

RULE BOOK

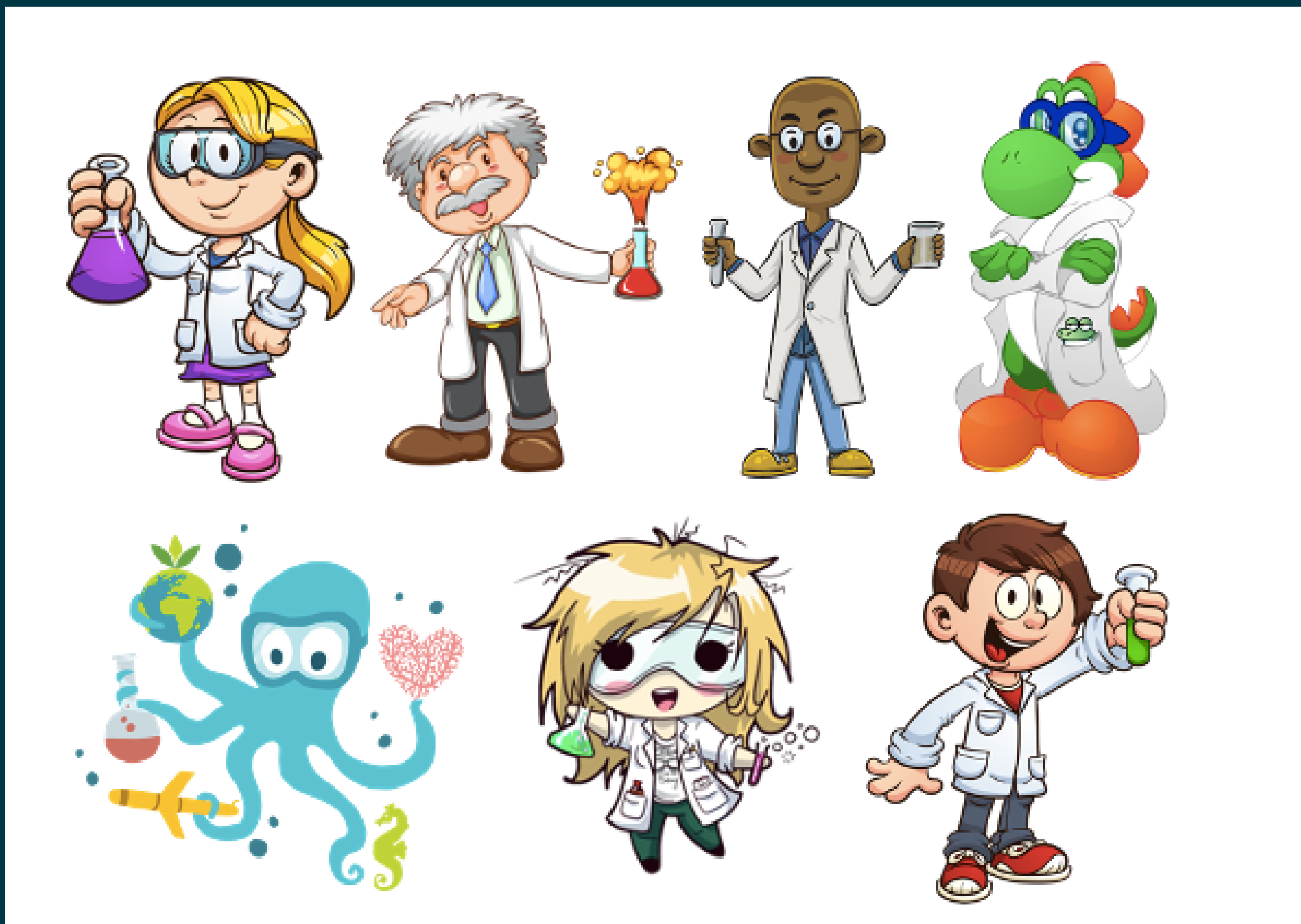
Creating elements is
elementary!

