






**8<sup>th</sup> Grade Science**  
**2010-2011 Syllabus**  
**Mrs. Turner**

Welcome to what I hope will be the best year of Science that you have ever had! In eighth grade, Science class explores the concept of scale. We learn about scientific ideas that affect large areas over long periods of time, and other ideas that concern only extremely tiny spaces. We will be considering the smallest living things and pieces of living things, and we will explore the world of elements and compounds they become. Our investigations will delve into the history of Earth and its inhabitants. We will also dive into the water on Earth and how it impacts our lives. You will get to do lots of hands-on experiments and work on some really fun projects. Below you will find a summary of the units that we will learn about in Science this year, and some of my class policies.

DATES	Unit	HIGHLIGHTS	Major Assignments
1st Nine Weeks  	<u>Hydrosphere</u> <ul style="list-style-type: none"> <li>☞ Properties of water</li> <li>☞ Cohesion/Adhesion</li> <li>☞ Universal Solvent</li> <li>☞ Density</li> <li>☞ Ground water</li> <li>☞ Wetlands, Estuaries</li> <li>☞ Water resources of NC</li> </ul> <u>Oceanography</u> <ul style="list-style-type: none"> <li>☞ Salinity</li> <li>☞ Ocean Features</li> <li>☞ Marine Ecosystems</li> <li>☞ Movement of Ocean Water</li> </ul> <u>Humans and Hydrosphere</u> <ul style="list-style-type: none"> <li>☞ Pollution</li> <li>☞ pH</li> <li>☞ Nitrates</li> <li>☞ Water Quality</li> </ul>	<ul style="list-style-type: none"> <li>☞ Water Lab</li> <li>☞ Density Lab</li> <li>☞ Model of an Aquifer</li> </ul> <ul style="list-style-type: none"> <li>☞ Plankton Lab</li> </ul> <ul style="list-style-type: none"> <li>☞ Water Quality Lab</li> </ul>	Water Poems Water Cycle Poster Lorax Project
2 <sup>nd</sup> Nine Weeks 	Lab Safety <u>Geologic Time</u> <ul style="list-style-type: none"> <li>• Stratigraphy</li> <li>• Geologic Time Scale</li> </ul> <u>Changes over Time</u> <ul style="list-style-type: none"> <li>• Evolution</li> <li>• Fossils</li> <li>• Plate Tectonics</li> <li>• Remote Sensing and Climate Change</li> </ul>	<ul style="list-style-type: none"> <li>☞ Lab Safety Posters</li> <li>☞ Model of Geologic Time</li> </ul> <ul style="list-style-type: none"> <li>☞ Molds and Casts</li> <li>☞ Milky way Lab</li> <li>☞ Pangaea Puzzle</li> </ul>	Lab Safety Quiz Time scale of Life Evolution of Objects
3 <sup>rd</sup> Nine Weeks 	<u>Chemistry</u> <ul style="list-style-type: none"> <li>☞ Study of Matter</li> <li>☞ Atoms</li> <li>☞ Elements/P. Table</li> <li>☞ Conservation of Matter</li> <li>☞ Human Health Impacts</li> </ul>	<ul style="list-style-type: none"> <li>☞ Atom Drawing</li> <li>☞ Balancing Equations</li> <li>☞ Gumdrops Molecules</li> <li>☞ Obbleck</li> </ul>	Adopt-an-Element Project My Periodic Table Project
4 <sup>th</sup> Nine Weeks 	Cell Theory and Microbiology <ul style="list-style-type: none"> <li>☞ Cell Theory</li> <li>☞ Cell Function and Division</li> <li>☞ Types of Microbes</li> <li>☞ Health Risks/Preventions</li> <li>☞ Biotechnology</li> </ul>	<ul style="list-style-type: none"> <li>☞ Bacteria Lab</li> <li>☞ Animal/Plant Cells</li> <li>☞ Protist Lab</li> <li>☞ Osmosis lab</li> <li>☞ Mitosis Flipbook</li> <li>☞ Model of Cell Division</li> <li>☞ Infected Population</li> <li>☞ Hand washing Lab</li> </ul>	Bacteria Wanted Posters