**Hydrolysis of Salts Lab**

**Procedure**:

1. Complete the first and third columns IN PEN and get them approved by the teacher.
2. Place a small amount of each salt into separate wells of the assay plate.
3. Add a few drops of distilled water – just enough to dissolve the salt.
4. Test the newly created solution with the blue/red litmus paper and record the result.

**Data** **Table**:

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Salt****Formula** | **Salt****Name** | **Predicted****Result** | **Actual pH Range** | **Acid that Forms** | **Strength of Acid** | **Base that Forms** | **Strength of Base** |
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**Lab** **Questions**: SHOW ALL WORK

1. Write a hydrolysis equation for each salt tested.
2. For the hydrolysis equations written in number 1, write the equilibrium constant equation to match.
3. Explain, clearly and completely, how it is possible to predict an accurate pH range for the resulting solution.
4. Explains, clearly and completely, why a 0.1M solution of BaCl2 and a 0.1 M solution of Na2CO3 turn different colors when tested with the same indicator. Write the hydrolysis equation for each.
5. Create three new salts NOT used in this lab; one that will create an alkaline solution, one that will created an acidic solution, and one that will create a neutral solution. Write the hydrolysis equations for each salt.
6. How accurate were YOUR results. Explain.