Learner Full Name: _____ **School:** _____

Assigned Workstation: _____ **Class:** _____

Session 9: Fix-It Day: Troubleshooting

Every computer user meets problems: no sound, no internet, a frozen screen. The difference between a beginner and a confident user is not that the confident one never has problems. It is that they know **what to try**. Finding and fixing a problem step by step is called **troubleshooting**. Today you become the Hub's fix-it team.

1. Plain Talk: Think Like a Fitter at Suame Magazine

When a taxi stops working, a good fitter does not take the whole engine apart first. They ask what happened, check the easy things (is there fuel? is the battery loose?), and only then go deeper. Most computer problems also have **easy** causes: a loose cable, a switch turned off, a wrong setting. So we always check in the same order, from easiest to hardest.

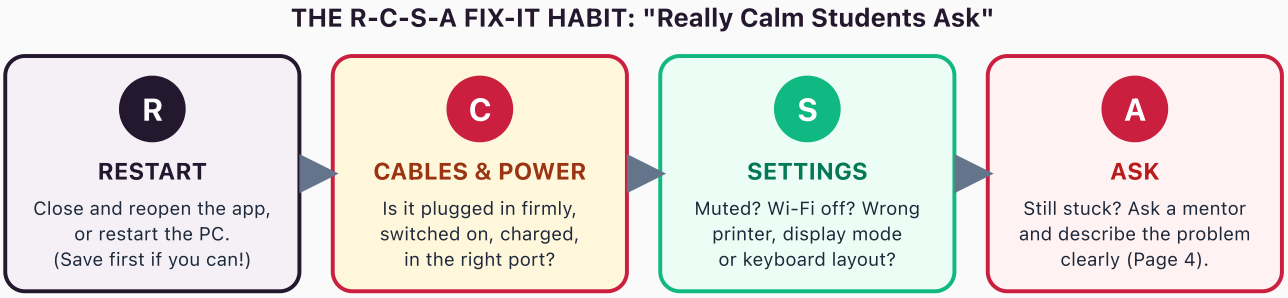

Figure 9.0: The fix-it habit. Easy checks first, then deeper ones, then ask for help.

💡 **"IT WON'T TURN ON" SKIPS STRAIGHT TO C**

You cannot restart a computer that will not start! If nothing lights up, begin with step C: cables and power.

🧯 **FIX-IT SAFETY RULES**

- **Never open the computer case** or a monitor, charger or power strip. There is mains electricity inside that can kill.
- **Never touch wall sockets, bare wires or anything wet.** Smell burning, see sparks or smoke? Step away and **tell an adult at once**.
- Only plug and unplug low-power cables (USB, HDMI, audio). Leave the mains plugs to an adult.

FIX-IT CARDS 1: SOUND, INTERNET, PRINTER, DISPLAY

Problem	Check (in R-C-S-A order)	How to fix it
🔇 **No sound**	R: close and reopen the video. C: headset or speaker plugged in firmly, in the green jack, switched on? S: muted? Volume at 0? Wrong output device? Is the video player itself muted?	Click the **speaker icon** on the taskbar: unmute and turn the volume up, then click **>** and choose the right device (Session 7). Check the player's own speaker button too.
🌐 **No internet**	C: Ethernet cable clicked in at both ends? Router lights on? S: Wi-Fi off? **Airplane mode** on? Connected to the right network? Is the hotspot's data bundle finished?	Click the **network icon** (bottom right): turn Airplane mode **off**, turn Wi-Fi **on** and connect to the right network (Session 8). Still nothing? Try another website, then ask.
🖨️ **Printer offline or not printing**	C: printer switched on, cable in, paper in the tray, no red light or jam? S: did you pick the right printer in the print dialog?	Load paper (never pull out jammed paper: tell an adult). Choose the correct printer. See waiting jobs in **Settings → Bluetooth & devices → Printers & scanners** → the printer → **Open print queue**.
🖥️ **Wrong display or blank projector**	C: projector or monitor on? Cable in at both ends? Projector set to the right input (HDMI or VGA)? S: wrong **Windows + P** mode? Brightness at 0?	Press `Windows` + `P` and choose **Duplicate**. Turn the brightness up in Settings → System → Display.