IN YOUR ELEMENT

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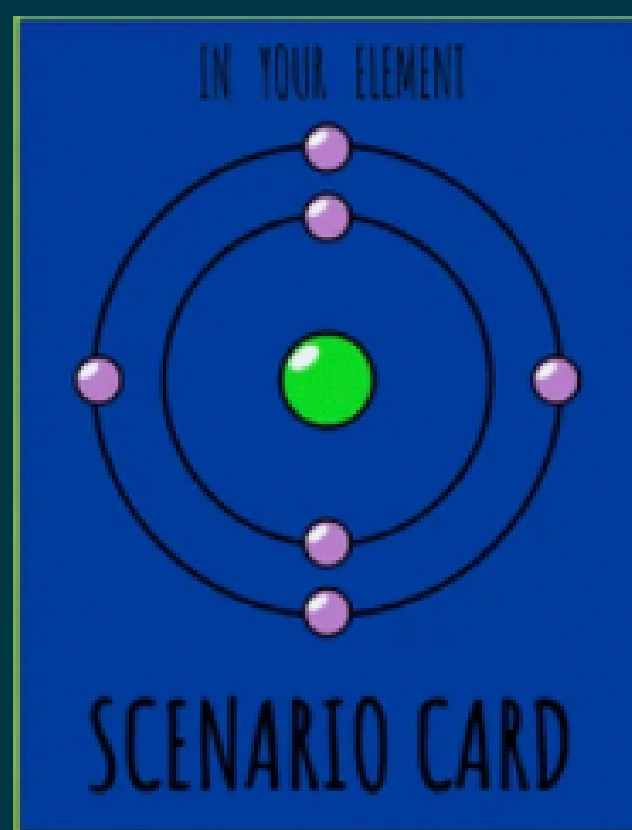
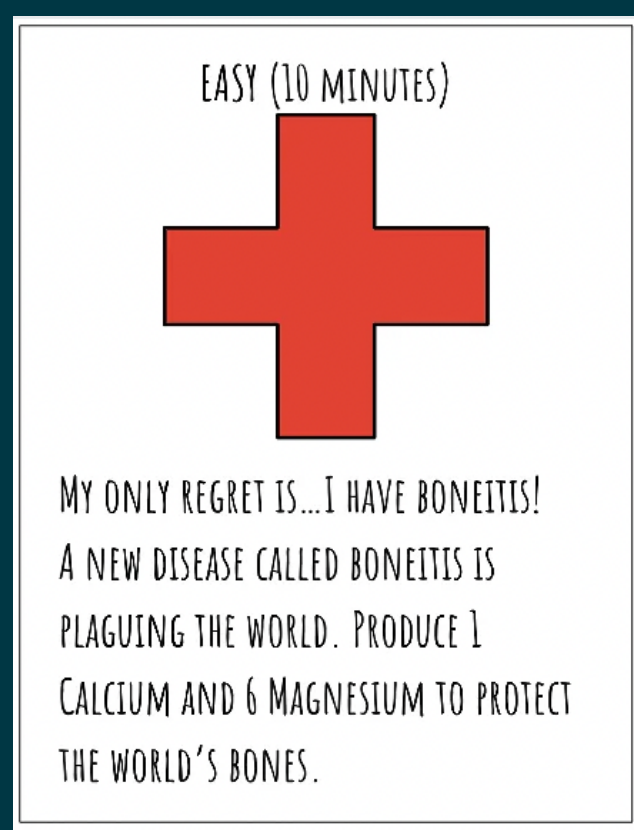
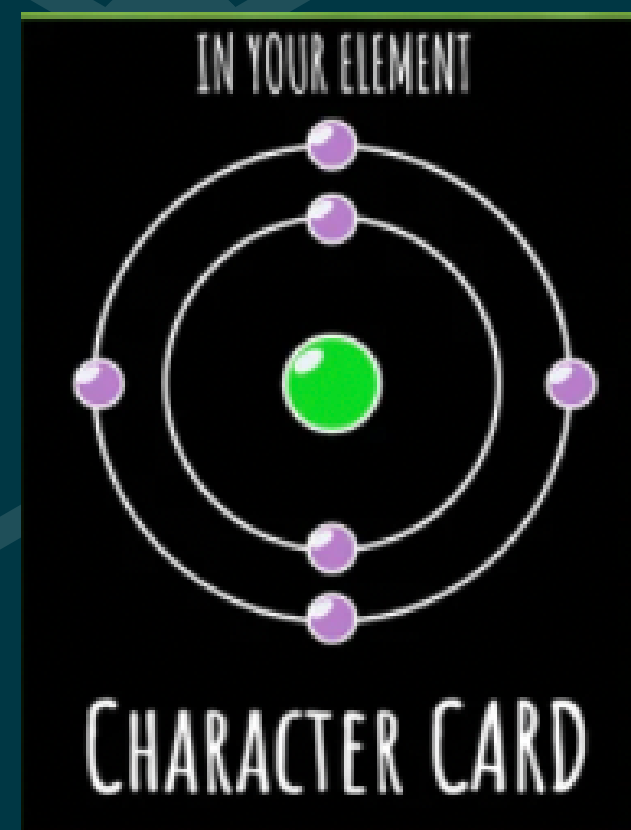
OVERVIEW

DUE TO THE OVERCONSUMPTION OF THE EARTH'S MATERIALS, THE WORLD IS UNABLE TO FIND ANY MORE ELEMENTS. YOU ARE A PART OF A GROUP OF SCIENTISTS TASKED WITH CREATING ELEMENTS TO SATISFY THE WORLD'S NEEDS. USING YOUR SMALL HADRON COLLIDERS, YOU AND YOUR TEAM ARE ABLE TO TURN SUBATOMIC PARTICLES INTO ELEMENTS AT WHIM. BE CAREFUL THOUGH! EVEN THOUGH THE TEAM IS WORKING TOGETHER TO SOLVE THE WORLD'S PROBLEMS, EVERYONE WANTS TO BE THE LEAD SCIENTIST IN ALL THE PAPERS! CAN YOU AND YOUR TEAM SOLVE THE WORLD'S URGENT ISSUES? WILL YOU END UP AS LEAD SCIENTIST?



