# **Unit 10: Acids and Bases**

Content Area: Science

Course(s): Chemistry Accelerated
Time Period: Marking Period 4

Length: **1 week** Status: **Published** 

### **Textbook Resources**

Glencoe Science Chemistry Concepts and Applications

Chapter 14: Acids, Bases, and pH

### **Standards**

SCI.9-12.HS-PS1-1 Use the periodic table as a model to predict the relative properties of elements based	-PS1-1 Use th	ple as a model to predict the relative properties of elements based o
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the patterns of electrons in the outermost energy level of atoms.

SCI.9-12.HS-PS1-6 Refine the design of a chemical system by specifying a change in conditions that would

produce increased amounts of products at equilibrium.

SCI.9-12.HS-PS1-2 Construct and revise an explanation for the outcome of a simple chemical reaction based

on the outermost electron states of atoms, trends in the periodic table, and knowledge of

the patterns of chemical properties.

## **Goals/Objectives**

- · How are acids and bases different?
- Why are acids and bases so important?

#### Content

- Hydronium and Hydroxide Ions
- Indicators
- Ionization
- Neutralization
- pH

### **Skills**

- Compare strong v. weak acids and bases
- Determine pH using various indicators
- Equate concentration of hydronium to pH

- • Identify, name, and describe the properties of acids and bases
- • Perform a neutralization reaction