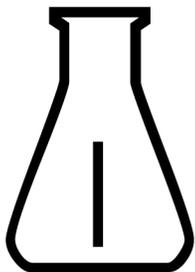


toms



&

sotopes

First Edition 2015

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eBook Version

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Atoms and Isotopes Game Assembly Instructions

Assembly Instructions

1. Print out the following single-sided on a standard letter sheet:
 - i. 1 copy of the game board
 - ii. 1 copy of the player cards for each player
2. Print out the following double-sided on a standard letter sheet:
 - i. 1 copy of the game cards (You should have two sheets of game cards when completed.)
3. Cut out the cards and laminate it all for durability.

Atoms and Isotopes is intended for 2 to 4 players whom are ages 5 and up.



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Atoms and Isotopes Game

Supplies Needed

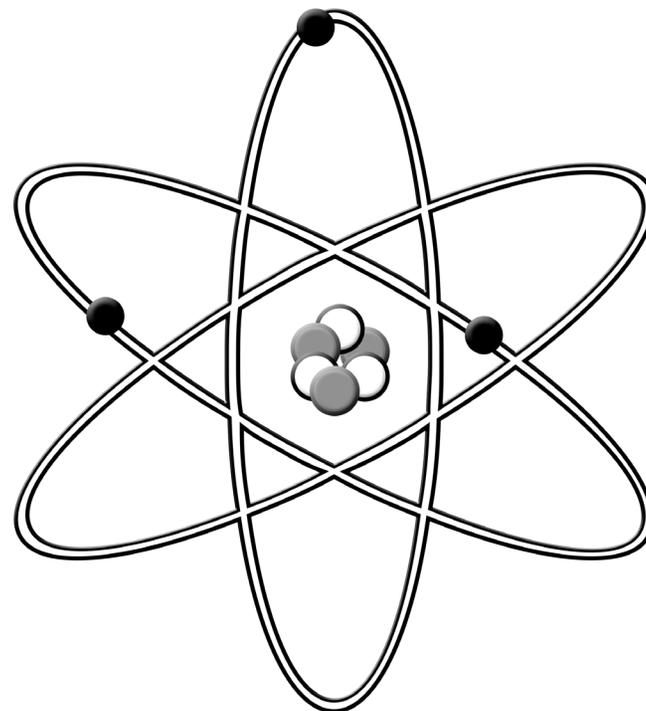
- ✓ 2 to 4 Players, ages 5 and up
- ✓ Blue, brown, and red colored beads or mini-M&M's (at least 30 of each)
- ✓ Game Board
- ✓ Game Cards
- ✓ Player Cards