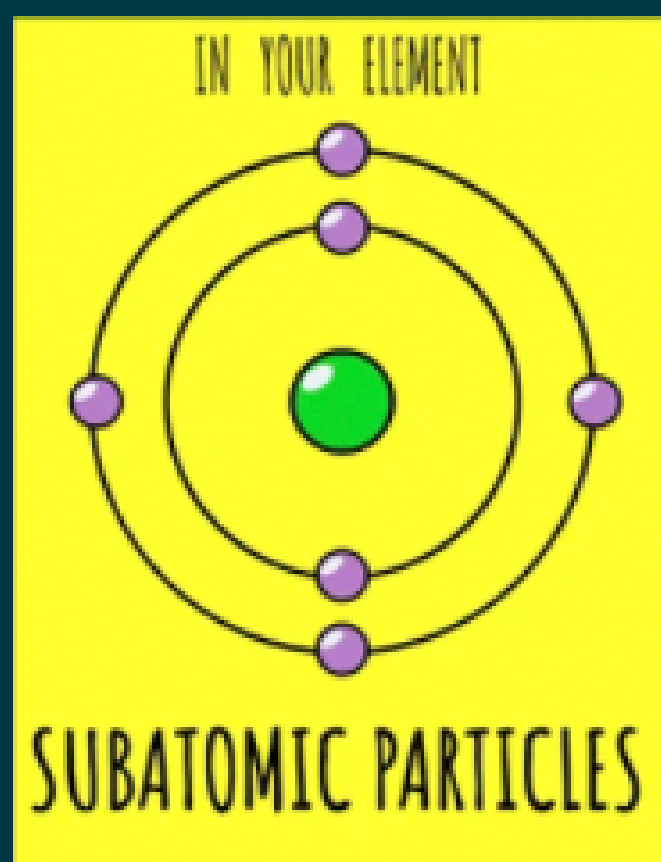
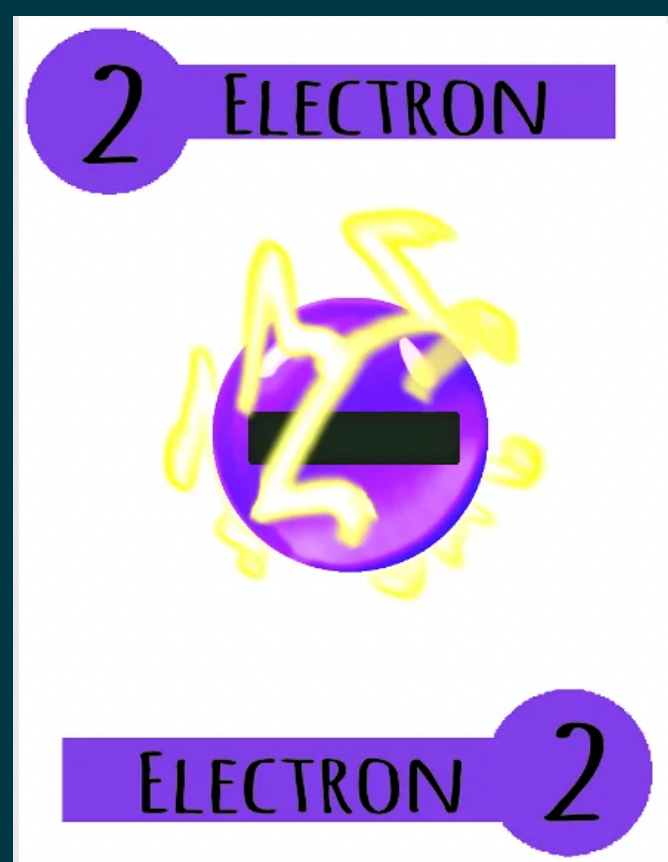
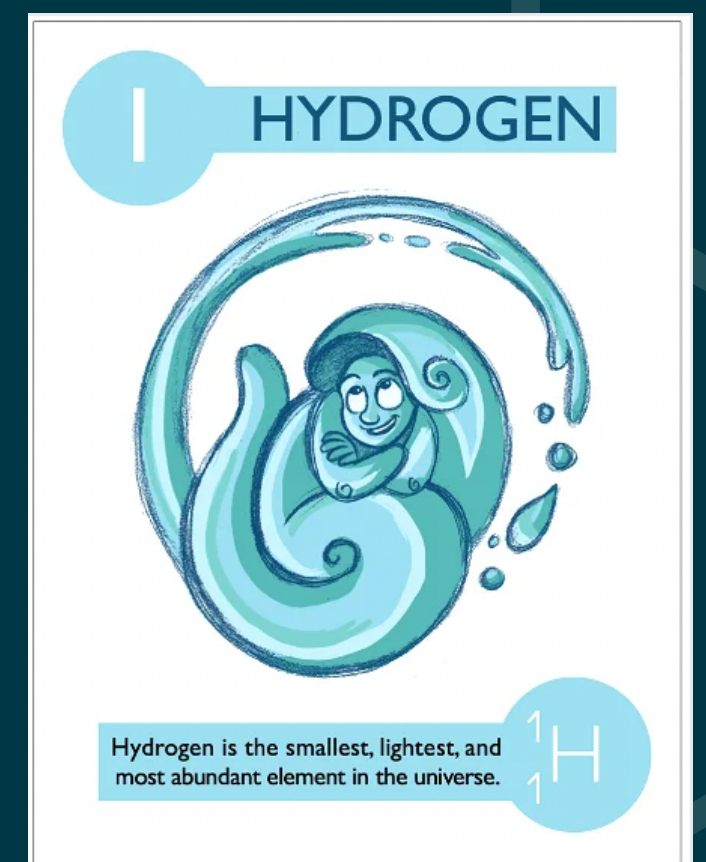
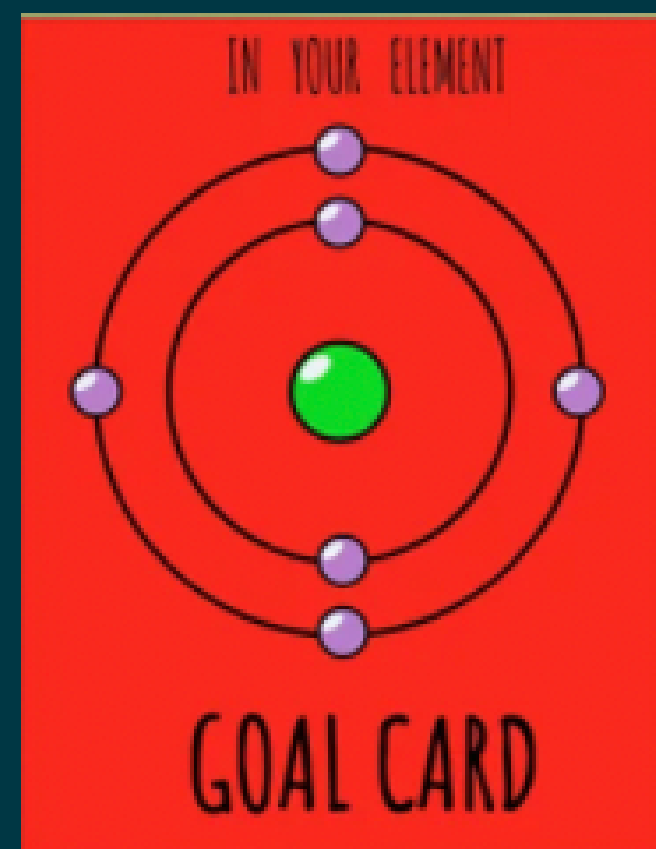
GAME PIECES

CHARACTER CARDS. CHARACTER CARDS GIVE PLAYERS SPECIAL SCIENTIST POWERS TO USE WHEN ACTIVATED DURING THE GAME. SHUFFLE THE CHARACTER CARDS AND PLACE FACE DOWN IN THE TOP LEFT OF THE BOARD.



