READINESS LAB — WALL PLAN

Teaching aids for the 10 × 20 ft shared classroom

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0. What this is

A wall scheme for the shared CS and ICT room, with the artwork already drawn at **A2** and a 3D model showing every sheet in position.

ITEM	DETAIL
Room	10 ft wide × 20 ft long × 9 ft ceiling
Fixed features	70 in monitor on the front wall; whiteboard front-left; door back-left; 6.3 ft charging shelf across the back
Arrangements	**12 at a 3 × 12 ft long table (default)** · 12 in three rows · 8 at four desks. Switch in the 3D room
Right wall	Free — used here for the ICT sequence
Artwork	13 A2 sheets + one 1200 × 300 mm banner
Print files	posters/ — one PDF per sheet
Scaled plan	wall-plan.pdf — 3 pages, 1 ft = 11 mm
3D room	classroom-3d.html — posters placed on the walls
Regenerate	`node build/make-classroom-walls.js`

Download the set: posters/ · wall-plan.pdf · 3D room

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1. The logic of the walls

The room changes session, so the walls are zoned rather than themed.

ZONE	WALL	CONTENT	WHY HERE
Teaching wall	Front	Monitor, today's objective, CS/ICT session board, banner	Everything a student needs at the start and end of a lesson is behind the teacher
CS wall	Left	Flowcharts, four states, six blocks, debug protocol	Used while building; the whiteboard is next to it for live drawing
ICT wall	Right	Four functions, files, spreadsheets, email, security	The longest uninterrupted run of wall, seen by every seated student
Entry and exit	Back	Four rules, charging and storage, above the shelf	Read on the way in and on the way out
Student space	Left 12 ft 6 in → back; right 13 ft 6 in → back	Bug wall and progress board	Left blank on purpose; the students fill it

Why not put everything on the front wall: a 10 ft wall with a 5 ft monitor leaves 2 ft either side. It holds two A2 sheets, not ten. The side walls are the teaching surface; the front wall is the attention surface.

1.1 The default arrangement is the long table

The room opens in the **12-seat long-table layout**: one 3 × 12 ft table down the centre, six seats a side. It is a mode, not a permanent rebuild — the rows layout returns for lessons that need everyone facing the monitor, and the 8-seat layout for smaller groups.

That has a direct consequence for the walls:

IN THE LONG-TABLE LAYOUT	WHAT IT MEANS
Students face each other across the table	The front monitor is **side-on** to everyone; it is a reference screen, not a lectern
The CS wall is behind the left row; the ICT wall is behind the right row	Side-wall posters are read **before and after** the lesson, or by the teacher walking the two side aisles — not while seated
Circulation is 2.1 ft down each side	The teacher supervises by leaning in; there is no central aisle
The back wall is in view	Lab rules and charging remain useful; keep the two most-used references on the front and back walls

So the side walls still carry the full sequences, but the **front and back walls carry the aids that must be readable during table work**: today's objective, the session board, the rules and the charging routine. If a lesson depends on students reading the four-state table while seated at the table, the teacher either moves that sheet to the front for the lesson or issues it as a handout.

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2. Placement schedule

Heights are to the centre of each sheet. A2 landscape = 1.95 × 1.38 ft.

CODE	SHEET	WALL	POSITION ALONG WALL	HEIGHT	PRINT
BANNER	Readiness Lab	Front	centred, above monitor	7 ft 5 in	1200 × 300 mm
SH-04	Today (dry-wipe)	Front	3 ft 8 in left of centre	4 ft 5 in	A2
SH-05	CS or ICT	Front	3 ft 8 in right of centre	4 ft 5 in	A2
CS-01	Flowchart symbols	Left	4 ft 7 in from front	4 ft 7 in	A2
CS-02	Four states	Left	6 ft 11 in	4 ft 7 in	A2
CS-03	Six blocks	Left	9 ft 2 in	4 ft 7 in	A2
SH-01	Debug protocol	Left	11 ft 6 in	4 ft 7 in	A2
ICT-01	Four functions	Right	3 ft 0 in from front	4 ft 7 in	A2
ICT-02	Files and names	Right	5 ft 4 in	4 ft 7 in	A2
ICT-03	Spreadsheet	Right	7 ft 7 in	4 ft 7 in	A2
ICT-04	Email and research	Right	9 ft 11 in	4 ft 7 in	A2
ICT-05	Security	Right	12 ft 2 in	4 ft 7 in	A2
SH-02	Four rules	Back	5 ft 5 in from left	4 ft 2 in	A2
SH-03	Charging and storage	Back	8 ft 1 in	4 ft 2 in	A2

Bottom edges: 3 ft 10 in for student-facing sheets; 3 ft 6 in above the charging shelf. **Top edges:** 5 ft 3 in. Nothing above 5 ft 3 in except the banner — higher aids stop being read and start being decoration.

