# Miner Rings

by Charlie Hoopes

Overview

You are the captain of an intra-planetary freighter making deliveries between space stations that are orbiting a ringed planet. Earn the best reputation by hauling the most cargo and colonists between space stations. Sometimes it is best to fly your freighter to a space station, others it might be more efficient to move the space station to your freighter. While using fuel will get you there quicker, your supply is limited, so choose wisely when to burn and when to conserve. In this game, everyone shares the same dice roll, so you can't blame how you roll.

Contents

1 Game Board

2 Dice

33 Resource Chips (9 each Water, Metals, Hydrocarbons, and 6 Colontists)

1 Delivery/Inventory Tracking Board & 7 Station/Eden Strips

4 Freighter Tableaus

4 Player Aid Cards

4 Freighter Tokens

1 Eden & 6 Space Station Tokens

36 Delivery Tracking Cubes
    (9 cubes x 4 colors)

8 Starting Inventory Cards

25 Fuel Chips

1 Rulebook

2 Moon Tokens

Game Board

Inner Rings (3orbits)

Middle Rings (2 orbits)

A Starting Space
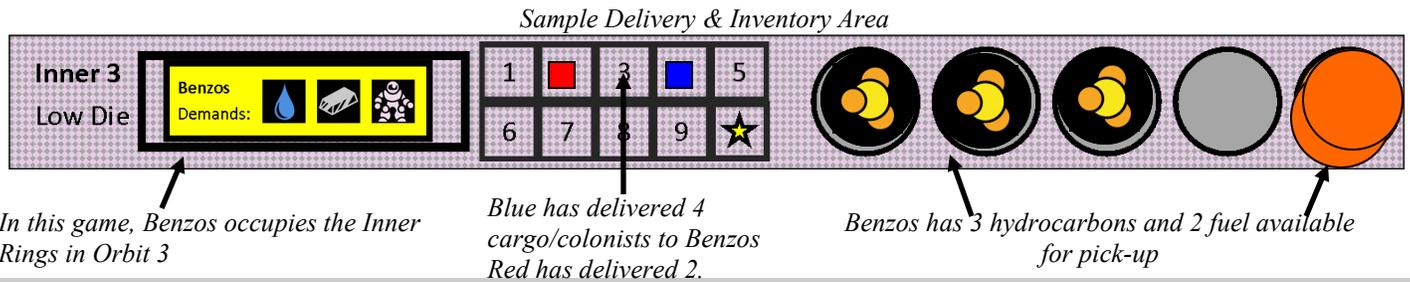
Outer Rings (2 orbits)
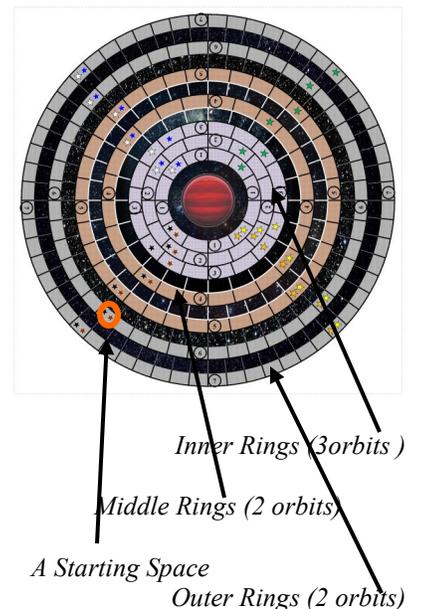
Game Concepts

The Game Board
At the center of the board is a ringed gas giant planet (similar to Saturn). Around this planet are concentric circles divided into spaces. Some of the circles are shaded with three different colors, representing three sets of rings, referred to in the game as the inner, middle, and outer rings. There are seven orbits (numbered 1-7) split between those three rings.

Space Stations
There are six space stations (and Eden). Each occupies one of the seven orbits. Space stations harvest resources from the rings, placing those resources in its supply inventory, where it becomes available for pick up by a freighter. Space stations demand deliveries of resources from other stations.