SCENARIO CARDS. SCENARIO CARDS DICTATE WHICH ELEMENTS YOU WILL GET TO BUILD AND PROVIDE A CONTEXT. CHOOSE A SCENARIO WITH YOUR PLAYMATES AND PLACE THAT CARD FACE UP ON THE BOTTOM LEFT OF THE BOARD. SET THE REST OF THE SCENARIO CARDS ASIDE FOR ANOTHER GAME DAY.

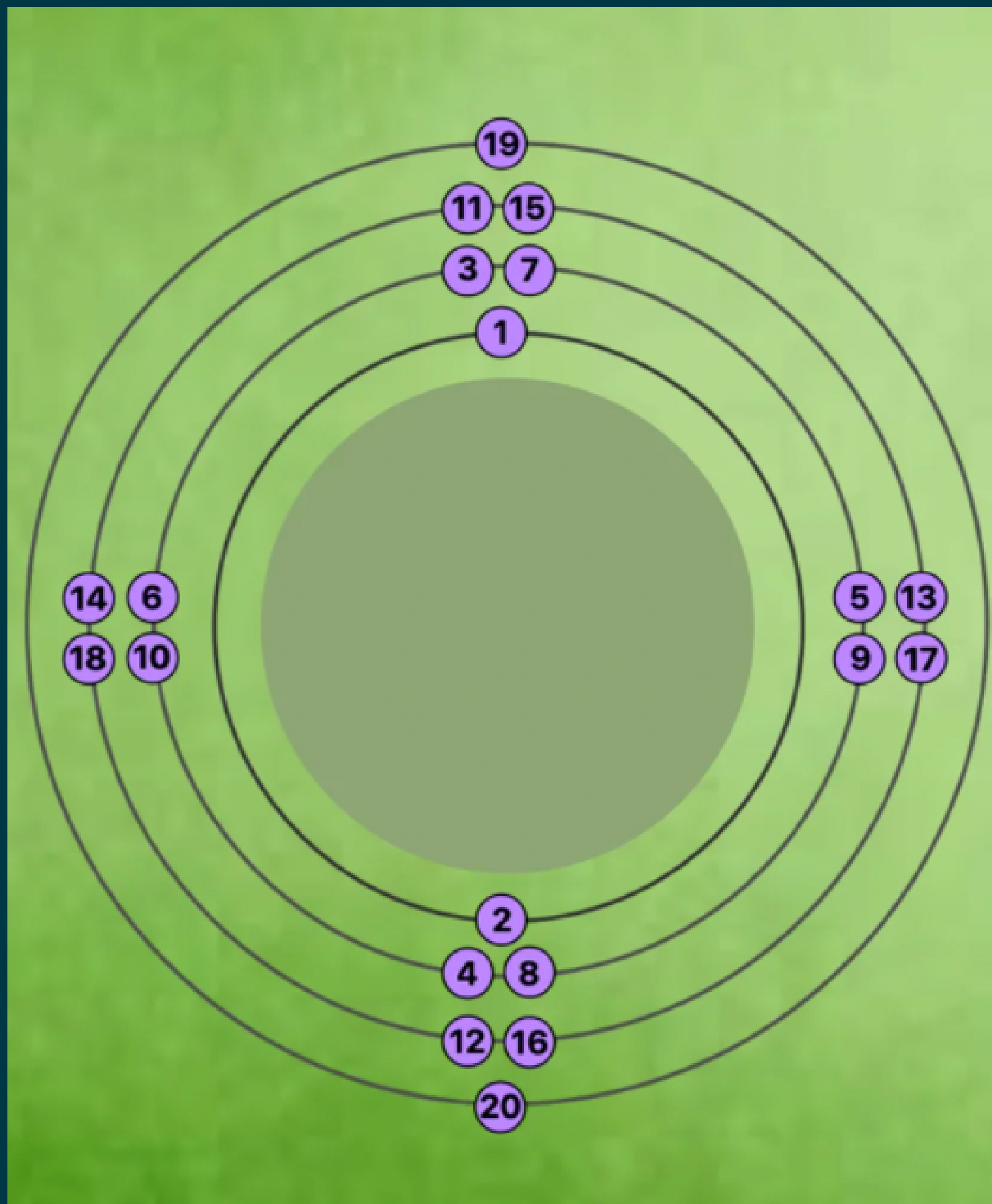
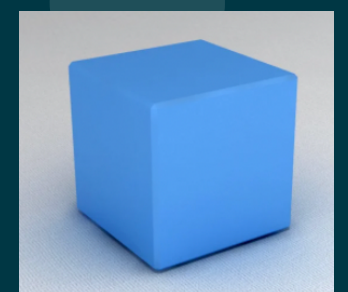
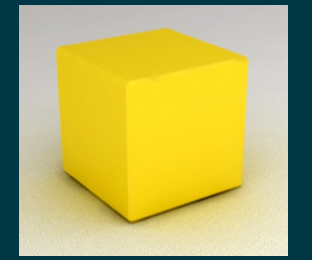
GOAL CARDS. GOAL CARDS IDENTIFY AND DESCRIBE THE ATOM OF AN ELEMENT YOU MAY NEED TO BUILD. SELECT THE APPROPRIATE GOAL CARDS THAT CORRESPOND TO YOUR CHOSEN SCENARIO. SET THE REST ASIDE TO USE ANOTHER GAME DAY. SHUFFLE THE SELECTED GOAL CARDS AND PLACE THEM FACE DOWN IN A PILE IN THEIR DESIGNATED LOCATION ON THE LEFT OF THE GAME BOARD. DRAW FIVE OF THESE CARDS AND PLACE THEM, FACE UP, IN THE FIVE GOAL CARD SPOTS AT THE TOP OF THE GAME BOARD.