Read the Network Icon

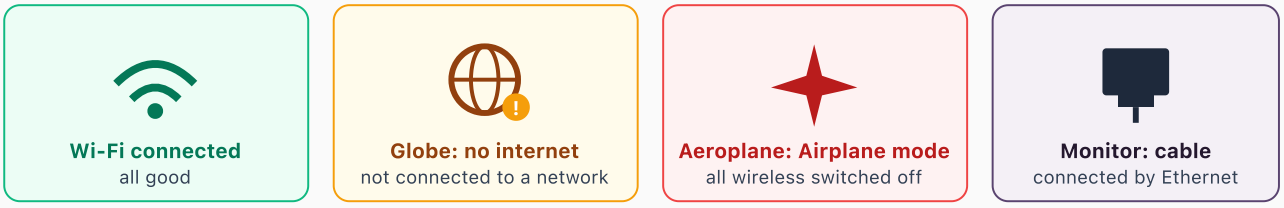

Figure 9.1: The network icon on the taskbar tells you a lot. Icons may look slightly different on your version of Windows.

Your turn: Akosua sees an aeroplane where the Wi-Fi icon should be. What is wrong, and what should she click?

FIX-IT CARDS 2: KEYBOARD, MOUSE & MORE

Problem	Check	How to fix it
⌨️ **Keyboard types the wrong things**	S: everything in CAPITALS? (Caps Lock) S: number pad makes arrows, not numbers? (Num Lock) S: **@** and **"** swapped, or **a** comes out when you press **q**? (wrong layout)	Press `Caps Lock` once (Session 2). Press `Num Lock` once. For the layout, look at the letters beside the clock (ENG UK, ENG US, FRA) and press `Windows` + `Space` to switch back.
🖱️ **Mouse pointer will not move**	C: wireless: battery flat? switch underneath on? tiny USB receiver plugged in? Wired: cable firm? S: laptop touchpad switched off?	Change or charge the battery. Replug the receiver or cable in another USB port. Touchpad: **Settings → Bluetooth & devices → Touchpad** → On (use the Tab and arrow keys if you have no mouse).
🪟 **App frozen** ("Not responding")	R: wait 30 seconds. Then close it.	`Ctrl` + `Shift` + `Esc` → Task Manager → click the app → **End task** (Session 8). Reopen it. Whole PC frozen? Restart.
📦 **Drive full** (red bar, "low disk space")	S: File Explorer → This PC: how much is free? What is big?	Empty the Recycle Bin. Move videos to a pen drive or the cloud (keep two copies!). **Settings → System → Storage → Temporary files** → Remove files.
🔌 **"It won't turn on"**	C: power strip or UPS switched on? Cable firm at the back of the PC? Laptop charged? Is it the *monitor* that is off, not the PC?	Ask an adult to check the wall socket, power strip and UPS. Press the monitor's own power button. Charge a laptop for 15 minutes, then try again.

Follow the Power

Look for a light at each stop. Where the lights stop is where the problem is. Adults handle steps 1 and 2.

Figure 9.2: Follow the power from the wall to the screen. A UPS keeps a PC running for a few minutes in a power cut, but only if it is switched on and charged.