In this game, Benzos occupies the Inner Rings in Orbit 3

Blue has delivered 4 cargo/colonists to Benzos Red has delivered 2.

Benzos has 3 hydrocarbons and 2 fuel available for pick-up

Eden

This habitable moon supplies colonists for deliveries to the space stations, and demands metals and hydrocarbons.

The Station Delivery & Inventory Tracking Board is used to track where cargo and fuel are available for pick up. Harvested resources are placed on the right side of this board. The middle of this board is used to track player deliveries. The space stations are as follows:

Ferrum & Metallum - Harvest metal particles such as iron, nickel, copper, and zinc.
      Supplies: Metals
      Demand: Hydrocarbons, Water, Colonists
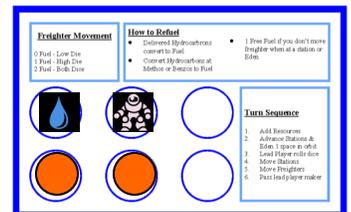
Glacia & Crystalla -   Harvest water ice
      Supplies: Water
      Demand: Hydrocarbons, Metals, Colonists

Methos & Benzos–   Harvest hydrocarbons such as methane and ethane.
      Supplies: Hydrocarbons
      Demand: Metals, Water, Colonists.

Eden- This rare moon has liquid water and an atmosphere rich in oxygen.
      Supplies: Colonists
      Demands: Hydrocarbons, Metals

Freighter Tableau

Your freighter has six spaces in its cargo bays that can be used to hold any combination of fuel, cargo, and/or colonists.

Freighter Tableau with 1 water, 1 colonist, 2 fuel, and 2 vacant spots

Setup

Place the game board in the middle of the playing area.

Pick your player color and take the matching freighter tableau, token, and cubes.

Place the Station Delivery & Inventory Tracking Board next to the game board.

Randomly place the seven Station/Eden labels into the seven orbit spaces on the Delivery & Inventory Tracking Board. Place the Eden and Station tokens on their start spaces. All start spaces are marked with stars, shaded as follows:

Shuffle the Starting Inventory Cards. Starting with the innermost orbit, draw one card and place that many resources/colonists & fuel in the inventory of each station/Eden. (There will be one unused card.)

All players roll both dice. High roll is the lead player.

In reverse order (starting with the last player, ending with the first), pick a station (or Eden) for your starting location. Place your freighter token on that station, take the resources/colonists and fuel from that inventory, and place in the vacant spots on your freighter tableau.

Turn Sequence

1. Add resources **
2. Orbital Motion **
3. Lead player rolls dice
4. Move Space Stations
5. Move Freighters
6. Pass lead player maker

** *(skip on turn 1)*

How to Play

All rules for space stations also apply to Eden unless otherwise stated.
All rules that apply to resources also apply to colonists unless otherwise stated.

1. Add resources

For each space station with a totally empty supply area, add one resource of whatever that station mines.

Always add one colonist to an empty space in the supply area for Eden.

If both space stations that mine the same resource have totally empty supply areas, yet there are not enough spare resource chips to add a resources to both, then add to neither.

2. Orbital Motion

Move all Space Stations and Eden one space clockwise within their orbits.

3. Lead player rolls dice

The lead player rolls the dice and places where all can see. Do not touch until the next turn. This dice roll is shared. It will be used by *all* players to move space stations and freighters

4. Move Space Stations

Starting with the lead player, you *may* advance a space station clockwise in its orbit. The number of spaces the space station advances depends on the dice roll and which ring the station occupies.

        Inner (Orbits 1,2, & 3) - Lower Die Roll
        Middle (Orbits 4 & 5) - Higher Die Roll
        Outer (Orbits 6 & 7)- Sum of Both Dice

A space station which is moved harvests an extra resource to its supply inventory.
The same space station may not be moved more than once by different players during the same turn.
A space station that is moved must be advanced the full dice roll for that ring.
Space Station movement is optional, you are not forced to move a space station.
Eden may NOT be moved extra during this phase.
All players move their stations in turn order before the Move Freighters phase.

