Ico

-Check, check… Test… Alright! Hey I’m Ico! I’m assigned to help you out right now. But before we start we need to make sure nothing got damaged when we shrank you down to size!

- Alright try moving forwards press W

-Excellent!

- Okay try moving left and right with A or D

- Excellent!

-Okay so you seem to be working fine. We’re almost there so you better get ready! Turn around there should be some safety glasses on the table behind you. You need those before doing any Science remember safety first!

-Alright so we’re just about there! So when we get there you are going to go out in this sub Atomic world. You’ll see some elements don’t be scared. Their harmless… relatively, and we need to go out and collect some elements and form some bonds!

- So we have just arrived time to step outside and view the sub atomic world!

- Okay see it’s impressive isn’t it big ol plane of elements. ANYWAYS we need to find some Hydrogen to start all this stuff. It shouldn’t be hard to find Hydrogen is the most common element in the universe! Hydrogen should be easy enough to spot gaseous and floaty looks like a cloud of sorts, also has oen valence electron floating around it there should be some around the ship!

-Hey there’s one right there being all floaty and cloud like go and grab em!

-Alright you got one! We will need one more!

- Okay you got two Hydrogen atoms head back to the ship and let’s get to some SCIENCE!

-Alright so now that you’re back to the lab we are going to do some SCIENCE! Head over to the counter with over there with all the lab equipment on it we’re going to make some bonds!

-Alright select the hydrogen molecule and let’s bond!

-Okay so Hydrogen is simple they have one valence electron each so you’re going to want to start by placing the valence electron for each Hydrogen atom. Since we are bonding them and there are only one each place them in the slots in-between the two of them.

-Okay so now that the electrons are in place its time to bond them. You are going to create a single covalent bond between the two of these Hydrogen atoms so they will share their electrons.

-YOU DID IT! The Hydrogen atoms are now bonded with a single covalent bond. This now forms a Hydrogen molecule also known as H2

-Alright we have some Hydrogen now I need you to get something a little more complicated. I need you to go out and get some Oxygen. Oxygen is a gas like Hydrogen but you can see the difference oxygen is a little taller and on the chubby side and also has 6 valence electrons floating around it. There should be a few outside the ship.

-There is some Oxygen go and grab two of them and head back to the lab.

-Alright you have two of them time to bond! Head over to the table again and be ready this is a little more complicated. Each Oxygen atom has 6 valence electrons each so you’re going to have to place them accordingly 6 each!

-Okay now Oxygen bonding follows what’s known as the Octet rule where it’s happiest when it has 8 electrons in its outer shell and it starts with 6 so this is easy to do. All electrons want a buddy and try to form pairs. You can see this as some electrons for pairs on a single atom these are called lone pairs. But there are two electrons on an Oxygen atom that aren’t paired and the Octet rule means Oxygen is only really happy when it has 8 so lone pairs aren’t an option so it shares two of it’s electrons with the other Oxygen atom so they both have 8!

- See now they are both happy and you fulfilled the octet rule and created a double bond! Double bonds are tougher to break apart than just a regular single bond!

-Okay now we have an Oxygen molecule also known as O2 one of the most important things for humans to survive!

-Alright so now you’ve done a single and double bond time to do the strongest type of bond. A TRIPPLE BOND!

- Not many elements regularly form stipple bonds but luckily Nitrogen forms triple bonds with itself and some aren’t too far away from us!

-Nitrogen is a gassy element that seems really low and mellow with a big gassy hairdue and has 5 valence electrons so go and get em!

-Alright you got one another one isn’t to far away!

-Okay you got the two Nitrogen atoms now head back to the lab.

-So triple bonds happen just like the double and single bonds except there are three of them so just place the electrons and connect the lone electrons to form those covalent bonds!

-There you go a triple bonds the most amount of bonds possible between two atoms and the strongest one to boot!

-Alright now you’ve done every kind of bond that involves sharing but now we need to cover the other type IONIC BONDS!

- Ionic bonds form between metals and non-metals and the valence electrons are taken not shared!

-So the bond we are going to make now is Sodium Chloride commonly known as salt.

-So we are going to need two different elements to do this Sodium which is a metal and will be easier to identify than the last few gasses. Sodium looks all metallic and is kind of short and has four legs and has a single valence electron

-Alright you got one sodium and now we need the Chlorine part of this.

-Chlorine is a gas but stands out more since chlorine is naturally green so you can see a green gas floating around with seven valence electrons around it.

-Okay you got the two of them head back to the lab and lets get Ionic.

- Now this will work in a similar way to the covalent bonds so lets start by placing the valence electrons remember Sodium has one and Chlorine has seven!

-Alright so now that the valence electrons are in place (however we have the ionic bonds working right now just fill this in) AND THERE YOU GO!