

SHORT GAME ALTERNATIVES

60 TO 90 MINUTES OF FUN:

1. During **SET-UP**, the Chemist shuffles the pack of Element Cards. The pack is then cut by the player at his left and the Chemist deals, one at a time, two Element Cards to each player (including himself if he both plays and acts as Chemist). Players receiving Element Cards must immediately pay the Lab the printed price of each of the two elements thus acquired. The play then commences as in the regular game.
2. In this short game it is only necessary to have three liquids (instead of four) on each lot of a complete color-group before the player may buy a solid. Rent received for a solid remains the same as in the regular game. The turn-in value of a solid is still one-half the purchase price, which in this game is one liquid less than in the regular game.
3. **END OF GAME:** The first player to go bankrupt retires from the game as in the regular game. However, when the second bankruptcy occurs the game ends. Play immediately ceases with the bankrupt player turning over to his creditor all that he has of value, including condensations and any other elements--whether the creditor happens to be a rival player or the Lab.

Each remaining player then values his property, including AMU_{ny} on hand; lots, life elements, and lab supplies owned by him at the price printed on the board; any transferred elements owned by him at one-half price printed on the board; and liquids and solids, valued at purchase price (including liquids condensed into solids).

4. RICHEST PLAYER WINS!



This game has been created by the 2015-16 RCAEP Chemistry Class, Tutor: Terri Kammerzell. For more information: tutoring@youformedme.com. No monetary price or incentive has been offered in exchange or on behalf of this game.



CHEMISTRY MONOPOLY RULES

OBJECTIVE: The object of the game is to be the player who accumulates the most wealth by buying, renting, and selling elements.

EQUIPMENT: The equipment consists of a board, 2 dice, 6 tokens, 51 liquids, 20 solids, Lab Day and Test Day cards, Element Cards, and AMU_{ny}.

SET-UP: Place the board on a flat surface, and place the Test Day and Lab Day cards face-down in their allotted spaces. Have each player choose one token to represent him on the board.

Give each player $\$1500$ in the following recommended breakdown: 2 each of $\$500$ s, $\$100$ s, and $\$50$ s; 6 $\$20$ s; and 5 each of $\$10$ s, $\$5$ s, and $\$1$ s. All remaining AMU_{ny} and player tokens should stay in the Lab.

CHEMIST AND LAB: Designate one player as the Chemist. The Chemist will be in charge of managing the AMU_{ny} in the Lab, as well as handing out the Element Cards as they are purchased. He must keep his AMU_{ny} separate from the Lab's AMU_{ny}. The Chemist also hands out Liquids and Solids as they are purchased.

The Chemist collects all taxes, fines, loans, interests, and the price of any elements purchased and keeps it in the Lab

The Lab can never "go broke." Should a game get to a point where the Lab is out of AMUny, the Chemist may write down amounts of AMUny on paper as a suitable substitute.

PROCEDURE: Each player rolls both dice, and whoever has the highest total roll plays first. All players place their tokens on the GO space on the board. On his turn, a player rolls both dice, and moves his token the same number of spaces as the total on the two dice. Play passes to the left. All pieces stay on their current space until their player's next turn. Multiple tokens may be on the same space.

If a player rolls two of the same number on each die (called rolling doubles), after the completion of his turn, he may roll again. If he gets doubles again, the same course of action is taken. However, should doubles be rolled a third time, the player moves his piece directly to Biology Class, without passing Go.

Depending on which space the player lands on, play continues as follows:

Go: Whenever a player passes over Go in a clockwise direction or lands on the space, he is paid \$200 by the Lab.

OPTIONAL RULE: If a player lands directly on the Go square, rather than just



BANKRUPTCY: A player is bankrupt when he owes more than he can pay either to another player or to the Lab. If his debt is to another player, he must turn over to that player all that he has of value and retire from the game. In making this settlement, if the bankrupt player owns liquids or solids, he must return those to the Lab at the usual sell back price and the AMUny is given straight to the creditor. Transferred elements must also be turned over, with the normal rules applying as if the player bought the transferred element from the bankrupt player.

If the bankrupt player owes the Lab rather than another player, the player turns over all that they own to the Lab. All elements are fully evaporated and transferred, then auctioned to any remaining players. The bankrupt player then leaves the game. The game is over when only one player is left.

END OF GAME: When only one player remains with any wealth, he is the winner.



two on Iodine. Iodine must have three liquids before a fourth could be placed on Fluorine.