5. Move Freighters

Starting with the lead player, all players use the shared dice roll for freighter movement. On your turn, you may:

        Pay *0 fuel* to move your freighter **up to** the number of spaces on the *low* die,
        Pay *1 fuel* to move your freighter **up to** the number of spaces on the *high* die,
        Pay *2 fuel* to use *both* dice to move your freighter.

A single die may be used to move a freighter *in one direction only*. In other words, you may use a die to either move:
        Clockwise or Counterclockwise within an orbit, OR
        Between orbits to move closer or further from the gas giant,
BUT NOT BOTH!

If you pay 2 fuel to use both dice to move, one die may be used to move in one direction while the second die is used to move in a different direction.

You may load/unload cargo/colonists/fuel at both the start and end of your freighter movement phase if you are orbiting a space station or Eden. See Pick-Ups, Deliveries and Bonuses for more details.

You may move through a station or Eden without stopping. However, if you stop to deliver and/or pick up, you may move no further.

6. Pass lead player maker

At the end of the turn, pass the lead player clockwise to the next player.

Orbiting

A freighter that occupies the same space as a station or Eden is considered to be in orbit. Freighters in orbit move with the station (or Eden).

Freighters MUST go into orbit if a station moves into the same space during station movement. The freighter moves with the station for the rest of that station's move.

During freighter movement, you may chose to move through the same space as a station or Eden without going into orbit.

A freighter in orbit may load cargo/colonists/fuel from the supply inventory to empty spaces in its cargo hold during freighter movement,

Pick-Ups, Deliveries & Bonuses

During the freighter movement phase, you may deliver and pick-up cargo/colonists/fuel, so long as you are orbiting that station/Eden. It is permissible to deliver/pick-up twice during freighter movement if you begin in orbit at one location, and end freighter movement in orbit around a second location.

To deliver resource chips from your cargo hold, increment your delivery total for that station, and return the chips to the pile of unused resources.

To pick-up resources/fuel, move from that station's inventory to an empty spot in your cargo. If all spots in your cargo hold are filled, it is permissible to shift excess fuel to the inventory of that station.

Water Bonus - If you deliver two or more water to stations where it is demanded (Methos, Benzos, Ferrum, or Metallum), also increment your Colonists delivered track by 1. (More water means better life support)

Metal Bonus - If you deliver two or more metal where it is demanded (Methos, Benzos, Ferrum, Metallum, or Eden), increment the deliveries to that station by +1.

Hydrocarbon Bonus
- If you deliver one hydrocarbon to a station/Eden, add one fuel chip to that destination's inventory.
- If you deliver two or more hydrocarbons to a staton/Eden, add two fuel chips to the inventory.

Fuel

There are 3 ways to add more fuel to the game.
- Delivering hydrocarbons adds fuel to that destination's inventory (see preceding section).
- If you are orbiting a station or Eden and **do not move** during freighter movement, you may add 1 free fuel chip directly to your cargo hold.
- If you are orbiting Methos or Benzos, you may convert hydrocarbons in that station's inventory to fuel. (1:1 exchange)

Scoring & Winning the Game

The game ends after 8 turns. Tally the scores. There are three ways to score and one way to lose points:

1) Total Deliveries - Score 1 point for each cargo/colonist delivered as reflected on the delivery tracks of Eden and the 6 stations.

2) Leading Deliveries at a station:
   - +2 points for each station where you have delivered more than any other player
   - +1 point if you are tied with another player for most deliveries to a station

3) Most Colonists Delivered
   - +5 points to the player who delivered the most colonists
   - +3 points to the player who delivered the 2nd most colonists
   - +1 point to the player who delivered the 3rd most colonists
   (for ties - add the points and divide by number of players, round down)

4) Non-Delivery Penalty - Deduct 2 points for each of the seven destinations to which you made no deliveries.

Tie Breaker - If there is a tie, whichever player has made the most deliveries wins. If still tied, enjoy the shared victory.

