**more framework logic and formulas –**

[Player Experience – Earned from Encounter] = [Encounter Experience] / [Number of Players]; real easy; so the 500xp pool from above, divided by 3 = 167xp per player.

[Player Experience – Finish] = [Player Experience – Start] + [Player Experience – Earned from Encounter]; start at 0xp, got 167xp, finish value = 167xp.

[Level of Player Characters – Finish] = same formula as [Level of Player Characters – Start] really; lookup the value of the field [Player Experience – Finish], which range does it fall into on the “CharacterAdvancement” table (a tab in excel); that’s their level at the end of the encounter. This is used to award level ups to players as part of the “End of the encounter” rewards+caravan information;

[Percent of Adventuring Day XP Remaining] = [Adventuring Day XP – Finish] / [Adventuring Day XP – Start]; shows what % of the way they are through an adventuring day; 92% left means they are early in the day, 2 SR’s to come still;

[Short Rest Needed? – First One (68%)] = IF [Percent of Adventuring Day XP Remaining] < 68% AND [Short Rest Counter – Start] = 2, THEN... “Yes”, ELSE “No”;

* So if you’re below 68%, you’ve expended 1/3 of your daily Adventuring Day XP, so you’re due for the first short rest.

[Short Rest Needed? – Second One (35%)] = IF [Percent of Adventuring Day XP Remaining] < 35% AND [Short Rest Counter – Start] = 1, THEN... “Yes”, ELSE “No”;

* So if you’re below 35%, you’ve expended another 1/3 of your daily Adventuring Day XP, so you’re due for the second, and final, short rest of the adventuring day.

[Short Rest Counter – Start] =

* Encounter #1 = 2
* Encounter #2+ = [Short Rest Counter – Finish] from Encounter n-1

[Short Rest Counter – Finish] =

* IF [Long Rest Needed?] = YES, then 2;
* IF [Short Rest Needed? – First One (68%)] = Yes OR [Short Rest Needed? – Second One (35%)] = YES, then [Short Rest Counter – Start] – 1;
* ELSE [Short Rest Counter – Start]

[Long Rest Needed?] = IF [Adventuring Day XP – Finish] < [XP Thresholds By Character Level – Easy], then “Yes”, otherwise, “No”

* This is saying “If an Encounter Difficulty of Easy cant fit within the remaining experience available for the adventuring day, then it’s time for a LR”.
* The other Encounter Opposition NPC logic will account for ensuring that the only encounter that COULD spawn if they had enough XP for an easy WOULD be an easy on next, overwritting any random roll on the table for difficulty;

[Time Spent Resting] =

* IF [Long Rest Needed?] then “8 Hours”;
* IF [Short Rest Needed? – First One (68%)] = Yes OR [Short Rest Needed? – Second One (35%)] = YES, then “60 minutes”
* ELSE “-“