TROUBLESHOOTING ESSENTIALS · COURSE TOOLKIT

Problem Investigation Worksheet and 5W1H Question Guide

> **Toolkit 2 of 10** · Problem Investigation Worksheet and 5W1H Question Guide · Based on Chapter 4 (§4.1–4.6) of Dr. Tahseen Al Doori's *Troubleshooting Essentials*, University Edition (2026). The 5W1H questions and problem statement template are the author's; the worksheet layout is the course's.

How to use this sheet

Use this worksheet during **Step 1: Identify the problem**, before you form any theory. Work through Part 1 with the user, gather the evidence in Part 2, then combine everything into the problem statement in Part 3. Do not attempt a fix until you can write that statement clearly. Keep the completed sheet with your problem log.

Interview tips: listen fully and acknowledge the impact on the user; avoid jargon; ask **open questions first** ("What were you doing when it happened?"), then **closed questions** to confirm details ("Did you see an error message?"); ask the user to **demonstrate** the problem where possible. Treat any diagnosis the user offers as a theory to test, not a fact.

Part 1 — The 5W1H questions

QUESTION	WHAT TO ASK	PROMPTS	ANSWER
What	What exactly happens? What should happen instead?	Exact symptom; expected behaviour; any error text	
When	When did it start? Always or sometimes?	Date and time first noticed; time of day; how often	
Where	Which device, room, site, network or application?	Device name; location; wired or Wi-Fi; one application or all	
Who	Who is affected: one person, a team, everyone?	Other users on the same device or system; other sites	
Which	Which changes happened just before?	Updates, installations, new hardware, moved equipment, password changes, power interruptions, new staff	
How	How is it triggered? Can it be repeated?	Steps to reproduce; same device and account; conditions	

When the user says "nothing changed"

Ask specific questions instead. Tick each one asked and note the answer.

✓	QUESTION	ANSWER
☐	Was anything installed or updated?	
☐	Was the device moved or cleaned?	
☐	Did the power go off?	
☐	Has anyone else used it?	
☐	Has a password been changed recently?	
☐	Has anything new been connected?	

Part 2 — Evidence collected

EVIDENCE TYPE	WHAT TO RECORD	RECORDED
Exact error messages	Word for word, with any code; screenshot or photograph	
Physical symptoms	Indicator lights, beep codes, sounds, smells, heat, vibration	
Logs and history	Event log entries at the time of the fault; update history; recent installations	
Scope	One user or many; one device or all; one site or every site	
Recent changes	Anything listed under Which	
Baseline comparison	How the system normally looks and performs; differences from an identical working system	

Part 3 — Reproduction and intermittent faults

ITEM	ENTRY
Can the fault be reproduced on demand? (yes / no)	
Steps used to reproduce it	
If not reproducible: occurrence log started? (date)	

Occurrence log (use for intermittent faults; a pattern usually appears over several occurrences):

#	DATE	TIME	ACTIVITY AT THE TIME	CONDITIONS (POWER, NETWORK, LOCATION, TEMPERATURE, OTHER USERS)
1				
2				
3				
4				
5				
6				

Part 4 — The problem statement

Combine your answers into one or two sentences that are **specific, factual and testable**. The book's template:

> Since [when], [who] cannot [what] on [where]. It happens [always / intermittently] when [how]. The most recent change was [which]. The error shown is "[exact message]".

TEMPLATE SLOT	YOUR ENTRY
Since [when]	
[who]	
cannot [what]	
on [where]	
It happens [always / intermittently]	
when [how]	
The most recent change was [which]	
The error shown is "[exact message]"	

Final problem statement:

Self-check: Does the statement contain a guess presented as fact? If so, remove it: causes belong in Step 2.

Sources

- Dr. Tahseen Al Doori — *Troubleshooting Essentials*, University Edition (2026), §2.3 (practitioner tip), §4.1–4.6