SUBATOMIC PARTICLE CARDS. SUBATOMIC PARTICLE CARDS INCLUDE NEUTRON, ELECTRON, PROTON AND SCIENTIST POWER PLAY CARDS. SHUFFLE THESE CARDS AND PLACE THEM IN THEIR DESIGNATED LOCATION ON THE LEFT OF THE GAME BOARD.

GAME PIECES

GAME PIECES. GAME PIECES ARE USED TO REPRESENT THE NEUTRON, ELECTRON AND PROTON SUBATOMIC PARTICLES THAT MAKE UP AN ATOM OF EACH ELEMENT. PLACE THE BAGS OF GAME PIECES WITHIN EASY REACH, ABOVE THE GAME BOARD. THERE SHOULD BE A BAG OF YELLOW NEUTRON DISCS, A BAG OF BLUE PROTON DISCS AND A BAG OF PURPLE ELECTRON DISCS. EACH DISC REPRESENTS ONE SUBATOMIC PARTICLE. THERE SHOULD ALSO BE A BAG OF YELLOW NEUTRON CUBES AND A BAG OF BLUE PROTON CUBES. EACH CUBE REPRESENTS 5 SUBATOMIC PARTICLES. THE BROWN BAG IS THE "GARBAGE" BAG.



BOHRDS. BOHRDS ARE GENERIC BOHR MODELS OF AN ATOM. THERE ARE THREE BOHRDS ACCESSIBLE DURING GAMEPLAY. THESE ARE LOCATED IN THE MIDDLE OF THE GAME BOARD. PLAY YOUR SUBATOMIC PARTICLES ON THESE BOHRDS TO TRY TO MATCH ANY OF THE GOAL CARDS DISPLAYED ABOVE THEM.

PERIODIC TABLE. THE PERIODIC TABLE SNIPPET CAN BE USED AS A REFERENCE DURING THE GAME FOR DETERMINING THE NUMBER OF PROTONS, NEUTRONS OR ELECTRONS THAT AN ELEMENT REQUIRES. PLACE THE PERIODIC TABLE SNIPPET IN AN EASILY ACCESSIBLE PLACE, SUCH AS THE BOTTOM OF THE GAME BOARD.

Periodic Table																					
1 H 1.01																	2 He 4.00				
3 Li 6.94	4 Be 9.01															5 B 10.81	6 C 12.01	7 N 14.01	8 O 16.00	9 F 19.00	10 Ne 20.18
11 Na 22.99	12 Mg 24.31															13 Al 26.98	14 Si 28.09	15 P 30.97	16 S 32.06	17 Cl 35.45	18 Ar 39.95
19 K 39.10	20 Ca 40.08	21 Sc 44.96	22 Ti 47.87	23 V 50.94	24 Cr 52.00	25 Mn 54.94	26 Fe 55.85	27 Co 58.93	28 Ni 58.69	29 Cu 63.55	30 Zn 65.38	31 Ga 69.72	32 Ge 72.63	33 As 74.92	34 Se 78.97	35 Br 79.90	36 Kr 83.80				

SETUP

01

Go big (or go home).

Each player is dealt a Character Card (black backing) at the beginning of the game. Read the description on the card to familiarize yourself with your character's ability. Players may store any acquired element goal cards in their player corner.

02

Bags of tricks!

All players have access to the bags of subatomic particles as needed.



03

Tools of the trade

Deal five subatomic cards to each player before beginning the game. This will be their starting hand.

THE PLAYER WHO ATE THE MOST VEGETABLES THE DAY BEFORE GETS TO GO FIRST. PROCEED CLOCKWISE FROM THIS STARTING POINT.

