



## Kindergarten: A Cloud in the Sky

**Course Description:** Over the course of three days, our educators will use in class activities and demonstrations to teach students how to observe weather, what makes up weather, why weather is important for the environment, and how they can easily prepare for the upcoming weather each day.

**Day 1:** One of the easiest weather phenomena to observe is clouds. In this lesson, kindergartners will learn about the makeup of clouds and the three main types of clouds: cumulus, cirrus, and stratus. They will then build a model of each of these clouds out of cotton balls that they can take home.

**Demonstration:** *At the end of the lesson, we will use liquid nitrogen and warm water to create an actual cloud in their classroom and have them observe and draw various characteristics of what they see. By combining liquid nitrogen and warm water, we can create a genuine cloud in the classroom.*

**Day 2:** Preparing for the weather of the day is an important skill to learn. In this lesson, kindergartners will learn how to use their weather observations to determine what to wear for the day. During the lesson, students will even build their own Weather Detection Bracelet using ultraviolet-sensitive beads. Ultraviolet beads contain a pigment that reacts with ultraviolet light from the sun and students will learn how to use this device to let them know when to put on sunscreen.

**Demonstration:** *At the end of the lesson, we will explore evaporative cooling using water and a leaf blower to talk about the different temperatures weather can make us experience. This fun and silly demonstration has the students getting sprayed with water and then blown with a leaf blower to show the process of evaporative cooling, a process that makes us feel colder when we are wet.*

**Day 3:** One of the hardest things to observe in weather is air, since we cannot see it. In this lesson, kindergartners will explore the effects of wind and make a wind vane in class to help them observe the direction wind is blowing.

**Demonstration:** *The lesson will end with us making a tiny bit of wind in the classroom using pressure cups. Pressure cups harness the power of air pressure to create a tight seal and partial vacuum.*