Unit 4: Chemical Reactions

Performance Task: Ionic Bonding Poster

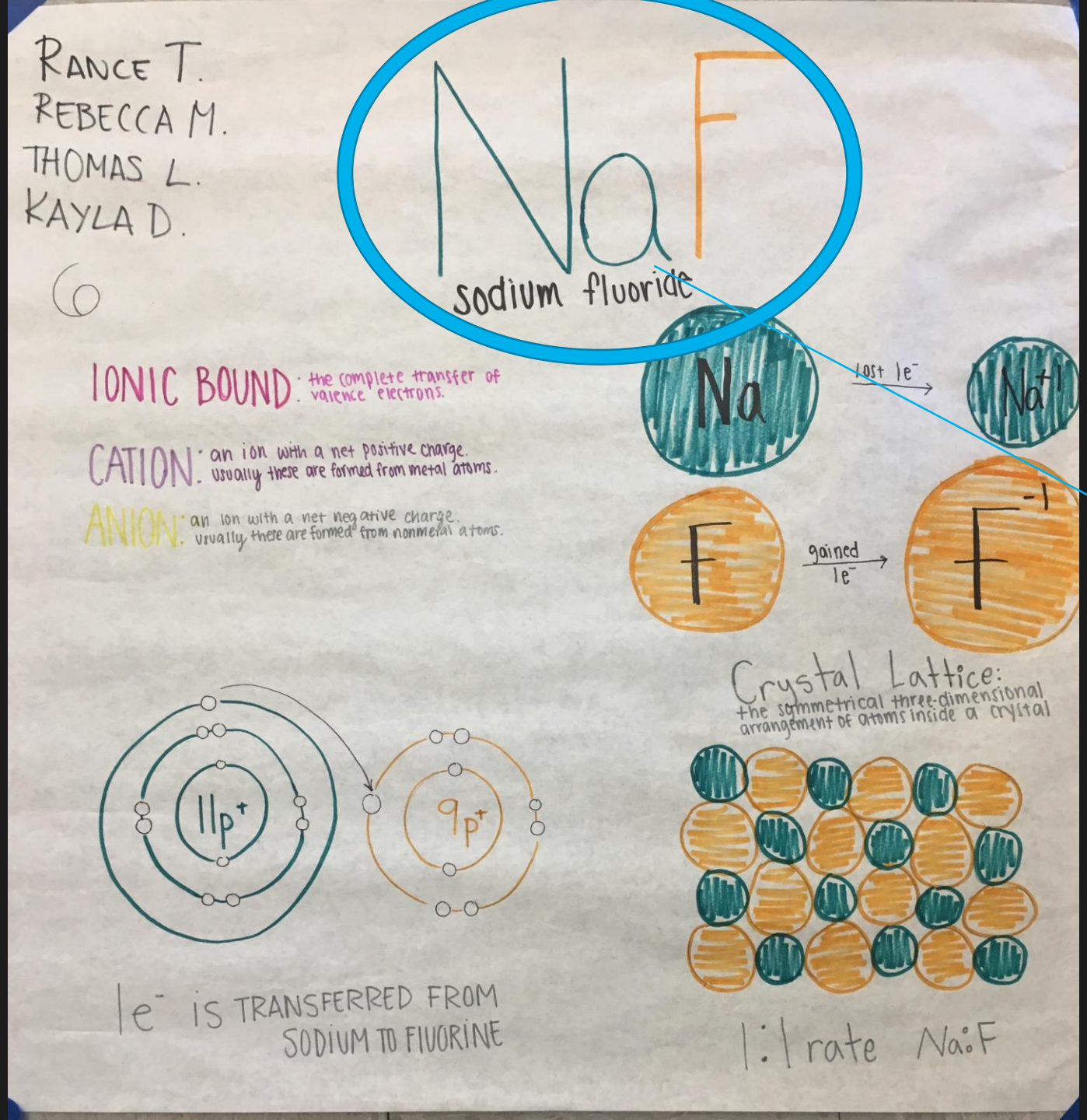
Guiding Question: Explain the process for naming and writing compounds involving polyatomic ions.

