BIG FLOOR PLANS · COLLEGE & TRADES TRACK · 50 MINUTES

Plan the Sales Floor: teacher script

Retail, merchandising and marketing students lay out a store's gondola rows at full size, test the aisles a shopper in a wheelchair needs, and compute how much shelf the floor really holds.

Prep: Tape the 40 ft x 60 ft floor, with 24-in wall fixtures along both 60-ft walls, a 12-ft checkout zone at the front and a 4-ft cross aisle at the back. Tape the merchandiser's five gondola rows, evenly spaced. Print one layout sheet per team.

Min	Step and what to do	Ask	Listen for
0-5	**Hook** Walk the five-row layout. "More rows, more sales?"	What does a shopper with a cart or a wheelchair need?	At least 36 in of aisle.
5-15	**Measure** Measure an aisle in the five-row plan.	Does it pass?	No: about 32 in.
15-28	**Fit the rows** Compute the width between wall fixtures; find the most 48-in rows that leave 36-in aisles.	How many rows fit?	4 rows.
28-38	**Use the slack** Spread the leftover width evenly into the aisles; re-tape.	How wide are the aisles now?	48 in.
38-46	**Shelf capacity** Compute linear feet of shelf: rows x sections x 4 ft x 2 sides x 5 shelves, plus the walls.	How much shelf?	2,200 linear ft.
46-50	**Exit ticket** Individual exit ticket.		

Common misconceptions

- **Learners may think:** More rows always means more sales. **Address it:** The fifth row makes every aisle too narrow for some shoppers to reach any of it.
- **Learners may think:** Aisle width is a style choice. **Address it:** The accessible route sets a minimum; anything above it is the planner's choice.

Supports

- Give a strip diagram of the width with blanks for rows and aisles.
- Multilingual learners: label gondola, aisle, wall fixture and checkout on the floor.
- Mobility: a wheelchair user can lead the aisle test if they choose; a 36-in tape bar works for everyone.

References

- **2010 ADA Standards for Accessible Design**: 403.5.1 accessible route clear width 36 in (check your jurisdiction's adopted code)
- **Perkins V (CTE)**: postsecondary and secondary CTE program context

Scenario sheet

Sales floor 40 ft x 60 ft. 24-in-deep wall fixtures run the full length of both 60-ft walls. Gondola rows run the 60-ft way: double-sided, 48 in deep, 4-ft sections, 5 shelves a side. The front 12 ft is the checkout zone and the back 4 ft is a cross aisle, so rows run 44 ft. Every aisle must be at least 36 in clear (2010 ADA 403.5.1). The merchandiser's plan: 5 rows, evenly spaced.

LEARNER SHEET · PLAN THE SALES FLOOR

Name _____ Date _____

Check	Work	Answer
Width between wall fixtures (in)		
Aisle width with 5 rows		
Most rows with 36-in aisles		
Aisle width with the slack spread		
Sections per row		
Linear ft of shelf: rows		
Linear ft of shelf: walls		
Total		

Exit ticket

1. A 300-in-wide floor uses 48-in rows and 36-in aisles. How many rows fit?

2. Five aisles share 60 in of extra width. How much wider does each get?

3. 2 rows x 10 sections x 4 ft x 2 sides x 4 shelves = ?

Answer key

Check	Answer
Width	480 - 2 x 24 = 432 in
5 rows	(432 - 240) / 6 = 32 in: fails
Rows	4 rows (48 x 4 + 36 x 5 = 372 in)
Aisles	(432 - 192) / 5 = 48 in
Sections	44 ft / 4 = 11
Rows shelf	4 x 11 x 4 x 2 x 5 = 1,760 ft
Walls	2 x 44 x 5 = 440 ft
Total	2,200 linear ft

Exit ticket

1. A 300-in-wide floor uses 48-in rows and 36-in aisles. How many rows fit?
   Answer: 3 (3 x 48 + 4 x 36 = 288 in).
2. Five aisles share 60 in of extra width. How much wider does each get?
   Answer: 12 in.
3. 2 rows x 10 sections x 4 ft x 2 sides x 4 shelves = ?
   Answer: 640 linear ft.

Scoring: 1 point each, plus 1 for the layout. 3 or more = secure.

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