

**CSI: South Florida
Scope and Sequencing**

Weather and Climate

Overview & Concepts

This module examines the fundamentals of weather and climate and why scientists are cautious about confirming a link between the two. Students will learn the differences between weather and climate, how climate is classified, and how scientists define and identify weather extremes.

When students complete this module, they will be able to

- Differentiate between weather and climate.
- Characterize the five general types of climate, as defined by Koppen’s Climate classification system.
- Explain the relationship between global warming and climate change.
- Compare methods meteorologists use for forecasting weather to those used by climate scientists for predicting climate trends.
- Analyze temperature data to identify recent heat waves at various locations on Earth.

Identify extreme weather events using the National Climatic Data Center (NCDC) website.

Science Standards (Next Generation Science Standards, Sunshine State Science Standards, and Climate and Energy Literacy Principles)

See website for standards addressed in the module.

Suggested Scope and Sequencing of Module

Inquiry Lesson	Extreme Heat: How Probable Are Warmer-than-Normal Seasons?
Module Content	Guided Reading/Note-Taking, and PowerPoint Presentation
Investigation Lesson	Extreme Measures: Are Extreme Weather Events Increasing?
Argumentation Practice	Addressing Students Claims about Weather and Climate
Evaluation	Pre and Post Quiz Questions, Inquiry Lesson, Guided Reading/Note-Taking, and Argumentation Practice