Whiteboard work:

Ionic Bonding Poster

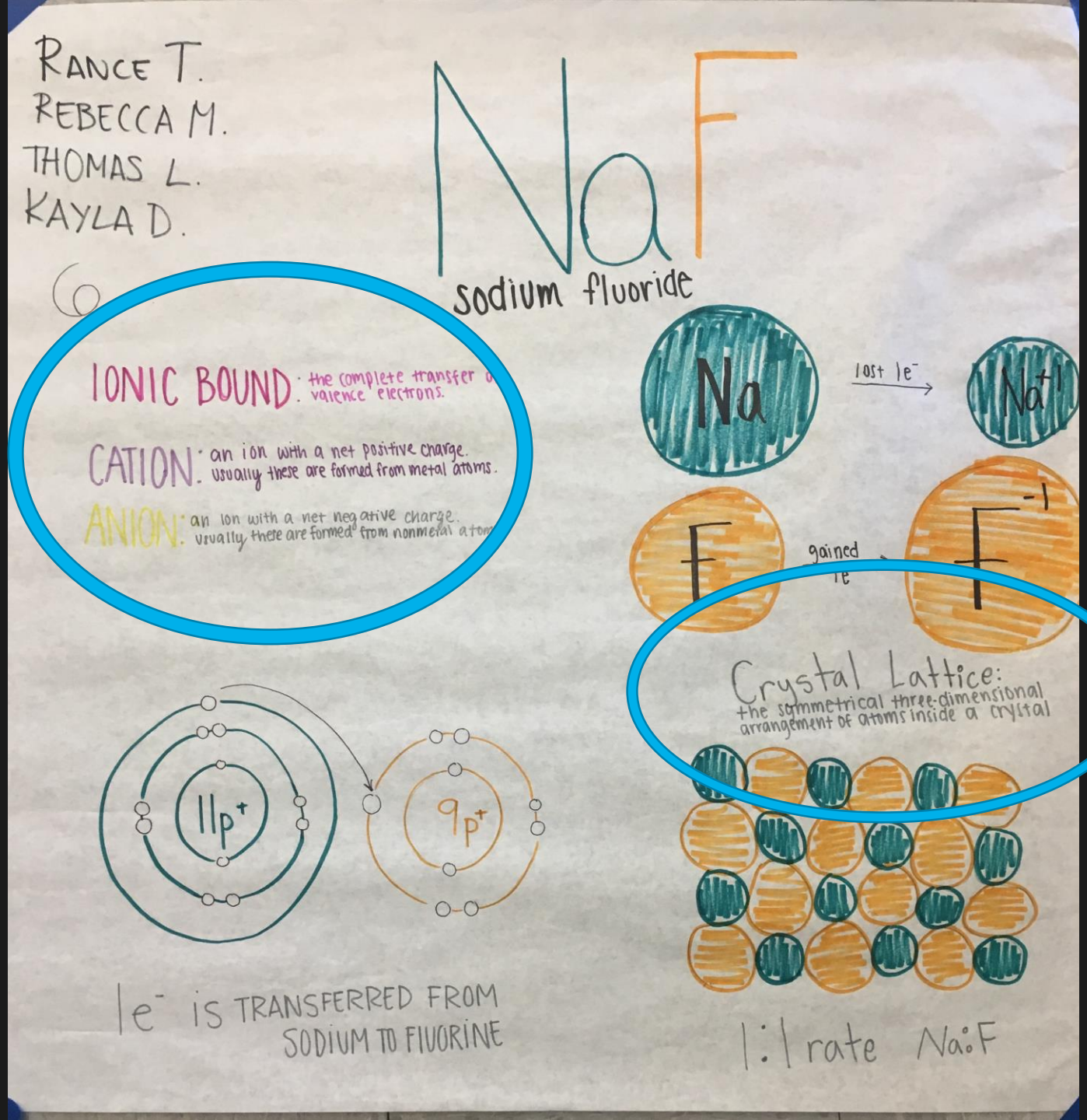
Elements: _____

Component	4	3	2	1	0
Layout	Poster is clearly titled with the correct formula of the ionic compound and compound name based on the two elements assigned to the group	Correct formula of the ionic compound and compound name can be found somewhere on the poster	The formula of the ionic compound and compound name are present based on the two elements assigned to the group. There is an error in one or both.	Poster is missing **either** the compound name or formula.	Not Present
Definitions	The terms **ionic bond, cation, anion, and crystal lattice** are defined clearly on the poster	1 of the terms is missing	2 of the terms are missing	3 of the terms are missing	Not Present
Shell Models	An accurate shell model is drawn for both assigned elements. The transfer of electrons between the atom(s) of each element are shown.	Accurate shell models are drawn, but the transfer of electrons is incorrect	Errors in the shell models and/or electron transfer not shown	Attempt	Not Present
Change in atomic radius	The initial drawing of each element is to scale based on its relative position on the periodic table. Poster clearly shows how the size of each atom changes when it becomes an ion	Poster clearly shows how the size of each atom changes when it becomes an ion	Poster incorrectly shows how the size of each atom changes when it becomes an ion	Only 1 atom is shown	Not Present
Compound Model	Poster correctly shows how the ions of each element would be arranged in a solid. The correct ratio between cations and anions is shown.	Poster correctly shows how the ions of each element would be arranged in a solid. The incorrect ratio between cations and anions is shown.	Poster incorrectly shows how the ions of each element would be arranged in a solid.	Attempt	Not Present