If the Lab runs out of liquids or solids, any players wishing to condense their elements must wait for another player to evaporate his elements, then they may condense their own elements, with the newly available Liquids and Solids.

NOTE: Carbon and Silicon can NOT be condensed.

SELLING ELEMENTS: Any element that is completely evaporated, or any lab supply, can be sold to another player for any price agreed between the two players. If an element has been condensed, the liquids and solids must be sold back to the Lab at half of the price they were bought at before the element can be sold. Liquids and solids must be sold back evenly in the same fashion they were bought.

TRANSFERRING: An element that is evaporated, or a lab supply, may be transferred for the price shown on the back of the Element Card, paid by the Lab. When an element is transferred, its Element Card is placed upside down, but still held by the owner. Rent cannot be collected from a transferred element. A transferred element may be sold to another player for any price. If a player in possession of a transferred element wishes to buy the element back from the Lab, he must pay the Lab the transfer price, plus 10% interest. If a player buys a transferred element, but does not wish to buy the element back from the Lab on that turn, he must pay 10% of the mortgage price to the Lab during the transaction. If and when he decides to buy back the element, he must still pay the usual 10% as well as the transfer price.

passing over it, he receives
\$400 instead.

ELEMENTS and Lab Supplies: If the player lands on an element or lab supply, he may either pass over it, buy it, or pay rent on it. If an element is unowned by any other player, the player whose turn it is may purchase it for the price listed on the board. The Chemist gives that player the Element Card showing ownership and the player places it face-up in front of him.

When a player lands on an element that is owned by another player, he must pay the rent listed on the Element Card to the owner of the element. The amount is doubled if all elements in a color set are owned, but the specific element has not been condensed. If an element has been transferred, no rent is due.



OPTIONAL RULE: If a player decides to not purchase an unowned element, an auction may be held for the element, with the winner being the highest bidder. He must pay his bid, and then receive the Element Card.

LAB DAY AND TEST DAY: If a player lands on one of these spaces, he must draw a card from the respective deck, follow any instructions on it, and replace the card at the bottom of the deck. If he

draws a "Get out of Biology Class Free" card, he may keep it with his AMUy until he wishes to use, trade, or sell it.

AVOGADRO'S TAX: If a player lands on this space, he has two options: he may estimate his tax at ₩200 and pay the Lab, or he may pay 10% of his total worth to the Lab. His total worth is all his AMUy on hand, printed prices of transferred and non-transferred elements, and cost price of all condensations he owns.

The player must decide which option he will take before he adds up his total worth.

BIOLOGY CLASS: A player may go to Biology Class in one of three ways. He either lands on the space "Go to Biology Class," a Lab Day or Test Day card tells him to, or he rolls three doubles in a row on a single turn. No matter where a player is on the board or how he is sent to Biology Class, he does not pass Go on his way to Biology Class.

While in Biology Class, a player may still collect rent, buy and sell elements, and condense and evaporate elements. If a player lands on the Biology Class space, he is just visiting, and his play proceeds as normal on the next round.

A player may leave Biology Class by only one of three ways. He must either roll doubles within three turns, he can use a "Get out of Biology Class Free" card, or he may pay a ₩50 fine



during any of his next three turns. If he has not rolled doubles by his third turn, he pays the ₩50 fine, and rerolls to see how many spaces he moves that round, and his turn proceeds as normal. If a player does roll doubles to get out of jail, he travels the amount shown on the dice, but he does not reroll at the end of his turn.

EXTRA CREDIT: Extra Credit is just a free space. Nothing special happens when you land here.

OPTIONAL RULE: All taxes and fines, whether from board spaces or Lab Day and Test Day cards (NOT rent), may be placed on the center of the board, and claimed by whomever lands on Extra Credit. There may also be a constant base of ₩50, provided by the Lab, on the center of the board.

LIQUIDS AND SOLIDS: At any time during a player's turn, if he owns all two or three elements in a color set, he may condense the elements. At the price listed on the Element Card for an element, he may place liquids and solids on elements. There must be four liquids on an element before a solid may be placed, and all liquids on the element at the time are removed. As well, all elements in a set must be condensed evenly, meaning that there may never be more than a one-liquid difference between the most-developed and the least-developed



element. For example, if a player owns all yellow elements, and he has four liquids on Fluorine, he may have three on Chlorine, but he cannot have