

CHEMICAL UNO

BY: CHLOE FAUSTO, YARELIN PLACENCIA, ANNETTE ALONSO & ALAN CHANG

HOW TO PLAY:

1. Everyone should start off with 7 cards.
2. Based on whatever card is played first, the following card can be played if the card has the same:
 - a. Color
 - b. Number of neutrons within 5
 - c. Mass within 5 units
3. Game continues until someone has ran out of cards and when someone runs out of cards they are considered the winner.
4. Chemical Uno also includes wild, +2 and reverse cards:
 - a. Wild cards: change the current color being played to any color that the player with the card desires.



- i.
- b. +2 cards: the person whose turn comes after the person playing the card, must take two extra cards.



i.

c. Reverse cards: reverse cards flip the order that the players are playing, the person who just went prior to the person playing the card, will now have another turn.



i.

5. If player has no playable cards, they draw from the stack of extras
6. If someone has one card they have to yell out “chemical” or they have to draw out another card.

WHO'S THE WINNER?

- Whoever is the first person to use all of their cards is the winner of the game

EXPLANATION OF CHEMISTRY CONCEPTS:

- *Bohr models*
 - Bohr models are used to visually display the protons, neutrons, and electrons of an atom. They display to what energy level the elements reach, and show the overall configuration of the element.
 - Most cards have a Bohr model for the element that belongs to that card.
- *Atomic mass*

- Atomic mass is the weight of an element, measured in atomic mass units. Equivalent to the sum of an atom's protons and neutrons.
 - Each card has the atomic mass for that element or isotope listed on the card.
- *Isotopes*
 - A form of the same element, with the same number of protons, and different number of neutrons.
 - Some cards have an isotope rather than only an element on the card.
- *Families of the periodic table*
 - The families of the periodic table are columns of elements, these elements share some of the same or similar characteristics, making them a family. There are a total of 18 families in the periodic table.
 - Each color (4 total) on each card signifies what family it belongs to.
 - Key:
 - RED: ALKALI METALS
 - ORANGE: HALOGENS
 - GREEN: ALKALINE EARTH METALS
 - BLUE: NOBLE GASES