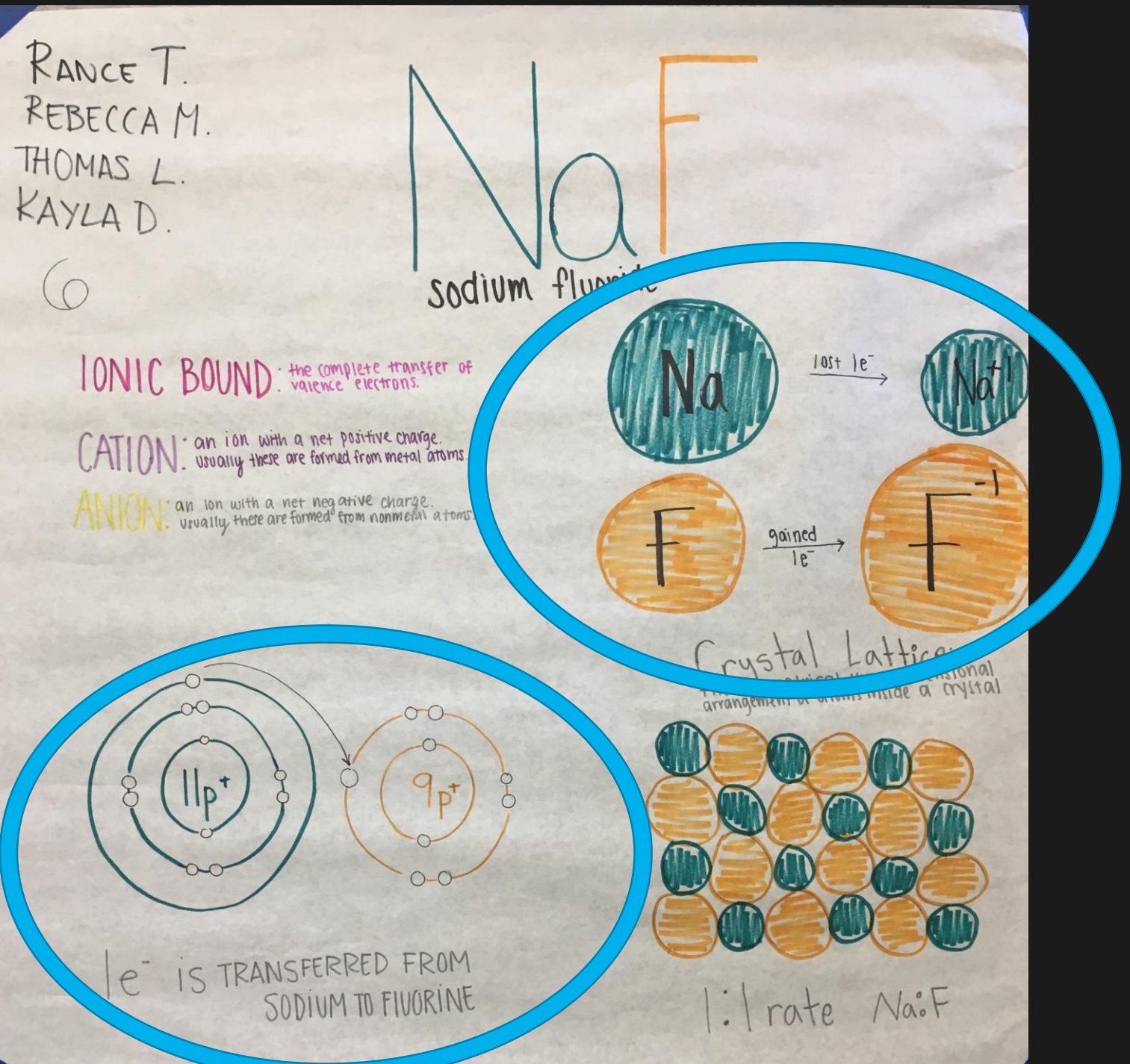
Correct Chemical Symbol and Name of Compound

Color Coordinate!