STEP A: HOW TO ASK FOR HELP WELL

1. "It's Not Working!" Is Not Enough

When you reach step A, the helper cannot see inside your head. A clear description saves time and gets you fixed faster. Give the helper these four things:

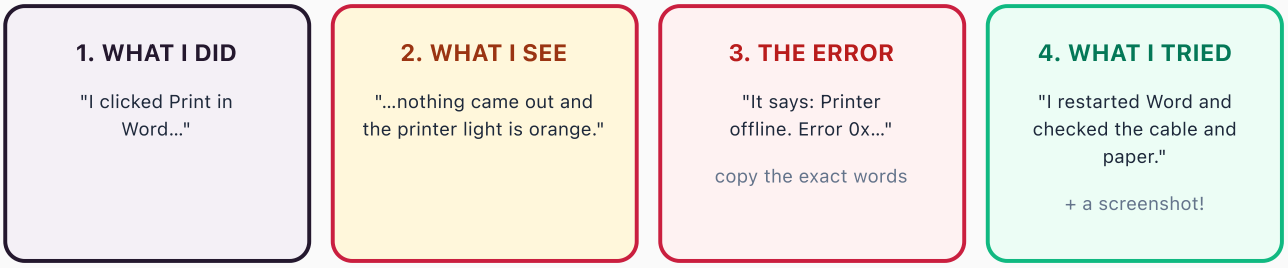

Figure 9.3: A good help request: what I did, what I see, the exact error message, and what I already tried.

📸 A SCREENSHOT IS WORTH A HUNDRED WORDS

Error message on the screen? Take a screenshot with `Windows` + `Shift` + `S` (Session 8) before you close it. Then the helper sees exactly what you saw, even if the message disappears.

2. Your Turn: Make It Clear

Selasi tells the mentor: *"Please, the computer is spoilt!"* In fact, he opened YouTube, the video plays but he hears nothing, he checked the volume is up, and there is no error message. Rewrite his help request using the four parts:

Part	Selasi's better request
1. What I did	----------
2. What I see	----------
3. The error	----------
4. What I tried	----------

What should Selasi check next, before he asks?

GUIDED HANDS-ON LAB: THE FIX-IT CHALLENGE

1. Warm-Up: Fix-It Workshop

Open the **Fix-It Workshop** 3D lab on your session page. A computer has problems: no sound, no internet, a frozen app, a full drive and more. Follow the fix-it habit to find and fix each one, and write a clear help request for the one you cannot fix. Say the step out loud each time: *"R... C... S..."*

2. Lab Mission: Fix the Planted Faults

Your mentor has secretly put a fault on each computer. Move to each station, find the fault and fix it. **Rules:** use R-C-S-A in order, test after every step, never touch mains plugs, and put everything back the way it should be.

1. **Notice:** what is wrong? Write the symptom (what you see or hear) in the fault log.
2. **R-C-S-A:** try each step in order. Which step fixed it? Write R, C, S or A.
3. **Prove it:** show the mentor or the next team that it works, and get their initials.

PC	What was wrong (symptom)	Step (R/C/S/A)	What I did to fix it	Checked by
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The trickiest fault was... and how I found it:

SESSION 9 REVIEW & VERIFICATION

1. What Is the Most Likely Cause?

What you see	Most likely cause (choose one)
1. Every letter Naa types comes out as a CAPITAL.	◯ The drive is full ◯ Caps Lock is on ◯ The keyboard is broken
2. The PC's light is on and you hear the fan, but the screen is black.	◯ The monitor is off or its cable is loose ◯ Wi-Fi is off ◯ The mouse battery is flat
3. Kofi's wireless mouse worked yesterday; today the pointer will not move.	◯ The battery is flat ◯ Windows needs an update ◯ The printer is offline

2. Written Review Questions

Question 1: Write the four steps of the fix-it habit in order, with one example for each.

Question 2: You smell burning from behind a PC. What do you do, and what must you never do?

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3. Self-Assessment & Mentor Sign-Off

Troubleshooting Competency	With Help	Almost Alone	All By Myself!
1. I can use the R-C-S-A fix-it habit in order.	◯	◯	◯
2. I can fix no sound, no internet and a frozen app.	◯	◯	◯
3. I can fix keyboard, mouse, display and printer problems.	◯	◯	◯
4. I can describe a problem clearly and stay safe.	◯	◯	◯

Mentor Signature: _____ **Date Completed:** _____