# $\mathfrak{M o r n i n g}$ Roll 

Setting aside the zen aspect of Morning Roll (where it is its own object), the default object of Morning Roll is to score the most points in the course of a round. Each round lasts one calendar year. Other objects - including objects potentially more significant, or unrelated to the accumulated total score, etc. - should be assumed to exist.

Morning Roll was conceived in Smithville, TX on Jan 292019 as a long-term daily dice game to play with Mike \& Heather. The game is open. To join, click "Add roll" and register an account. If you need help, email me: tom.bubul@gmail.com

## Setup:

- 6 six-sided dice (d6), ideally physical
- Internet browser


## Play:

- Each player gets one turn per day. If a player forgets to take their turn on a day, they miss their turn for that day.
- Scores must be reported day-of to this website https://tombubul.info/morningroll.html. Because Morning Roll is for the morning, the game information on this page is only available, and scores can only be entered, between 8am and 8pm in local browser time.
- Play for the round ends on the final day of the year.
- Dice must be rolled on a table. Rolling in a box or within other boundaries on the table allowed. If any dice in any roll on your turn roll off of the table, you bust, and your turn is over. Be respectfully aware of the relationship between the dice, the surface, and your own rolling hand, and roll accordingly.
- Unlike in other similar dice games you may have played, there is no minimum first score required to get on the board. We want you to play, just start rolling!


## Rolling:

Roll six dice in the morning.

If a player scores, they select any dice that scored that they wish to count for points and remove them from play. They can remove as many of the scoring dice as they choose, but must remove at least one. The player then either re-rolls the remaining dice, repeating the above, or ends
their turn, adds up all points scored that turn, and reports that score. If all dice have scored after one or more rolls, the player may continue their turn by re-rolling all six dice, aka "rolling over".

If a player does not score on any roll during their turn, they "bust," immediately ending their turn and giving them a score of zero for the turn.

A player can only score points if they choose to end their turn before they have busted.

## Examples:

- Heather rolls six dice, 1,2,2,3,5,6 - she keeps the 1 and scores 100. She removes one die and re-rolls; 1,4,4,4,6-she keeps the 1 and 4 s and scores 500 . She ends her turn and totals up her score for 600 points.
- On the second roll of his turn, Tom rolls five dice, $2,2,3,4,6$. There are no fives, no ones, no three of a kind or higher combo: Tom busts, his turn is done, his score is zero.
- On the fourth roll of his turn, Mike rolls two dice, 3,4. There are no fives or ones: Mike is busted, his turn is done, he scores zero.


## Dice Scores:

| Die <br> value: | Single | Pair | Three of a <br> kind aka <br> triples | Four of a <br> kind | Five of a <br> kind | Six of a <br> kind |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 100 points | 200 | 1000 | 2000 | 4000 | 8000 |
| 2 | 0 | 0 | 200 | 400 | 800 | 1600 |
| 3 | 0 | 0 | 300 | 600 | 1200 | 2400 |
| 4 | 0 | 0 | 400 | 800 | 1600 | 3200 |
| 5 | 50 | 100 | 500 | 1000 | 2000 | 4000 |
| 6 | 0 | 0 | 600 | 1200 | 2400 | 4800 |

1 s or 5 s in a three of a kind or higher combo can be counted individually instead, but generally you'd be nuts not to take the combos.

## Special rolls:

- Three unique pairs aka "boxcars" = 2500 points
- 1,2,3,4,5,6 aka a "straight" = 2500 points
*Note - if a player scores boxcars or a straight, they may not end their turn; they must continue and immediately re-roll all six dice.


## That's it! Have fun rolling \& we'll see you tomorrow morning :)

p.s. Read on for some more deepish "statistical" stuff, common understandings of good/bad rolls, and musings from Tom - definitely not required and only if interested.

## Best practices aka Tom's Tips for Dice Freaks

"Strategy" is nominal, but morning roll does have some best practices:
Big picture:

- Being respectful and cognizant of the passage of time may relate to positive, active play.
- A year is a long time. If you google "human lifespan" it says "79 years," also a long time. But also, a year isn't really that long, and neither is 79 of them.
- There's no "winning" your life (except, often, by being born), though there are fleeting victories sprinkled throughout.
- The objective truth of what happens in your life is inarguable, so it's best to be honest about it.
- In ideal circumstances, you get to set the terms for what a good life is for yourself.

On the "two dice trap", "dropping fives", and other scoring notes:

- It becomes statistically more dangerous to roll 2 or fewer dice because there are fewer winning rolls.
- On 2d6, $55 \%$ of rolls are "successful," meaning have a 1 or a 5 and allow you to continue, making it slightly better than a coin toss. But there's only an $11 \%$ chance of both dice scoring, thereby "rolling over" back to six dice, and giving you any real chance to significantly increase your score with more combos.
- Now, on 1d6, only $33 \%$ of rolls will be successful. But $100 \%$ of those successful rolls will "roll over".
- So if your aim is to "roll over", you always have to roll 1d6 after merely scoring on 2d6. Know that this suggests that the combined probability of "rolling over" from a 2 d 6 starting point $(11 \%+(44 \%$ * $33 \%)=25 \%)$ is actually lower than that of on a 1d6 (33\%).
- The takeaway here is that it's worth considering how you would keep dice after scoring on 3d6, and in combo scenarios. if you're trying to "roll over", and on 3d6 get $5,1,2$, it seems to me you're in better shape by taking the 5 and the 1 and just going for it on 1d6. The extra turn on 2 d 6 trades an $11 \%$ chance at rolling over for an additional $44 \%$ of busting, which looks to me like a bad deal.
- If anyone can mathematically prove out whether rolling 2 or rolling 1 is more advantageous in the above scenario, l'd love to see that. :)
- Excepting the "avoid rolling 2" suggestion above, if you don't roll triples or a higher combo on a given roll, it maximizes your odds for higher-scoring (and non-busting) subsequent rolls to only keep one of any present scoring dice; e.g., if you roll 5d6 and get 1,5,2,2,3 it's better to keep the 1 and roll 4d6, than to keep the 1,5 and roll 3d6.
- The above both also mean that if you roll a 1 and a 5 as part of any given roll (e.g. 6d6 $1,2,3,5,5,6$; you'd typically keep the 1 and reroll 5 d 6 ), you're probably never going to keep the 5 unless you also intend to stop your turn or bypass rolling 2.
- Re: "crazy to not take the combos," one exception to consider is "low combos" like three $2 s$ or three 3 s . If you roll say $1,2,2,2,4,6$ or $1,3,3,3,4,6$ in either case you might reasonably prefer to take the 1 and reroll 5 d 6 , than to cut straight to 3 d 6 .

Housekeeping etc.

- Comments are not required, and if they're burdensome, should be left blank.
- Internet dice are permitted in a pinch but players should be rolling real IRL dice.
- The open hours thing is in place to enforce game aesthetics - this is Morning Roll, after all, not Evening Roll or 24 Hour Roll. But if you need to get in earlier or later, email Tom.


## Pisex CuPs

Big shoutout to the rollers!

- kenny
- stefan
- heather
- mike
- shea
- bennett
- molly
- Jeremy
- jeff
- jacob