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3. The sheets

CODE	FILE	WHAT IT DOES
CS-01	cs-flowchart.pdf	Six standard symbols and the five rules for drawing them
CS-02	cs-four-state.pdf	The two-sensor table students write in Term 2 and run in Term 3
CS-03	cs-blocks.pdf	The six constructs that carry the year; "if you use it twice, name it"

CODE	FILE	WHAT IT DOES
SH-01	sh-debug.pdf	Six-step debug protocol, shared by both programmes
ICT-01	ict-functions.pdf	Input, process, output, storage — with the touchscreen exception
ICT-02	ict-files.pdf	Folder tree, naming convention, copy vs move, 3-2-1 backup
ICT-03	ict-spreadsheet.pdf	Cell references, the `$` rule, six functions, chart choice
ICT-04	ict-email.pdf	Five parts of an email; five checks on a source
ICT-05	ict-security.pdf	Six habits, including AI acknowledgement
SH-02	sh-lab-rules.pdf	The four rules at the entrance
SH-03	sh-charging.pdf	Robot and laptop storage above the shelf
SH-04	sh-objective.pdf	Dry-wipe frame: outcome, exit ticket, words, week
SH-05	sh-session.pdf	What changes between a CS and an ICT session
BANNER	banner.pdf	Room identity above the monitor, 1200 × 300 mm

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4. Installing it

1. **Print on 200 gsm matt paper or mount on 3 mm foam board.** A2 posters curl; a clip frame or foam board keeps the bottom edge flat against the wall.
2. **Use removable adhesive strips**, not nails. The walls may contain conduit, and the layout will change after the first term.
3. **Put the two dry-wipe sheets in A2 snap frames.** SH-04 and SH-05 are written on every lesson; paper will not survive a term.
4. **Work from the plan, not from the 3D.** The 3D is for agreement; the dimensions are for the drill and the tape measure.
5. **Leave the two free zones empty.** The bug wall and the progress board are student-owned, and they are the only places where work can be added without moving a poster.

Sightlines. A2 at 4 ft 7 in centre is readable from 10–12 ft — the full length of the room — if the text is 24 pt or larger. The artwork uses 15 pt body and 40 pt titles, so the near half of the room reads comfortably and the far half reads the titles. That is the intended hierarchy: titles orient, the near wall teaches.

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5. Using the walls in a lesson

MOMENT	CS SESSION	ICT SESSION
Start	SH-04 states the outcome; monitor shows the table	SH-04 states the outcome; monitor shows the file name
Demonstration	Point to CS-01 or CS-02 rather than redrawing it	Point to ICT-03 rather than repeating a formula
Independent work	Students look up at CS-01/02/03 instead of asking "what was the block?"	Students look up at ICT-02/03 instead of asking where to save
When it breaks	SH-01: walk to the wall, read step 1 aloud	Same sheet; the protocol is identical
End	SH-04 exit ticket; SH-03 robot back in the box	SH-04 exit ticket; ICT-02 folder check
Entry and exit	SH-02 at the door	SH-02 at the door

The rule for the teacher: if you answer a question that is already on the wall, point at the wall instead. A poster that is read once and never used is a poster that should not be there.

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6. Assumptions and limits

- The door and whiteboard positions are taken from the 3D model, which marks them as assumptions. Measure before drilling or fixing.
- The right wall is treated as free, as confirmed.
- No window is assumed. If there is glazing on the right wall, move ICT-01 and ICT-02 to the back-right and drop ICT-05 to the left wall after SH-01.
- The charging shelf is assumed 3 ft high and 6.3 ft wide. If it is taller, the two back sheets move up until their bottom edge clears it by 4 in.
- **The long table is a layout mode, not extra furniture.** It replaces all six desks in the 12-seat layout; the row layout and the 8-seat layout are unchanged. If the centre must keep a clear 3 ft aisle, use the rows mode for that lesson rather than narrowing the side aisles.
- The 3D room is a placement model, not a lighting or acoustic design.