GAMEPLAY

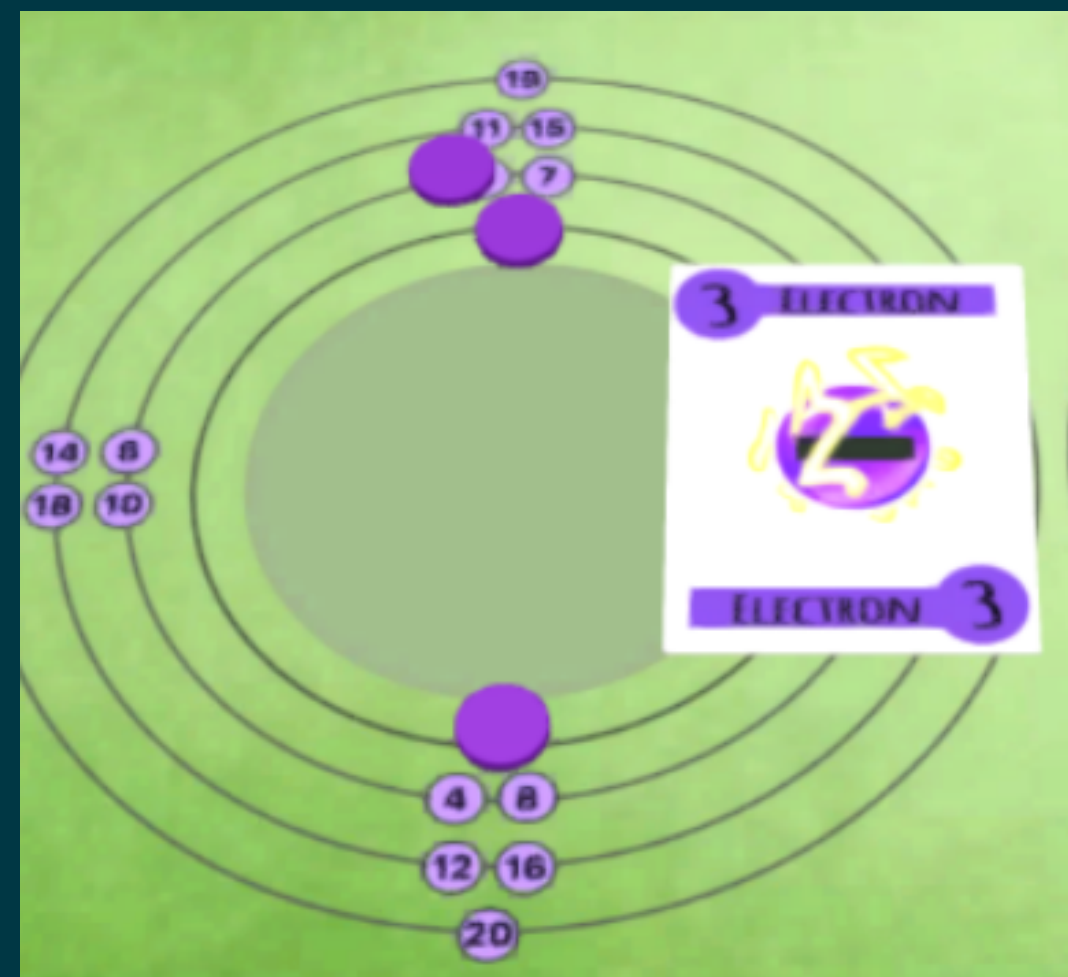
1

- Ensure you have five cards in your hand then:
- Play a subatomic particle card.



2

- Move or add subatomic particle game pieces on or off of a Bohr model.



3

- Draw another subatomic particle card and put it into your hand.



REPEAT STEPS 1-3 ONCE


4

- Take a goal card if all subatomic particles on a Bohr model match it. (Draw a new goal card if able)



ACTIONS

1 PROTON



PROTON 1



2 NEUTRON



NEUTRON 2



3 ELECTRON

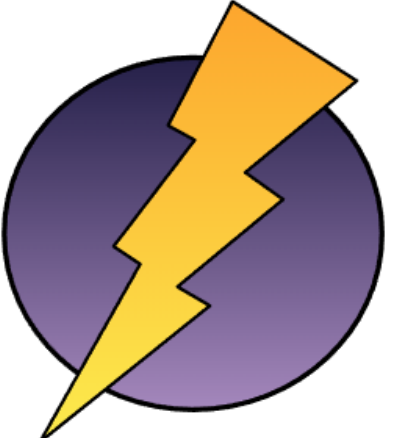


ELECTRON 3




Pick up tokens equal to the color of the card and place it in the proper spot (center for Neutrons and Protons, in the electron ring for Electrons).

SCIENTIST POWER PLAY CARD!



PLAY THIS CARD TO USE YOUR
SCIENTIST'S POWER IN GAME PLAY.

3 LITHIUM



The metal form of Lithium is so soft
it can be cut with a knife.

${}^7_3\text{Li}$

If you play a Scientist Power Play card, it does not count towards the two cards per turn rule. Then you get to use your character's power. Follow the instructions on your Character card.

If at any point during your turn, you match the number of subatomic particles on one of the Bohrds to any of the goal cards displayed, you may take that goal card. This goal card gives you points (10 + the amount of protons in that element's atom). The person who finishes the game with the most points, wins.

ADDITIONS

- ADDITIONAL NOTES REGARDING TURN STEPS:
- IF YOU PLAY A SCIENTIST POWER PLAY CARD, THEN YOU GET TO USE YOUR CHARACTER'S POWER. FOLLOW THE INSTRUCTIONS ON YOUR CHARACTER CARD.
- IF YOU PLAY A NEUTRON, ELECTRON OR PROTON CARD, YOU THEN CAN CHOOSE TO EITHER MOVE OR ADD THE NUMBER AND TYPE OF SUBATOMIC PARTICLES AS DICTATED ON THE CARD. IF YOU DECIDE TO MOVE THE PARTICLES, MOVE THEM FROM ONE BOHRD TO ANOTHER. IF YOU DECIDE TO ADD THE PARTICLES, ADD THE PARTICLES TO A BOHRD.
- WHEN MOVING OR ADDING PARTICLES, YOU MUST MOVE OR ADD THE EXACT NUMBER AS INDICATED ON THE SUBATOMIC PARTICLE CARD
- AS DICTATED ON THE CARD, TO THE SAME BOHRD. IF MOVING THE PARTICLES FROM ONE BOHRD TO ANOTHER, YOU MUST MOVE THE EXACT NUMBER AS DICTATED ON THE CARD, AND YOU MUST MOVE THEM ALL TO THE SAME BOHRD.
- SUBATOMIC PARTICLE DESTINATION NOTE: PROTONS AND NEUTRONS GO IN THE NUCLEUS
- (REPRESENTED BY A CIRCLE) IN THE CENTER OF THE BOHRD. ELECTRONS ARE PLACED IN THE ENERGY LEVELS (REPRESENTED BY RINGS) SURROUNDING THE NUCLEUS, IN THE ORDER INDICATED BY THE NUMBERS ON THE BOHRD
- DRAW ANOTHER SUBATOMIC PARTICLE CARD TO REPLACE THE CARD YOU PLAYED FROM YOUR HAND.
- IF AT ANY POINT DURING YOUR TURN, YOU MATCH THE NUMBER OF SUBATOMIC PARTICLES ON ONE OF THE BOHRDS TO ANY OF THE GOAL CARDS DISPLAYED, YOU MAY TAKE THAT GOAL CARD. THIS GOAL CARD GIVES YOU POINTS WHICH WILL BE TOTALLED AT THE END OF THE GAME. THE PERSON WHO FINISHES THE GAME WITH THE MOST POINTS, WINS.
- IF A GOAL CARD HAS BEEN TAKEN, REPLACE IT WITH ANOTHER GOAL CARD ACCORDING TO THE SCENARIO CARD CHOSEN AT THE BEGINNING OF THE GAME. NOTE: SOME SCENARIO CARDS DO NOT INVOLVE THE USE OF MORE THAN FIVE GOAL CARDS. IN SUCH A CASE, THE TAKEN GOAL CARD WOULD NOT BE REPLACED.
- SCIENTIST POWER PLAY CARDS DO NOT COUNT IN THIS TWO CARDS PER TURN LIMIT.
- DISCARD OR DRAW CARDS FROM YOUR HAND UNTIL YOU HAVE EXACTLY FIVE CARDS IN YOUR HAND AT THE END OF YOUR TURN. THIS SHOULD ONLY BE NECESSARY IF YOU FORGOT TO DO SO DURING YOUR TURN.

