

Mineral Rummy

Directions for Play

The Deck

The deck contains 55 cards of the ions needed to form the minerals included in the game. The name and symbol for each ion are included on each card. *Note:* Since most metal ions have more than one possible charge, the charge of each ion is not included with the symbol. Five of the cards are wild. See rules for Wild Cards on the next page.

List of Mineral Rummy Cards in Deck

An additional six cards listing the types of ions and how many of each are in the deck (see Figure 1). Remove these cards and give one to each player to use during the game for reference. The silicate ion is indicated as [SiO] since the ratio of silica to oxygen varies in this complex mineral group. Extra list cards should be set aside.

Mineral Rummy Cards in Deck		
Name	Symbol	# of Cards
Aluminum	Al	3
Calcium	Ca	6
Carbonate	CO ₃	4
Copper	Cu	4
Fluoride	F	2
Hydroxide	OH	4
Iron	Fe	7
Magnesium	Mg	3
Oxide	O	4
Phosphate	PO ₄	3
Silicate	[SiO]	4
Sulfate	SO ₄	2
Sulfide	S	4
Wild		5

Figure 1. List Card

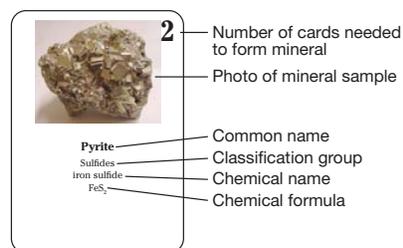


Figure 2. Mineral Card

The Mineral Cards

Sixteen mineral cards are provided in a separate set of cards. See Figure 2 for a sample and explanation of the information found on each card.

The Deal (for 4–6 players)

The first dealer is chosen randomly, and the turn to deal rotates clockwise if more than one round is played. The dealer shuffles the 16 mineral cards and then deals two mineral cards face down to each player, starting to the dealer's left. Each player places his or her mineral cards into a foam card holder and positions the holder so no other player can see the information on the cards. The remaining mineral cards are set aside face down and are out of play. *Note:* To speed up the game, a player other than the dealer may shuffle and distribute the mineral cards.

The dealer then shuffles the deck of 55 ion cards and deals seven cards face down to each player. Each player picks up the set of seven cards dealt and holds them in his or her hand so the face of the card cannot be seen by other players. The remaining cards in the deck are placed face down for the stock pile. The dealer then turns over the top card from the stock pile and places it face up next to the stock pile. This card begins the discard pile (see Figure 3).

If the stock pile is depleted during a round, all the cards in the discard pile except the top card are shuffled and turned face down to form a new stock pile.

Object of the Game

The object is to be the first player to play all of the cards from your hand. Cards are played in two ways—by “melding” minerals in the player's card holder and by “laying off” cards on any players' minerals that have been melded.

Melding Minerals

The main object is to form or “meld” the minerals in your card holder. The ions needed are indicated by the chemical name. For example, to meld pyrite (iron sulfide) at least one iron card and one sulfide card must be in hand. *Note:* Even though the chemical formula for pyrite is FeS₂, only one sulfide card is needed along with the iron card to meld the mineral and put it into play. Quartz only needs one card—the silicate ion. Once the needed ion cards have been obtained, the player may meld the mineral during his or her turn. To meld a mineral, the mineral card is removed from the card holder, placed face up in front of the player, and the respective ion cards are placed below the mineral card in an overlapping manner (see Figure 4).

Laying Off

A player may add or “lay off” matching ion cards to any melded mineral during his or her turn. Players may lay off cards during their turns before melding their own minerals.

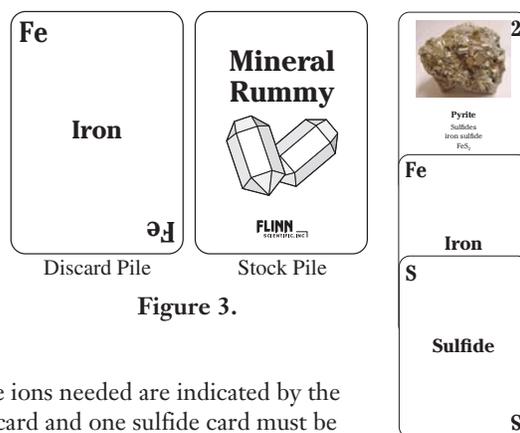


Figure 3.

Figure 4.

The Play

The player to the left of the dealer begins. Each player in turn draws the top card from either the stock pile or the discard pile. (*Note:* If a player forgets to draw, a card may be drawn anytime during his or her turn. Once a discard has been made, the player must wait until the next turn.) If the ion cards needed to form one or both of the minerals in the player's card holder are in the player's hand, the mineral card or cards may be melded. Additional cards may be laid off. *Note:* Melding or laying off cards on any turn is optional. One may choose to wait in order to declare "Rummy" (see below).

The Discard

Each player ends his or her turn by discarding one card face up onto the discard pile. A player may not discard a card drawn from the discard pile in the same turn. A card drawn from the stock pile may be discarded in the same turn. This way, the top card on the discard piles changes with each turn.

If a player discards an ion card that may be laid off on any melded mineral, any player (except the one who just discarded) may call "rummy on board," and pick up the card from the discard pile. The card must be laid off immediately. This exposes the previous top card on the discard pile for the next player. Play proceeds clockwise as before the "rummy on board" was called.

Important Note: A player must always keep enough cards in hand after discarding to meld the player's own minerals. For example, if a player needs three cards to form malachite and two cards to form gypsum, and neither mineral has been melded, then the player must have at least five cards in hand after discarding. If the malachite card has been melded, then the player needs to keep a minimum of two cards in hand after discarding. In other words, a player may not lay off cards if by doing so would leave fewer cards in the player's hand than needed to meld his or her own minerals.

Winning the Round

A player may not go out without first melding minerals. The winner of the round is the player who has melded the minerals from the card holder and then lays off or discards the last card in hand. A discard is not necessary to go out, and a player may go out by melding only. The rest of the players count the cards remaining in their hands. The winner receives five points for each ion card and 15 points for each wild card left in the players' hands. If the winner goes out by declaring Rummy the points are doubled.

Rummy

If a player is able play all the cards in hand on one turn, with or without a discard, then the player says "Rummy," melds both minerals, and lays off any additional cards on opponents' minerals, if needed. The round is over and the player receives double points for each card remaining in the opponents' hands. Rummy may not be called on a player's first turn. A player may not declare Rummy if any card has been played from the hand on any previous turn, whether by melding or by laying off.

Wild Cards

The wild card pictures the periodic table and may be used in place of any ion card. Only one wild card may be played as a substitute for an ion card in order to meld any mineral except quartz. Quartz may not be melded with a wild card.

Once a wild card has been played, any player, during his or her turn, may replace a wild card with the ion card for which it was substituted. The player then keeps the wild card in his or her hand or uses it to meld a mineral. A wild card may also be replaced by a discarded ion card when "rummy on board" is called. The player's turn still begins with drawing a card from the stock pile or discard pile and ends with a discard or by going out.

Wild cards may be added to any melded mineral, even if the required ion cards are present. A player may choose to play a wild card in this manner in order to go out or to keep from "getting stuck" with a card of higher point value.

For 2 or 3 players

All the above rules apply except each player is dealt three mineral cards and 10 ion cards.

Hints

- The advantage of declaring rummy is receiving double points. The disadvantage of waiting to declare rummy is another player may go out before you have played any cards!
- Place each mineral card in the card holder so the bold number indicating how many ion cards are needed to meld the mineral is visible. It is important to always have enough cards in hand to meld your minerals.