

How to Play

18 Plays Similarly to 21

Step 1. Choose one player to be the dealer.

Step 2. Dealer divides the metal and ligand cards into separate piles.

Step 3. Dealer shuffles each pile separately.

Step 4. Game proceeds clockwise.

Step 5. Dealer deals out one metal card (face up) to every player and themselves.

Step 6. Dealer then deals out one ligand card (face up) to every player and one ligand card (face down) to themselves.

Step 7. Players go in order and decide if they want the dealer to deal them another ligand card or to stay with the cards they have.

Step 8. Once all players have gone, the dealer will decide to deal themselves another ligand card or to stay.

How to Play Continued...

Step 9. Dealer will determine if any players won. (Beat dealer with higher electron count without going over 18 (bust)).

(optional)

Step 10. Dealer must reward the winners with benzene chips and collect the losers' benzene chips.

Step 11. In case of a tie, the game is considered a push (neutral). No one wins and no one loses their benzene chips.

Step 12. Repeat steps 1-9 (optional to 11).

Goal of the Game

To beat the dealer by achieving a higher electron count without going over 18.

Common Language

Decompose (Bust) (went over 18 electron count)

Ligate (Hit) (ask for another ligand card)

Neutral (Push) (tied with the dealer)

Stable (Stay) (pass your turn)

Add on Rules (Optional)

One Metal Per Round

Deal out one metal card in the middle of the playing area. All players + dealer must use the same metal card during play. Everyone is dealt two ligand cards at the beginning of the turn instead of one metal and one ligand.

Saturation Bust

Players can also bust by having more than six donors on a metal card. This rule can vary depending on the metal, but as a general rule, coordination number of six works well.

Stable Square Planar d^8 -16 e^-

A four coordinate square planar 16 electron count with any d^8 metal is equivalent to obtaining an 18 electron count complex.

Betting & Payout (Optional)

Payout

Dealer pays the player an amount equal to what the player had bet if the player beats the dealer. In the event of a tie (Push), no payout.

Triple Payout

A player automatically wins and receives triple their bet if they achieve an 18 electron count on the first two initial cards dealt. If playing the add-on rules, a four coordinate square planar 16 electron count with a d^8 metal will also receive a triple payout.

Splitting

A player may divide their ligand cards into two separate games if the first two initial cards dealt are the same ligand (splitting). The player must match their initial bet on the second game when attempting a split. Splitting will only work if playing the "one metal per round" add on rule.

Credits

Game Designer: Zachary Thammavongsy

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Game Editors: Brian Lydon & Kim Le

Special Thanks:

To Professor Jenny Y. Yang for suggesting an 18 electron rule game. She sold us on the idea that this game would be of interest to the scientific community.

Legal

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Benzene Chips

Sold Separately - \$9.00 USD

*Will have a slight amount of soot around the edges, from laser etching which can easily be wiped off.

Material: 60pt chipboard covered with heavy matt finish paper



**30 black
benzene
chips**

**20 blue
benzene
chips**



**10 red
benzene
chips**