CHARACTERS



Play your PowerPlay card. Remove one subatomic particle on any Bohr and replace it with a different subatomic particle on the same Bohr. This does not count as one of your two actions. You may now play your two actions.

Albert Einstein, though recognized universally as a physicist, was also a chemist. It was actually Einstein who mathematically proved the existence of atoms through Atomic Theory in 1905. He was only 25 years old at the time! The existence of atoms had been theorized before, but thanks to him, not only were they proven without a doubt, but we could also tell the exact size of these atoms and molecules!

ALBERT EINSTEIN

Play your PowerPlay card. You may now play your two actions. During this turn, any Electron card that you play can be worth any value between 1-3. This value can also be used to move or remove electrons instead.

Gilbert Lewis discovered both the covalent bond and the Lewis pair, the fact that electrons pair up in the valence shell of atoms. His Lewis Diagram revolutionized modern theories on chemical bonding, and how electrons interact with each other and with other atoms once bonded together. He was nominated for the Nobel Prize 41 times...but never won!



GILBERT LEWIS

Play your PowerPlay card. You may play all cards in your hand this turn, but each card's value is reduced to 1. Instead of drawing a card after an action as normal, play all cards in hand, and then pick up 5 cards. Your turn is now over.

Marie Curie is most famous for discovering both Radium and Polonium, and her research into radioactivity paved the way for the discovery of cancer treatments. Curie was the first woman to ever win a Nobel Prize in Physics, and when she later won another for Chemistry, she became the first person ever to win the Nobel Prize twice this is why she gets double the power! Her notebooks are stored in lead containers in France because they are still so radioactive from her research!



MARIE CURIE

CHARACTERS

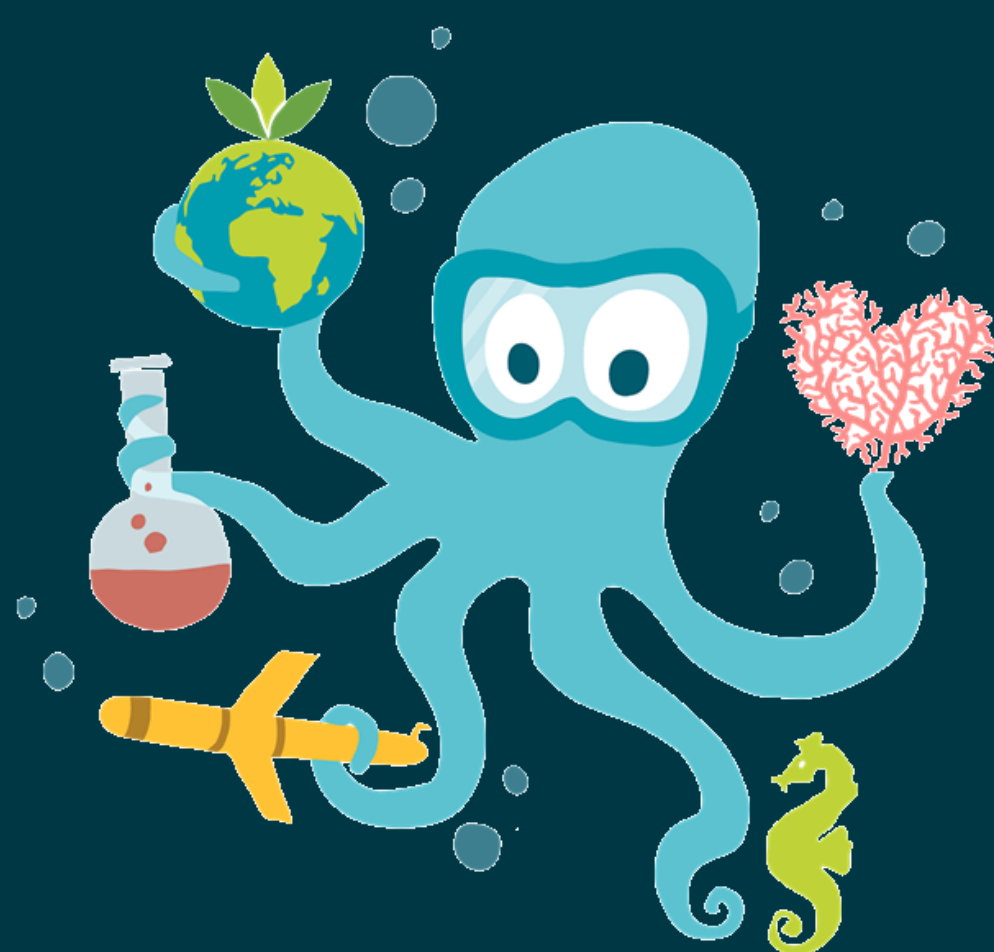
Play your PowerPlay card. You may now play your two actions. During this turn, any Proton card that you play can be worth any value between 1-3. This value can also be used to move or remove protons instead.

Alice Ball was the innovator of the “Ball Method,” a technique of chemical extraction of the oil from a Hawaiian tree that became the cure of leprosy symptoms. Leprosy was a horribly stigmatized and lethal disease, so much so that those who were diagnosed were sent off to islands to die in isolation with other patients. At only 23 years old in 1915, Alice Ball discovered the cure to the symptoms and contagion, allowing those infected to return to their families.



