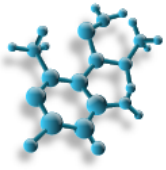
Name _____



# Classifying Compounds

**Examining chemical formulas and molecular structures allows chemists to predict the chemical and physical properties of matter**

## Owning my learning

Below is a list of learning intentions. Place a check mark in the box that best describes your learning level at the beginning of the learning and after we have learned together.
"B" stands for beginning, "A" stands for accomplished.

I Can Use:

| B | A | |
|---|---|---|
| ○ | ○ | a variety of indicators to classify solutions as acidic, basic (alkaline), or neutral |
| ○ | ○ | a table of indicators to determine their colour in a solution of known pH |
| ○ | ○ | a pH scale to determine relative acidity |
| ○ | ○ | three dimensional models to represent the structure of simple organic compounds |

I Can Determine:

| B | A | |
|---|---|---|
| ○ | ○ | the relative acidity of solutions by testing them with Mg and several indicators |
| ○ | ○ | the relative acidity of solutions by neutralizing them with a base |

I Can Describe:

| B | A | |
|---|---|---|
| ○ | ○ | the properties of acids and bases |

I Can Identify:

| B | A | |
|---|---|---|
| ○ | ○ | covalent compounds, acids, bases, salts, metal oxides, non-metal oxides, carbonates, inorganic and organic compounds, hydrocarbons and alcohols from both the name and formula |
| ○ | ○ | isomers for a simple hydrocarbon |

I Can Name and Write:

| B | A | |
|---|---|---|
| ○ | ○ | the formula for three different types of acids:<br>H <u>non-metal element</u> (aq)<br>H <u>polyatomic ion "ate"</u> (aq)<br>H <u>polyatomic ion "ite"</u> (aq) |
| ○ | ○ | the molecular formula for simple organic compounds |
| ○ | ○ | the condensed structural formula for simple organic compounds |

I Can Recognize and/or Draw

| B | A | |
|---|---|---|
| ○ | ○ | the full structural diagram for simple organic compounds |
| ○ | ○ | a ball and stick model of simple organic compounds |
| ○ | ○ | a space filling model of simple organic compounds |

I Can Predict the Products when a:

| B | A | |
|---|---|---|
| ○ | ○ | specific acid and base react in a neutralization reaction |
| ○ | ○ | metal oxide reacts with water |
| ○ | ○ | non-metal oxide reacts with water |
| ○ | ○ | metal reacts with an acid |
| ○ | ○ | carbonate reacts with an acid |