Types of Reactions Test (Science 10)

Summary:

* 6 types of chemical reactions, predicting their products
* Acids and bases (neutralization reactions, properties of acids and bases, pH indicators, concentration calculations)

**Learning Map Criteria:**

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| --- | --- | --- | --- | --- |
| Relevance | Extending | Proficient | Developing | Emerging |
| Reaction Types  ☑ | Identify types of reactions and predict the products of chemical reactions consistently and accuracy. | Identify types of reactions and predict the products, most of the time. | Identify types of reactions when given a skeleton equation or balanced chemical equation. | Recognize that certain combinations of chemicals can react to form new chemicals, in a chemical reaction. |
| Acids, Bases, and Neutralization Reactions  ☑ | [same as Proficient, but to a higher level of accuracy] | Use information from various pH indicators to solve pH problems and determine the identity of unknown substances.  Draw diagrams showing the relative concentration of H+ and OH- ions at various pHs.  Use the pH of a substance to calculate and compare the relative concentrations of H+ and OH- ions in solution (see examples on pg 170 of tb). | Use the pH of a substance to identify it as an acid, base, or neutral.  Based on its chemical formula, identify a compound as an acid, base, or salt.  List some of the properties of acids and bases.  Describe the colour that a pH indicator will appear in a solution of a given pH. | Know that the chemical formula of water is H2O. |

**Vocabulary:**   
*(Disclaimer: This is not meant to be an exhaustive list. Vocabulary words may appear on the test that are not in this list.)*

* Metal
* Non-metal
* Ionic compound
* Covalent compound
* Element
* Diatomic element
* Subscript
* Charge balancing
* Prefix
* Synthesis
* Decomposition
* Single Replacement
* Double Replacement
* Combustion
* Neutralization
* Acid
* Base
* Salt
* pH
* pH indicator

**Primary Study Material:**

Types of Reactions:

* Types of Reactions Powerpoint
* Notes Package Handout
* Textbook section 2.4
* Workbook pgs 108-127
* Green workbook pages (chapter 6)
* Acids and Bases:
  + All About That Base Notes package
  + Acids and Bases Lab