

THE ROLLING GEMSTONES

A family dice game for 1-4 players aged 8+.

COMPONENTS

1 scoring pad

10 dice (5 regular d6 and 5 colored d6 in gemstone colors-brown, red, green, blue, yellow and white)

GOAL OF THE GAME

By combining colored and numbered dice into pairs, the players try to have sums of all gemstones in sorted ascending order from left to right. Players must carefully choose pairs to achieve ascending sum of gemstones, but also to enable themselves enough options in future turns and leave less options to non active players.

DESCRIPTION

Sheet comprises of 6 columns with colored gemstones (smoky quartz, ruby, emerald, sapphire, citrine and diamond) that match the colors on colored dice. Players are collecting gemstones by rolling dice and matching gemstone with values. Leftmost column (smoky quartz) is the least valuable gemstone that players try to have the least at the end of the game. Rightmost column (diamond) is the most valuable gemstone that players try to have the most at the end of the game. All columns from left to right should have ascending sum of gemstones.

SETUP

Each player takes a score sheet and something to write with. Determine starting player on any method you prefer, and then the turns are taken clockwise.

RULES FOR 4-PLAYER GAME

GENERAL RULES

The player who currently has the dice is the active player. Active player rolls all 10 dice. If he has rolled same result on at least three dice (either colored or numbered dice) he has option (but doesn't have) to re-roll only those dice, either all of them or some of them. If he has again same result on at least three dice he has same option again (also only those that have same results).

Active player then must "connect" colored dice with numbered dice into pairs. Each pair will contain exactly one colored dice and one numbered dice. That way active player decides how many gemstones of that color he will obtain. Active player must connect 3 pairs of the dice thrown (6 dice in total), and must record it on his sheet. Those 6 dice are not available to non-active players.

Remaining (unmatched / not-chosen by active player) 4 dice will be used by players that are not active players on this turn. All non-active players MUST match one pair of colored and regular die from remaining dice to write on his sheet. Non-active player can use same di(c)e as some other non-active player.

Therefore, on each turn, active player will write 3 numbers (even if active player choose one gemstone two or three times, he has to write it separately in two or three rows, as the number of written rows is important) and all other players will write 1 number each.

















RULES FOR RECORDING NUMBERS ON SHEET

Matched pair is written in the next free row on the column of that color. Player increases the previous sum (number from previous row) of that gemstone for the value of white die matched in this turn.

For each gemstone player can write up to 10 numbers. If the only possible gemstone to write is the one where the column is full, the player will not write anything. However, if it is possible to choose something else, player must choose different gemstone (even if it is worse for him in terms of ascending order of gemstones' sum).

Example: Active player has chosen brown 3, green 4 and yellow 6 and that is written on the sheet by adding those numbers to previous sum (or as in case of brown it is added to zero). All other non active players can choose blue 4, blue 5, brown 4 or brown 5.

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		3	2	6	3	6	4
			7	10	5	12	9
					6	13	15
					9		

If possible, number cannot be written/pair cannot be chosen if that column already has 3 or more rows more than any other column. Only if it is not possible to write some other gemstone, that player is allowed to write in that column (and have 4 or more rows filled of one color than the other). *That's why in previous example, player could not have chose blue with any of the numbers before writing something in brown column, as that would be fifth number in blue column, while brown had zero. Also note, that if the player has chosen to write two brown dice, then he would have been allowed to play also the blue dice as third chosen color, as then the brown would have 2 numbers written and brown would have 5 numbers written.*

However, if he only has option to write in two columns that are 3 or more rows further than the worst one, he can freely choose which one he will write.

END OF THE GAME

When, **at the end of his turn**, a player has sums of all gemstones in sorted ascending order from left to right AND at least four numbers written (first big line) in each column he announces it to all players to possibly trigger the end game. If **at the end of the next turn of that player** he still has sums of all gemstones in sorted ascending order from left to right, game ends after his turn (other players still play as non-active players in his turn) and that player is the winner of the game and order of remaining players is calculated by performing final evaluation. Otherwise game continues.

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3	2	6	3	6	4
4	7	10	5	12	9
8	12	12	6	13	15
11	15	18	9	18	21
17	19	19	15	22	24
18			21		29

Example: Active player accomplished that all columns are sorted from lowest sum to highest sum from left to right, and he announces to other players. This trigger the possible last turn where all other players play as active players and this player plays again. If, after his turn, he still has all columns sorted, the game is over and he is the winner.

Note that if two or more columns have same sum, the player chooses the order of those columns in accordance with his preference.

If none of the players can accomplish this, the game ends at the end of the round when at least one player has written 7 numbers in ALL of his columns (second big line). That round is finished to the end so that all players had same number of turns to be active player and final evaluation is performed to decide the order of players.

FINAL EVALUATION

Each player writes order of sums of his gemstones in boxes bellow preferred order (1, 2, 3, 4, 5 and 6). If two or more columns have same sum, he can choose the order of those columns. Then he calculates absolute difference of each column against that column preferred order. Sum of all six absolute differences is written in the last box. Winner is the player with minimum sum of absolute differences. In case of tie, tied players compare columns with least numbers written in it – ties are won by player who has most rows filled in worst column; if worst is tied than compare second worst etc.

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4	7	10	5	12	9
8	12	12	6	13	15
11	15	18	9	18	21
17	19	19	15	22	24
18	21	22	21	27	29
22	26	24	22	33	34
23	27			34	40
					44

1 2 3 4 5 6

$$\begin{array}{r}
 \boxed{2} - \boxed{4} - \boxed{3} - \boxed{1} - \boxed{5} - \boxed{6} \text{ TOTAL} \\
 \boxed{1} + \boxed{2} + \boxed{0} + \boxed{3} + \boxed{0} + \boxed{0} = \boxed{6}
 \end{array}$$

Example: Final evaluation is done by writing order of columns below the preferred order 1, 2, 3, 4, 5, 6 already written on the sheet. Then the absolute difference between two numbers is calculated for each column. Total score of the player is sum of all absolute differences. The lowest score wins.

RULES FOR 1-3 PLAYERS

All the rules are the same, except there are fictional additional player to add to 4 players, i.e. when playing with 3 players, there will be 1 fictional player, when playing with 2 players, there will be 2 fictional players and when playing solo, there will be 3 fictional players.

When fictional player(s) is on turn, somebody rolls only 4 dice: 2 colored and 2 numbered dice, to simulate what is "left" for non-active players from fictional player. All actual players must act as non-active player and write one pair as per rules above.

For solo games, if a player achieves that sums of all gemstones is sorted in ascending order from left to right AND at least four numbers written (first big line) in each column in two consecutive turns (including fictional player's turns in between), he then wins the game and his score is 0 sum of absolute differences. If not, the game ends at the end of the round when he has written at least 7 numbers in ALL of his columns (second big line). That round is finished to the end (i.e. if he has achieved this as active player, he has to play as non-active player three more times) and then he performs final evaluation trying to achieve minimum sum of absolute differences

