BIG FLOOR PLANS · COLLEGE & TRADES TRACK · 50 MINUTES

Space Planning Review: teacher script

Interior-design and architecture students walk an office furniture plan at full size with a "client", check the accessible route, turning space and door clearances, and red-line the plan.

Prep: Tape the office and its eight workstations, the conference table, the printer and the file cabinet at the scenario positions. Make a 60-in turning-circle loop from string. Print one review sheet per team.

> **Teacher only: tape these as-built clearances.** A: 32 in; B: 10 in; C: 54 in; D: 44 in.

Min	Step and what to do	Ask	Listen for
0-5	**Hook** "The client loves this plan. Would they still love it in a wheelchair?"	Where do furniture plans usually fail?	Aisles, door clearances, turning spaces.
5-12	**Model** Measure the route to the second exit and compare with 36 in.	Pass?	44 in: passes.
12-30	**Teams check** Teams measure the aisle, the entry door latch side and the space in front of the printer, and test the 60-in loop.	What fails?	The aisle, the latch side and the printer space.
30-42	**Red-line** Teams red-line each failure with the measurement and the smallest fix.	What is the smallest fix for the aisle?	Pull the conference table 4 in east.
42-46	**Density** Compute square feet per workstation.	Is that tight or generous?	90 sq ft each.
46-50	**Exit ticket** Individual exit ticket.		

Common misconceptions

- **Learners may think:** If a chair fits through, a wheelchair fits through. **Address it:** A wheelchair route needs 36 in clear and room to turn; walk it with the loop.
- **Learners may think:** The door clearance is the door's own width. **Address it:** The clear floor beside the latch on the pull side matters as much as the opening.

Supports

- Give the clearance card (36 in route, 60-in circle, 18 in latch side).
- Multilingual learners: label aisle, latch side, pull side and turning space on the floor.
- Mobility: a wheelchair user can lead the route test if they choose; the loop works for everyone.

References

- **2010 ADA Standards for Accessible Design**: 403.5.1 clear width 36 in; 304.3.1 60-in turning circle; 404.2.4.1 front approach, pull side, 18 in beyond the latch (check your jurisdiction's adopted code)
- **Perkins V (CTE)**: postsecondary and secondary CTE program context

Scenario sheet

Office suite 30 ft x 24 ft: eight workstations, a conference table, a printer and a file cabinet, as drawn. The entry door swings into the office. Criteria as quoted (2010 ADA Standards): accessible route at least 36 in clear (403.5.1); turning space a 60-in circle (304.3.1); front approach, pull side: 18 in clear beyond the latch (404.2.4.1). Check your jurisdiction's adopted code.

ID	Where to measure
A	Aisle between the desk row and the conference table
B	Entry door, latch side, pull side (door swings into the office)
C	Clear space in front of the printer (smaller of the two sides)
D	Route to the second exit

LEARNER SHEET · SPACE PLANNING REVIEW

Name _____ Date _____

ID	Measured (in)	Needs (in)	Pass / fail	Red-line fix
A				
B				
C				
D				

Square feet per workstation: _____

Exit ticket

1. An aisle measures 34 in. What is short, and by how much?

2. A door swings into a room. Which side gets 18 in beyond the latch?

3. A 900 sq ft office has 10 workstations. Square feet per workstation?

Answer key

ID	Measured	Needs	Result	Fix
A	32 in	36 in	fails by 4 in	Pull the conference table 4 in east.
B	10 in	18 in	fails by 8 in	Move the file cabinet 8 in off the latch side.
C	54 in	60 in	fails by 6 in	Shift the printer 6 in toward the wall or open the space beside it.
D	44 in	36 in	passes	-

720 sq ft / 8 workstations = 90 sq ft each.

Exit ticket

1. An aisle measures 34 in. What is short, and by how much?
   Answer: The accessible route: 2 in short of 36 in.
2. A door swings into a room. Which side gets 18 in beyond the latch?
   Answer: The room side (the pull side), for a front approach.
3. A 900 sq ft office has 10 workstations. Square feet per workstation?
   Answer: 90 sq ft.

Scoring: 1 point each, plus 1 for red-lines with measurements. 3 or more = secure.

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