Definitions:

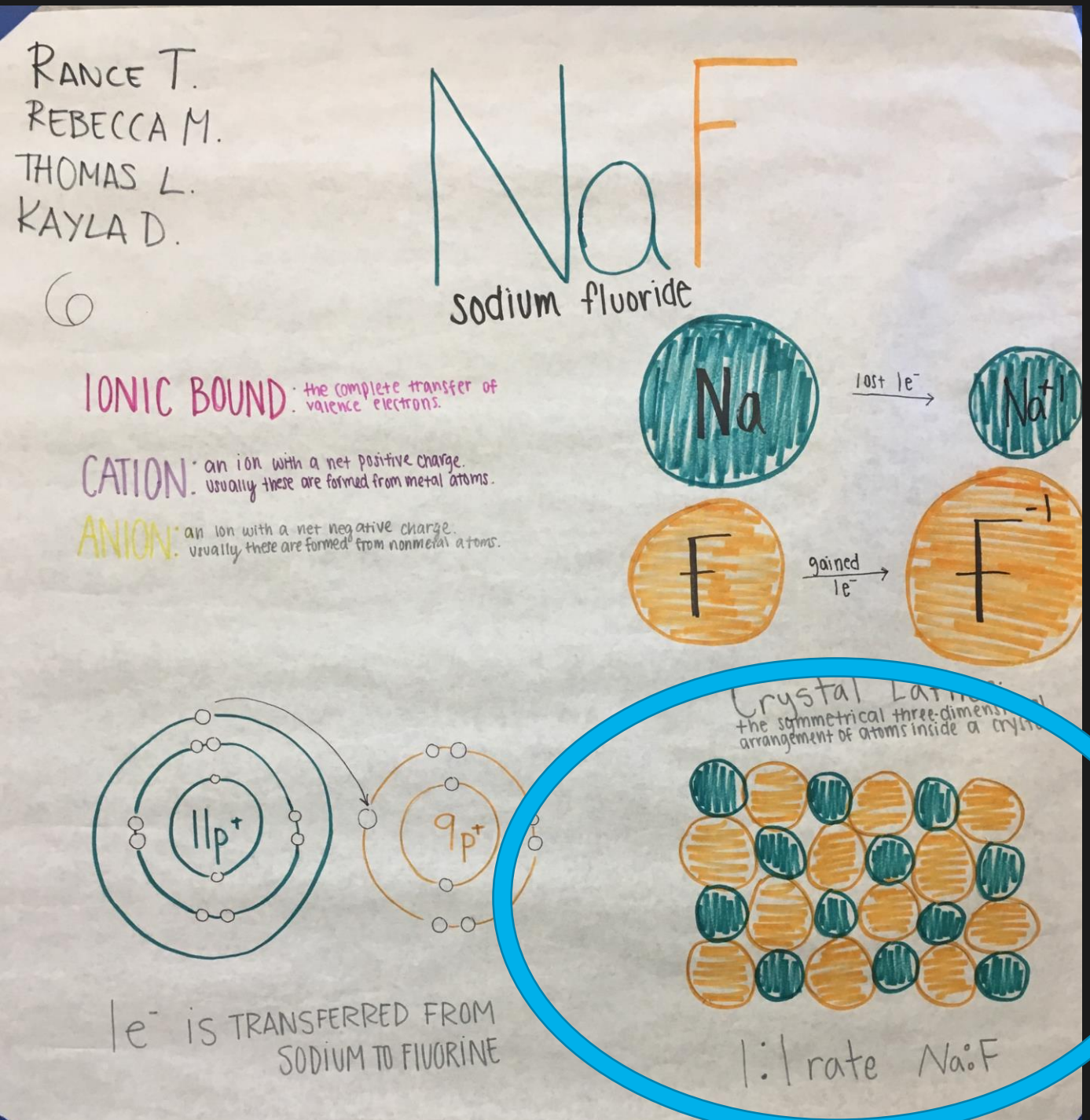
Ionic Bond
Cation
Anion
Crystal Lattice



Change in Atomic Radis:

If Na loses an e- it gets smaller

If F gains an e- it gets larger



Crystal Lattice:

Show and explain ratio for the compound

Draw a picture of MORE than 1 molecule and how they share charged electrons/ attractive force.