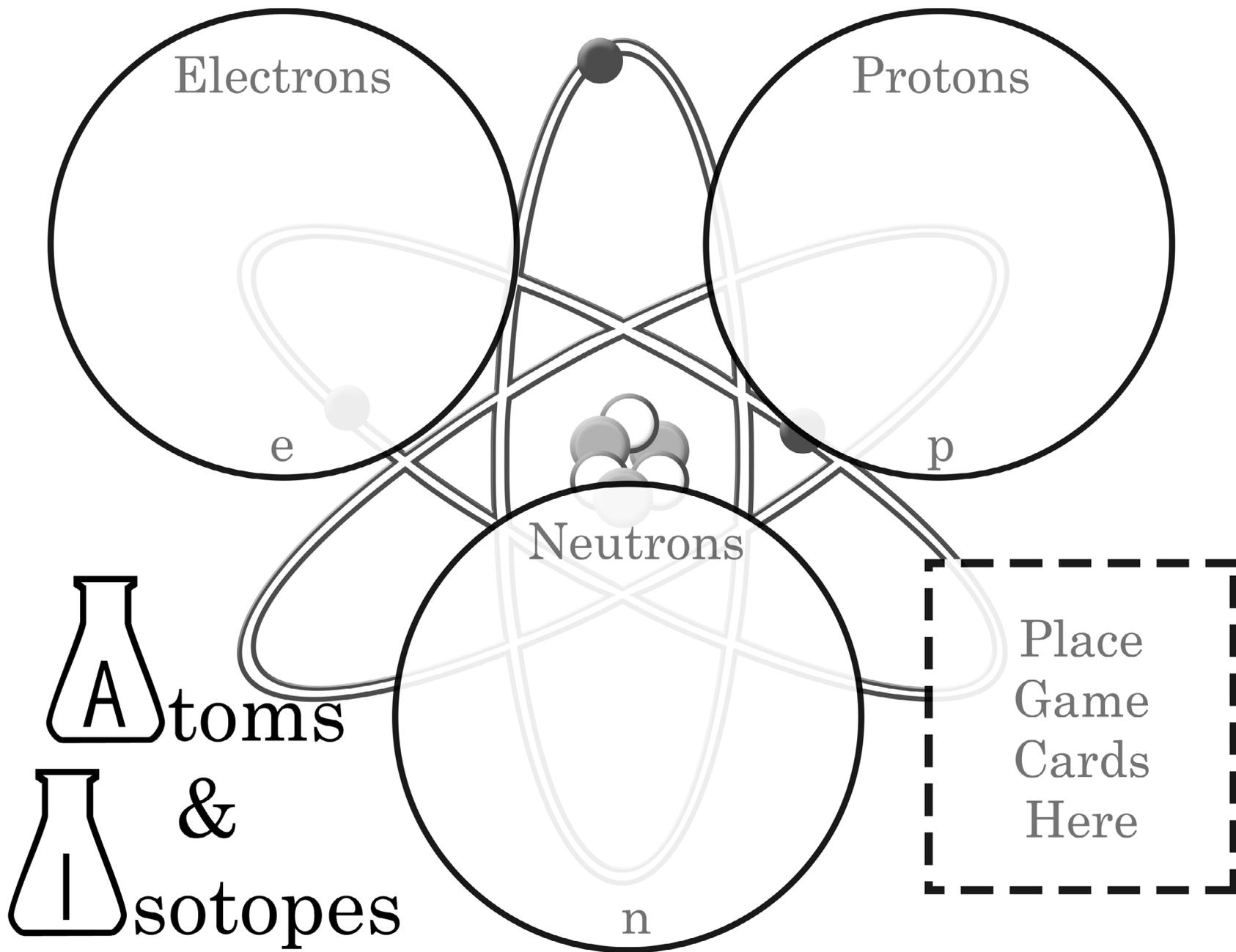
Instructions

1. Teach the players about the atoms and isotopes by reading from a book, encyclopedia, or article. We suggest the following article:
☞ <http://elementalblogging.com/atoms-and-isotopes/>
2. Set up the game.
 - i. Sort the beads or mini-M&M's into the three piles on the game board – electrons (blue), protons (red), and neutrons (brown).
 - ii. Place the game cards in the provided square.
 - iii. Choose to do an easy game (hydrogen card) or challenging game (nitrogen card). Hand the appropriate player card to each player.
3. Read the rules of the game.
 - i. Electrons go on the circles marked with an “e” on the player card, protons go on the circles marked with a “p”, and neutrons go on the circles marked with a “n” on the player card.
 - ii. Players can fill the space on either atom until both are complete. If they do not have space for the subatomic particle they have chosen, the particle is placed in their holding tank at the bottom of the player card.
 - iii. Players may use the subatomic particles in the holding tank to fill the spaces left when they choose a card that tells them to lose a particle.
4. The youngest player begins the game by choosing a card and then doing what it tells you to do. Once they are done, the player to the right chooses a card and repeats the process.
5. Game play continues until someone wins.

How to Win

Be the first player to create an atom of each of the stable isotopes on their player card.

