## **North Colonie Curriculum Overview**



Content Area: Science Grade Level: 2

Course Name: Science 2

Course Description: Students explore three non-sequential modules throughout the course of the year. The skills and concepts embedded into these units are tied to the New York State 5th Grade Science Assessment, however there is no state assessment at the end of this grade level.

Units Length of Time	Description
How Can We Change Solids and Liquids? (8 weeks)	Students explore how solids and liquids can change by heating, cooling, building up, carving, and taking apart. Throughout portions of this unit, students will:  - investigate several properties of solids and liquids including color, shape, and hardness.  - learn through a text that hard materials can be carved and soft materials can be built up.  - build a sculpture and take it apart to make another sculpture with different properties.  - compare the properties of several liquids and solids and argue from evidence for whether sand is a solid or a liquid.  - explore what happens when materials are heated and observe that a wax crayon still works as a crayon when it is heated and cooled.  - construct an explanation for how a silver necklace is made by heating and cooling different materials.

Units Length of Time	Description
How Can We Stop Soil from Washing Away? (8 weeks)	<ul> <li>Students will explore and collect evidence on the fast and slow ways water and wind can change the shape of the land Throughout portions of this unit, students will: <ul> <li>examine photographs and models of certain changes in the land caused by flowing water and blowing wind.</li> <li>engage in a literacy activity that highlights the successful and unsuccessful ways people have attempted to minimize the impact water and wind have on the land.</li> <li>use a stream table as a model to compare multiple solutions designed to prevent water from changing the shape of the land.</li> <li>apply the evidence gathered in previous lessons to a scenario-based engineering design challenge to save sand towers from destruction.</li> </ul> </li> </ul>
What Makes a Home? The Study of Habitats and Communities. (8 weeks)	Students will explore the topic of what makes a home by studying various habitats and communities. Throughout portions of this unit, students will:  - review the differences between fiction and nonfiction books  - work together to set up a terrarium to study a particular habitat.  - learn how maps can communicate information and model a map of their schoolyard  - study the structure of a seed and learn how plants disperse seeds in various habitats  - study the relationships between population density and a community  - model a suburban community

NYS Standard	Links
	Click <u>here</u> to learn more about the New York State Science Learning Standards!