



## 6th Grade Weather Man(tis)

patterns and how weather occurs. At the end of the lesson, students will be able to apply their understanding of concepts learned throughout the week to conduct their own weather forecasts.

**Day 1:** Students will have a basic introduction to weather and climate. This day's focus will be on learning how wind forms through differences in air pressure.

**Demonstration:** We will introduce weather and climate, so students understand the difference at the beginning of the lesson and then discuss how winds and air pressure influence weather. For students to understand the basics of air pressure they will create a fountain in a bottle. We will bring in some insects capable of flight to further develop students' understanding of air pressure.

**Day 2:** Students will discuss storms! They will learn all about the different types of clouds as well as how rain clouds are formed.

**Demonstration:** We will do a large demonstration with a liquid nitrogen cloud to excite the students and then they will be creating their own liquid nitrogen clouds and hurricanes in a bottle to understand different weather patterns. We'll bring in insects and discuss how they can be affected by these storms just like us.

**Day 3:** Tornadoes form when warm, humid air collides with cold, dry air. The denser cold air is pushed over the warm air, usually producing thunderstorms. The warm air rises through the colder air, causing an updraft. The updraft will begin to rotate if winds vary sharply in speed or direction. The students will learn about a tornado and how it forms.

**Demonstration:** We will do a large fire tornado demonstration in front of the class to excite and engage the students. After this, we will discuss how tornadoes form and the impact they can have on the land. We will discuss how locusts, midges, and even grasshoppers can, in the right conditions, be swept up into bug tornadoes. They will then be able to make their own bug tornadoes in a bottle to observe how tornadoes form. We will bring in some insects for students to observe and discuss how these giant bug tornadoes can form.

**Day 4:** Now that students have learned all about the weather, it is time for them to apply what they've learned and create a weather report!

**Demonstration:** Students will work together in groups to choose the weather they are going to have for their forecast and create a poster to go along with it. Students must then build and wear a praying mantis costume while presenting their weather report for the day and explaining how they formulated their predictions.