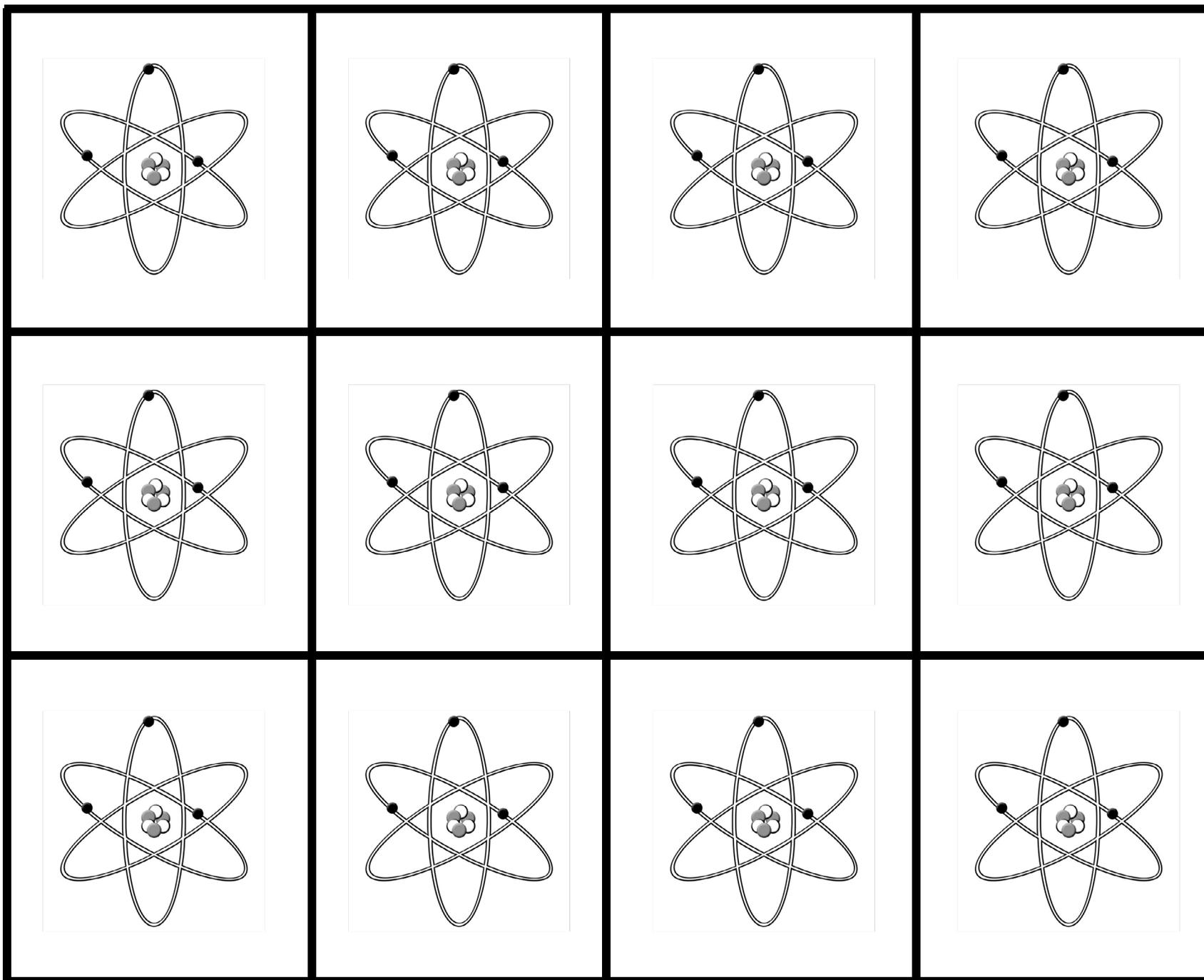




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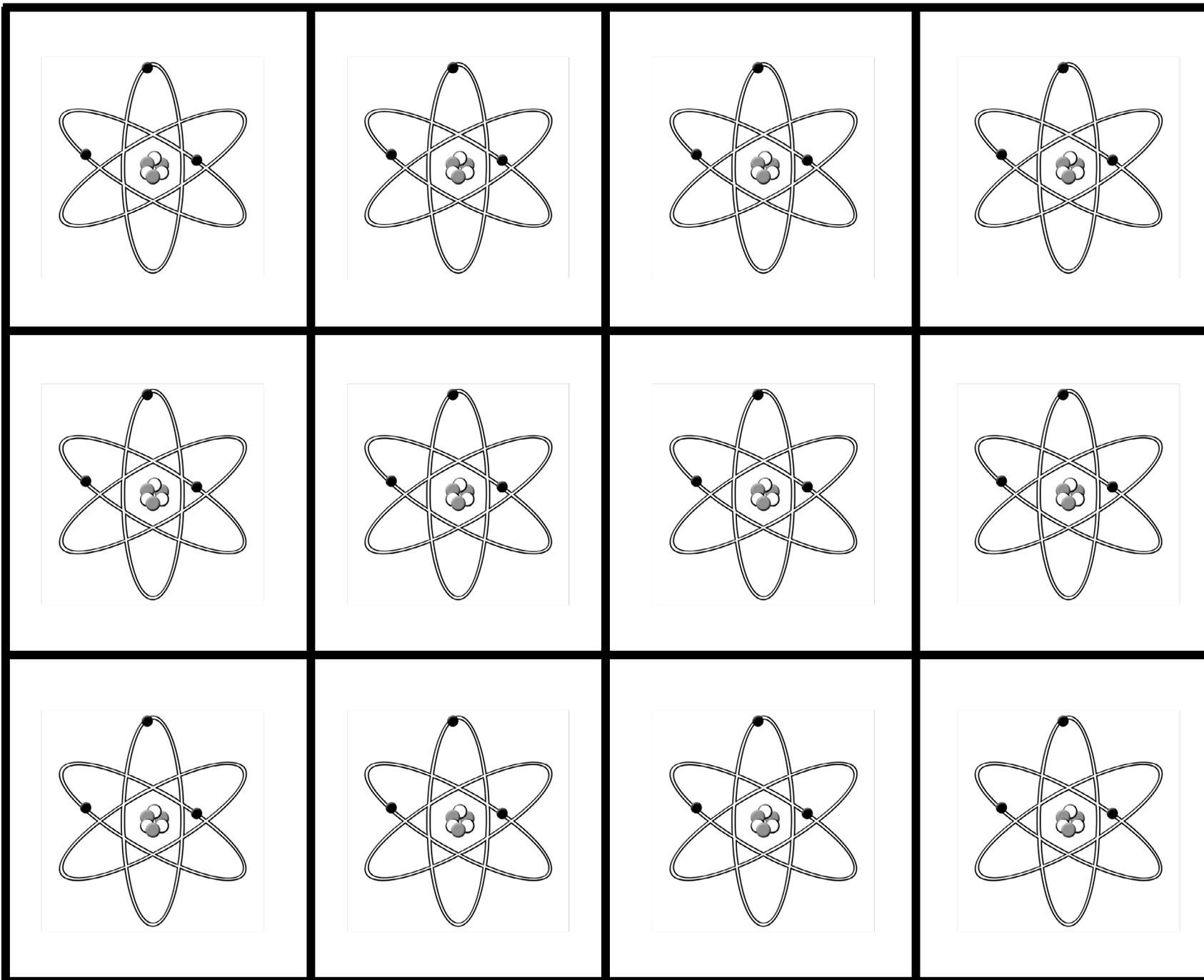
Add an electron.	Add a proton.	Add a neutron.	Add a proton and a neutron.
Add a proton.	Add a neutron.	Add a proton, an electron, and a neutron.	Add a proton and an electron.
Add an electron.	Add a neutron.	Add a proton and a neutron.	Add a proton and an electron.

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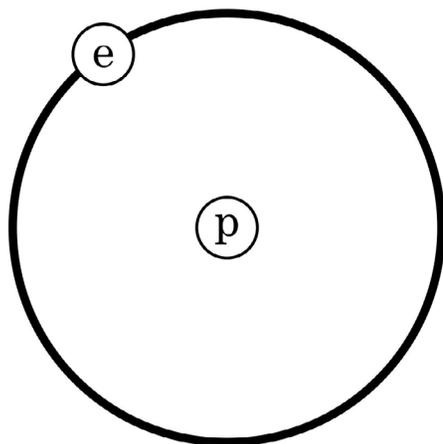
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Add two electrons.	Add two protons.	Add two neutrons.	Add two protons and two neutrons.
Lose a proton.	Lose a neutron.	Lose a proton, an electron, and a neutron.	Add two protons and two electrons.
Lose an electron.	Add three subatomic particles of your choice.	Lose a proton and a neutron.	Complete one of your isotopes.

