Arcade Prize Menu

Name: ________________________________ Date: _________________

INSTRUCTIONS

- Use your validated win percentages from Activity 4.1 to complete this sheet.
- STEP 1 — Pick one Small Prize and one Large Prize from the Prize Menu below.
- STEP 2 — Fill in the Profit Calculation table.
- STEP 3 — Check whether your design meets Pat's $50/day profit requirement. If not, revise (cheaper prizes, tighter Large Prize zone, etc.).

Prize Menu

Tier	Option	Cost	Notes
Small Prize A	Roll of arcade tickets (10)	$0.40	Boring but cheap
Small Prize B	Piece of candy	$0.50	Universally popular
Small Prize C	Sticker pack	$0.75	More exciting
Large Prize A	Small bouncy ball	$1.50	Cheapest "big prize" feel
Large Prize B	Plush dragon (mini)	$2.50	Ties to castle theme
Large Prize C	LED keychain	$3.50	Most exciting, most expensive

Our Prize Choices

Small Prize choice	Tier (A/B/C): _______	Cost: $ _______
Large Prize choice	Tier (A/B/C): _______	Cost: $ _______

Storm-the-Castle Profit Calculation

Validated win percentages (From Activity 6)	
Small Prize win %	________ %
Large Prize win %	________ %
Cost per play	
Small Prize expected cost per play = small % × small prize cost	$ ________
Large Prize expected cost per play = large % × large prize cost	$ ________
Operating cost per play (given)	$0.20
Total cost per play (add the three rows above)	$ ________
Daily profit	
Price per play (given)	$1.50
Profit per play = price per play − total cost per play	$ ________
Plays per day (given target)	30
Daily profit = profit per play × plays per day	$ ________

Does this meet Pat's $50/day requirement? ☐ Yes ☐ No

If NO, what will you change?

____

____