Moons & Gravitational Sling Shots

In actual interplanetary space travel, courses are naviagated to fly by a planet or large moon to benefit from gravitational sling shot effects that can alter the path and speed of a space craft while conserving fuel.

At setup, add the two moon tokens on the crescent spaces on the black orbits between the rings. Unlike Eden, these moons are uninhabited, produce no resources, and accept no deliveries. Simlar to Eden, they advance one space clockwise at the start of every turn, and cannot be advanced by the players during station movement.

Whenever a freighter moves through the same space as Eden or one of the two uninhabited moons, they receive the following two slingshot benefits.
   1. The freighter may ignore the rule forbidding direction changes for the rest of that move.
   2. The freighter may accelerate as follows
      A, If no fuel was spent, the freighter may move up to the high die (as if 1 fuel were spent)
      B. If one fuel was spent, the freighter may move with both dice (as if 2 fuel were spent).

The moon in the orbit between the inner and middle rings doubles as the turn marker. When that moon advances to the final full moon space, it is the final turn of the game.

Play Tester Credits

The original version of this game was called Planet Movers, and was third place finisher in the 2016 Cardboard Edison Prototype of the year.

Planet Chasers was playtested at the following events:
Origins, Columbus OH June 2014
Congress of Gamers Unpub Zones, Rockville MD, Sep 27 2014
Unpub Mini, Games & Stuff, Glen Burnie MD, Oct 4 2014
Euroquest, Pikesville MD, Nov 14-15 2014
Unpub5, Baltimore MD, Feb 7 2015
Congress of Gamers Unpub Zones, Rockville MD, Sep 26 2015
Metatopia, Morristown NJ, Nov 6-7 2015
Break My Game, Boards&Brews, College Park MD, Feb 21 2016
Unpub6, Baltimore MD, Apr 10 2016

Play Tester Credits: JeffW, TomB, DanH, CoreyY, EugeneP, AaronH, EthanG, JohnW, Zenlizard, KevinK, KeithF, MikeB, AdamF, Max, DougH, BarbF, ChrisM, NickV, ChristianA, BrantW, DavidY, BenB, GiovanniD, RichB, MichaelH, ShawnS, Jen-naS, JernellW, KarenH, LeeG, JasonS, ColetteG, CharlesW, MattH, AndrewJ, SteveT, Ely, TylerS, GregM, DavidT, MichaelS, BenG, BrianK, EvanE, GrecC, MiriamS, AustinS, PaulE, DanielN, JohannK, MelissaE, MichaelM, MikeC, KevinG, BradleyM, PaulO, TimothyO, PatickO, JohnO, AdenM, SimonM

Junior Playtesters: Francesco, James, Thomas

Miner Rings was playtested at the following events:

Events:
Break My Game, Boards&Brews, College Park MD, 16 July 2017
Break My Game, Congress of Gamers, Rockville MD, 7 October 2017
Metatopia 2017, Morristown NJ, 3-5 November 2017
Pax Unplugged, Philadelphia PA, 18 November 2017
Unpub 8, Hunt Velley MD, 24-25 March 2018
Break My Game, JohnCon, John Hopkins University, Baltimore MD, 7 April 2018

Playtesters:
MackC, RickyH, AndrewG, AustinS, TimothyO, PatrickO, JohnO, PaulO, EmuKiller, BobB, JeffF, NoahC, RowanC, KaitlynG, DustinS, JoshV, JeffW, TomB, PeterG, PatrickV, JulieZ, HarrisonM FedjaB, BenS, AnnieS BillyS, AaronU, KristynaB, SteveC, StephenT, RoscoS, RogerH, GaryK. DanielP, MiekeR, StevenK, NikitaS, IanZ, AndrewM, JonZ, MikeF, NoamS, AaronW, ToddM, GabbieK, ScottM, WillK, MikeS, KivaF, ChristopherD, IsaiahL, LenaL, KaylaW, IsisS, DanielP, Duffy, SteveM, MattA,

Junior Playtesters: AdenM, SimonM, ElijahE, EmilyL, Adam