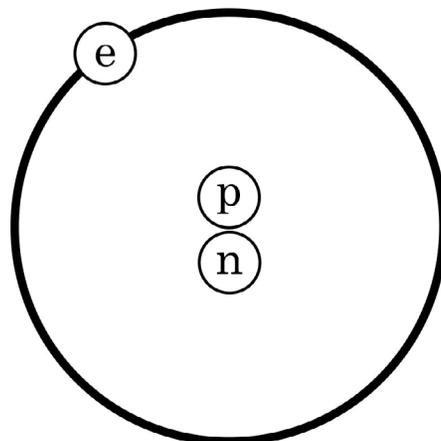


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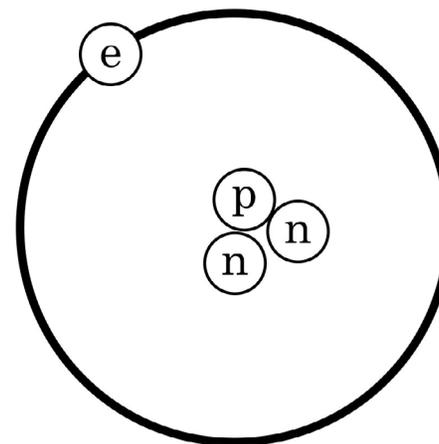
Hydrogen Player Card



