Name: _____ Period: _____

Ionic Bonding Webquest

Go to the following website: **http://tinyurl.com/ionictutorial**

Read the text on screen and answer the questions that follow

1. What does the typical definition of ionic bonding involve?

2. Click on the right arrow. Follow the directions on the screen. What happens when you move the negative charge close to the other negative charge?

3. Click on the right arrow. Follow the directions on the screen. What happens when you move the opposite charges close to each other?

4. Click on the right arrow to screen 5. What do like charges do? What do opposite charges do?

5. Click on the right arrow. What do atoms that form positive ions tend to do?

6. What usually forms the positive ion?

7. Where can these be found on the periodic table?

8. Click on the right arrow. What do atoms that form negative ions tend to do?

9. What usually forms the negative ion?

10. Where can these be found on the periodic table?

11. Click on the right arrow. What forms an ionic bond?

12. Click on the right arrow and read the following screens. Continue to screen 10.

13. Why are chlorine atoms able to take one electron from the sodium atom?

14. What happens when the sodium atom loses an electron?

15. What happens when the chlorine atom gains an electron? What is it then called?

16. Click on the right arrow. Since the two ions now have opposite charges, what will happen?

17. Click on the right arrow. What is an ionic bond?

18. Click on the right arrow and read the following screens. Continue to screen 18.

19. When other ion pairs are attracted, what is built?

20. Click on the right arrow and read the following screens. Continue to screen 21. Click "Count Na^+ Ions" and "Count Cl^- Ions." What is the ratio of sodium ions to chloride ions?

21. Click on the right arrow. Since the ratio of Na^+ to Cl^- is 1 to 1, what is the formula?

Name: _____ Period: _____

Ionic Bonding Webquest

22. Click on the right arrow. What does the formula tell us?

23. Click on the right arrow. The crystal shown is formed between calcium ions and fluoride ions. In the boxes on the screen, enter the number of each type of ion present. Check your answers.

24. What is the ratio of calcium to fluoride ions? What does this reduce to? What is the ionic formula?

25. Click on the right arrow. Continue to screen 27.

What's the formula of…

Go to the following website: **http://tinyurl.com/HeyTherePig**
On the screen you see scale with a positive and negative side. At the top of the screen, it asks for the formula for a given compound. On the left, you see ions provided. Click on the "instructions" button. Drag the positive and negative ions to the scale. You must add enough positive and negative ions to get the formula to balance at neutral. Write the name, ions, and final balanced formula below. Click on the "new compound" button and repeat this for 4 more compounds.

26. Formula name: _____ Ions: _____ & _____

    Balanced formula: _____

27. Formula name: _____ Ions: _____ & _____

    Balanced formula: _____

28. Formula name: _____ Ions: _____ & _____

    Balanced formula: _____

29. Formula name: _____ Ions: _____ & _____

    Balanced formula: _____

30. Formula name: _____ Ions: _____ & _____

    Balanced formula: _____

Writing Ionic Formulas

Go to the following website: **http://tinyurl.com/HaveSomeCheese**
From the drop-down boxes, select a cation and an anion. Write these below.
Assign integer (whole number) subscripts to balance the compound formed by these ions.
Click on the "Total" button to check to see that the net charge is zero. If it is not, adjust the subscripts.
Repeat this for 4 more combinations.

31. Cation: _____ Anion: _____

Ionic charges: _____ _____

Subscript: _____ _____ Formula: _____

Name: _____ Period: _____

Ionic Bonding Webquest

32. Cation: _____ Anion: _____

Ionic charges: _____ _____

Subscript: _____ _____ Formula: _____

33. Cation: _____ Anion: _____

Ionic charges: _____ _____

Subscript: _____ _____ Formula: _____

34. Cation: _____ Anion: _____

Ionic charges: _____ _____

Subscript: _____ _____ Formula: _____

35. Cation: _____ Anion: _____

Ionic charges: _____ _____

Subscript: _____ _____ Formula: _____

Compound Formula Exercise

Go to the following website: **http://tinyurl.com/ThatsALowPrice**

On the screen, you will see three lines above yellow boxes with ions, and possibly numbers and parentheses. Your task is to arrange the yellow boxes between the lines to make correct ionic formulas. Remember that the cation comes first and then the anion. Place the correct subscripts behind the ions to get a neutral formula. Place parentheses around any polyatomic ions that need to be multiplied.

When you have made a formula, click on the "Check" button to see if you have it correct. If you are successful, click on the "=>" button to advance. If you are not successful, rearrange the formula and try again.

Do this for 5 formulas, writing the ions and correct formula below.

36. Ions: _____ Formula: _____

37. Ions: _____ Formula: _____

38. Ions: _____ Formula: _____

39. Ions: _____ Formula: _____

40. Ions: _____ Formula: _____

Naming Ionic Compounds

Go to the following website: **http://tinyurl.com/kwkoj3e**

Read the directions and provide names for these compounds. Check your answers by click the "c" button.