BIG FLOOR PLANS · COLLEGE & TRADES TRACK · 50 MINUTES

Plan the Child Care Room: teacher script

Early childhood education students tape a preschool room at full size, subtract the fixed furniture, find how many children the room can be licensed for, and lay out learning centers that work.

Prep: Tape the 30 x 24 ft room, the door and the fixed furniture from the scenario. Print one room sheet per team.

Min	Step and what to do	Ask	Listen for
0-5	**Hook** "720 square feet. 20 children. Easy yes?"	What do we need to know first?	How much floor children can actually use.
5-15	**Usable area** Measure the fixed furniture and subtract it.	Usable area?	661.5 sq ft.
15-25	**Capacity** Divide by 35 sq ft per child; round down. Adults at 1 per 10.	Capacity and adults?	18 children, 2 adults.
25-42	**Centers** Tape blocks, dramatic play, reading, art (by the sink) and tables. Keep quiet and busy centers apart; keep a clear path from the door.	Where does art go and why?	Next to the sink, for cleanup.
42-50	**Answer and exit** Answer the director with numbers, then the exit ticket.	Can the room take 20?	No: 18 under this rule.

Common misconceptions

- **Learners may think:** Capacity = room area / 35. **Address it:** Only usable floor counts; fixed furniture comes out first.
- **Learners may think:** More centers always means a better room. **Address it:** Each center needs enough floor and a sensible neighbor.

Supports

- Give a filled example for one piece of furniture.
- Multilingual learners: label usable, capacity, ratio and center with pictures.
- Mobility: the licensing reviewer can do the math from a seat while teammates tape.

References

- **State child care licensing rules**: the scenario uses 35 sq ft of usable indoor space per child and 1 adult per 10 children; both vary by state and age group, so use your state's rule
- **Perkins V (CTE)**: postsecondary and secondary CTE program context

Scenario sheet

Preschool room 30 ft x 24 ft, one door. Fixed furniture: Cubbies 12 x 1.5 ft, Sink counter 6 x 2 ft, Storage cabinet 8 x 2 ft, Teacher desk 5 x 2.5 ft. Scenario licensing rules (check your state): 35 sq ft of usable indoor space per child, not counting fixed furniture; 1 adult per 10 children. The director asks for 20 children. Centers to place: blocks, dramatic play, reading, art and two tables.

LEARNER SHEET · PLAN THE CHILD CARE ROOM

Name _____ Date _____

Step	Work	Answer
Gross area		
Fixed furniture		
Usable area		
Capacity		
Adults needed		
Answer to the director		

Center	Where	Why there

Exit ticket

1. A 600 sq ft room has 40 sq ft of fixed furniture. Capacity at 35 sq ft per child?

2. 16 children at 1 adult per 10. Adults?

3. Name one center that belongs near the sink.

Answer key

Step	Answer
Gross	30 x 24 = 720 sq ft
Fixed	18 + 12 + 16 + 12.5 = 58.5 sq ft
Usable	720 - 58.5 = 661.5 sq ft
Capacity	661.5 / 35 = 18.9, so 18 children
Adults	18 / 10, rounded up: 2
Director	18, not 20: 20 children need 700 sq ft usable, 38.5 sq ft more than the room has.

Layout: any arrangement that keeps blocks and dramatic play (active) apart from reading (quiet), puts art next to the sink, and keeps a clear path from the door, with a reason for each.

Exit ticket

1. A 600 sq ft room has 40 sq ft of fixed furniture. Capacity at 35 sq ft per child?
   Answer: 16 (560 / 35).
2. 16 children at 1 adult per 10. Adults?
   Answer: 2.
3. Name one center that belongs near the sink.
   Answer: Art (or sensory play).

Scoring: 1 point each, plus 1 for a layout with a reason for each center. 3 or more = secure.

Free to copy for teaching. Big Floor Plans, Plan the Child Care Room, 2026. Codes and standards change: use the edition your jurisdiction or program adopted. Full-size prints: bigfloorplans.com/get-a-quote