateway, ping 8.8.8.8 then DNS name 8 = DNS problem 9 = Identify, theorize, test, plan+implement, verify, document | 10 = Throughput, ports, security features, growth headroom