ALICE BALL

Play your PowerPlay card. Immediately draw 4 cards to now have 8 in your hand. You have two actions this turn, and after both actions you must discard two cards to end your turn with 5 cards in your hand.



Ozzy the octopus doesn't actually have any formal education. A marine biologist studying octopi had too many test samples to hold onto, and kept dropping them on the rocking boat. Ozzy helped her out, holding onto 8 samples at once with secure suction cups. Ever since that day, Ozzy has been a lab assistant at world-class laboratories, securely grasping up to 8 high-tech devices and sensitive samples at a time!

OZZY THE OCTOPUS

Play your PowerPlay card. You may now play your two actions. During this turn, any Neutron card that you play can be worth any value between 1-3. This value can also be used to move or remove neutrons instead.

Though often dismissed as a friendly dino-sidekick, Yocchi is actually an accomplished chemist. Yocchi received his PhD in organic chemistry in 1985 after his discovery of rapid egg creation through oral consumption. Yocchi found that his species' particular stomach acids could be combined with living organisms to instant eggify them. Initial worries of inhumane testing were squashed once proven that no harm was done to the test subject upon wriggling out of the egg.



YOCCHI

CHARACTERS



Play your PowerPlay card. You have two actions for this turn. If at any point between now and immediately after your second action there is a completed Hydrogen element on a Bohr, you may automatically replace that Hydrogen with an Oxygen. You may claim the completed Oxygen if desired.

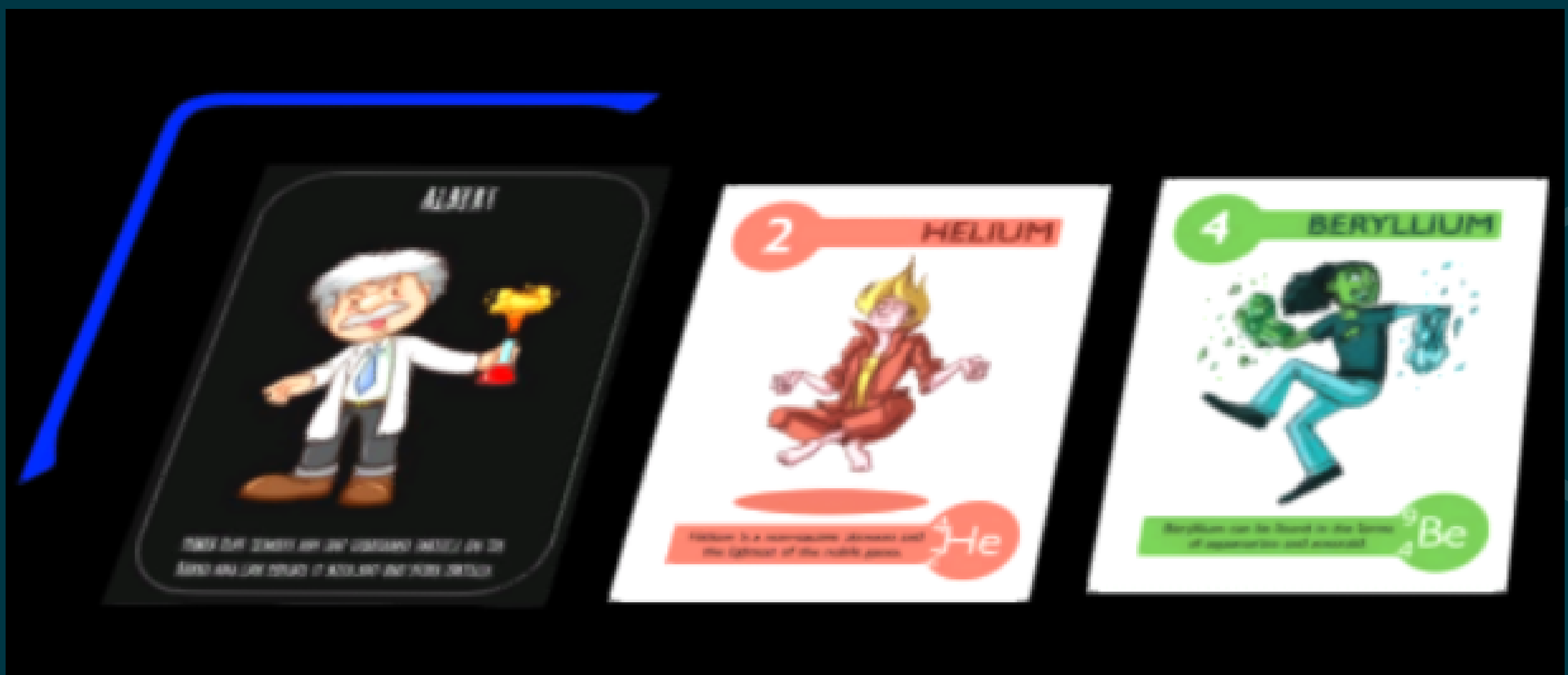
Saint Elmo Brady worked in the field of Organic Chemistry, and was the first Black American to ever get a PhD in Chemistry! Brady actually started his research while a student as a means to settle a debate between two of his superiors in the lab.

Through his research of replacing Hydrogen with Oxygen in the chain of compounds, Brady invented new ways of preparing and purifying these compounds, groundbreaking for the new field of organic chemistry in 1915.

SAINT ELMO BRADY

GAME END

ONCE THE FINAL GOAL CARD HAS BEEN TAKEN, THE GAME IS NOW OVER. IT'S TIME TO COUNT POINTS!



POINTS ARE AS FOLLOWS: FOR EACH CARD, 10 POINTS + THE AMOUNT OF PROTONS IN THE ATOM. MOST AMOUNT OF POINTS WIN!

In this example, the blue player gets 10+2 point and 10+4 points which totals to 26 points. Great job!

CREDITS

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GAME DESIGN

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