

Names: _____

Modeling an Atom Rubric

Introduction to Basic Chemistry

Model

Chosen: _____

Element

	1	0
Protons	Contains all required parts: <ul style="list-style-type: none"> - correct location - correct charge - labeled 	Missing/incorrect information: <ul style="list-style-type: none"> - incorrect location - incorrect charge - not labeled
Neutrons	Contains all required parts: <ul style="list-style-type: none"> - correct location - correct charge - labeled 	Missing/incorrect information: <ul style="list-style-type: none"> - incorrect location - incorrect charge - not labeled
Electrons	Contains all required parts: <ul style="list-style-type: none"> - correct location - correct charge - labeled 	Missing/incorrect information: <ul style="list-style-type: none"> - incorrect location - incorrect charge - not labeled
Visual	Model is neat, organized, and accurately depicts an atom of the chosen element.	Model is disorganized, incomplete, or does not accurately depicts an atom of the chosen element.

Covalent & Ionic Bonding Drawing

	1	0
Ionic Bonding	Diagram accurately depicts an ionic bond.	Diagram does not accurately depict an ionic bond.
Covalent Bonding	Diagram accurately depicts a covalent bond.	Diagram does not accurately depict a covalent bond.

Comments:

_____ /6 points

Modeling an Atom Rubric

Introduction to Basic Chemistry

2= Student fully understands the material and can answer the question on their own.
1= Student has a good understanding of the materials, but needed assistance from their partner.
0= Student was unable to answer the question correctly.

- | | | | |
|---|---|---|---|
| 1. What is an atom? | 2 | 1 | 0 |
| 2. What subatomic particles make up the nucleus? | 2 | 1 | 0 |
| 3. Which subatomic particle(s) are found surrounding the nucleus? | 2 | 1 | 0 |
| 4. What particle(s) determine the overall charge of an atom? | 2 | 1 | 0 |
| 5. What is an element? | 2 | 1 | 0 |
| 6. What are isotopes? What are the isotopes of your element? | 2 | 1 | 0 |
| 7. What does mass number and atomic number refer to? | 2 | 1 | 0 |
| 8. What are the different types of chemical bonds? | 2 | 1 | 0 |
| a. Explain ionic bonding | 2 | 1 | 0 |
| i. What is an ion? | 2 | 1 | 0 |
| b. Explain covalent bonding | 2 | 1 | 0 |
| 9. What is a molecule? | 2 | 1 | 0 |
| 10. What is a compound? | 2 | 1 | 0 |
| 11. What do the subscripts and coefficients tell us about the atoms in a molecule or compound? | 2 | 1 | 0 |

Comments:

_____ /8 points

Names: _____