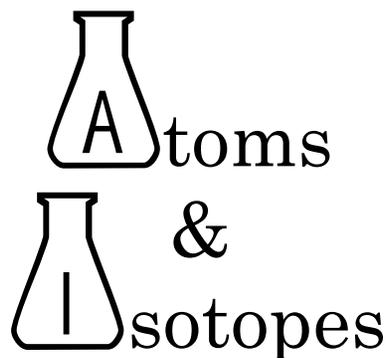
Protium



Deuterium



Tritium

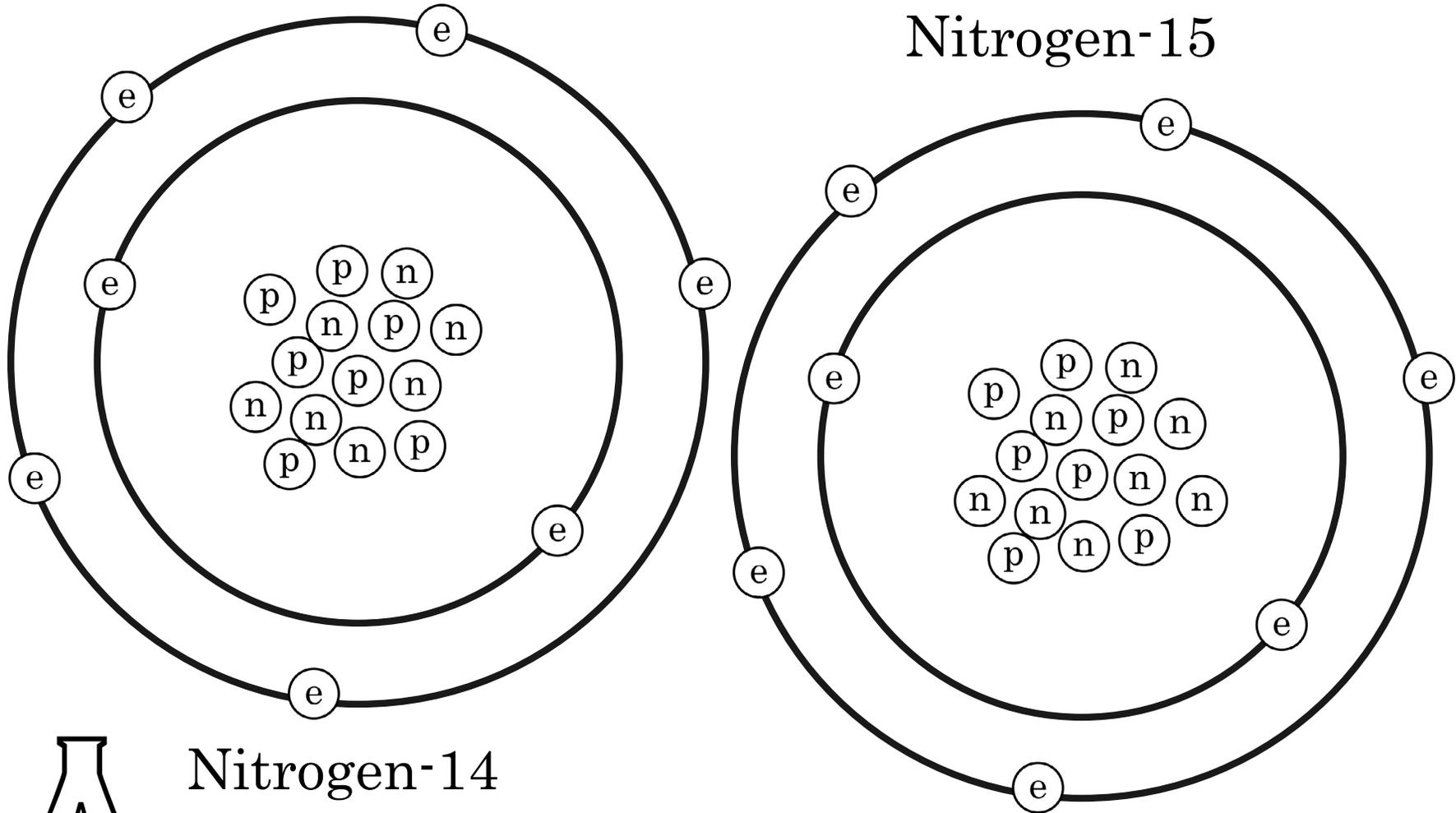


Subatomic Particles Holding Tank

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Nitrogen Player Card

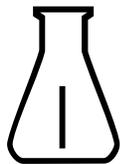
Nitrogen-15



Nitrogen-14



Atoms



&

Isotopes

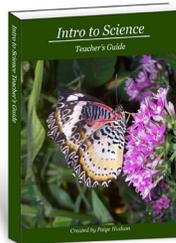
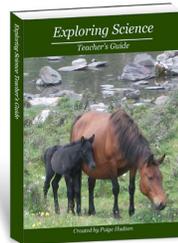
Subatomic Particles Holding Tank

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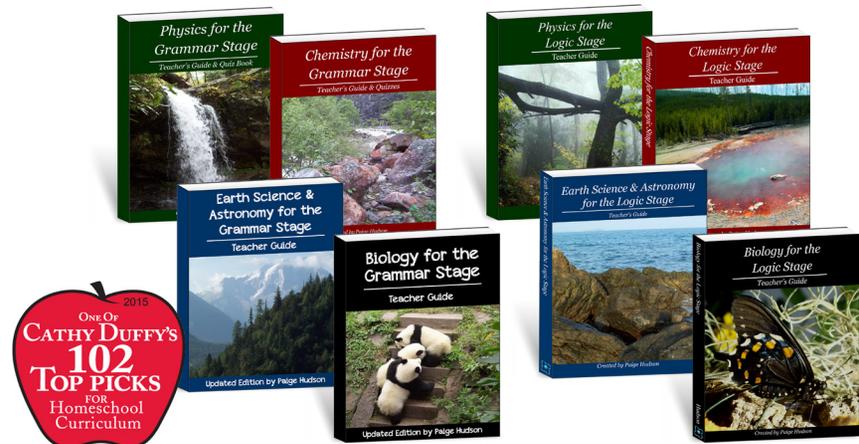
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