



CAPE COD MARITIME MUSEUM

PO BOX 443 | 135 SOUTH STREET | HYANNIS, MA 02601

PH. 508-775-1723 | FAX 508-775-1706 | INFO@CAPECODMARITIMEMUSEUM.ORG

WWW.CAPECODMARITIMEMUSEUM.ORG

Meteorology: Wind, Weather & Coastal Environmental Impacts

Lesson Goal:

Meteorology is the science of the atmosphere. In this class, we will focus on weather: how and why does it form, as well as signs to help with predicting weather. This class will discuss the different types of weather found on Cape Cod, a peninsula with its own unique weather patterns.

Lesson Objectives:

The students will:

- learn what weather, climate, and meteorology is.
- learn why our peninsula has unique weather patterns.
- recognize wind and weather patterns and their importance.
- identify wind directions, signs of wind speed and connections to erosion.
- observe different cloud formations, comparing illustrations to clouds in the sky.
- discuss human intervention, specifically how well jetties, dredging, and other techniques work.

Assessment:

The teacher will:

- facilitate discussion for students to share their existing knowledge.
- observe students choosing correct cloud formations for certain situations.
- analyze students' ability to calculate specific speeds and direction from signs of wind activity.
- observe students' engagement.
- encourage students to analyze the advantages and disadvantages of humans trying to control the weather's effects locally.

Frameworks:

- *PreK-ESS2 Earth's Systems* PreK-ESS2-4(MA); PreK-ESS2-6(MA)
- *K-ESS2-1 Earth's Systems* K-ESS2-1; K-ESS2-2
- *K-PS3 Energy* K-PS3-1
- *2-ESS2 Earth's Systems* 2-ESS2-1; 2-ESS2-3; 2-ESS2-4(MA)
- *3-ESS2 Earth's Systems* 3-ESS2-1
- *3-ESS3 Earth and Human Activity* 3-ESS3-1
- *4-ESS1 Earth's Place in Universe* 4-ESS1-1
- *4-ESS2 Earth's Systems* 4-ESS2-1; 4-ESS2-2
- *5-ESS2 Earth's Systems* 5-ESS2-1
- *MS-ESS1 Earth's Place in the Universe* MS-ESS1-1b
- *MS-ESS2 Earth's Systems* MS-ESS2-5; MS-ESS2-6

Cape Cod Meteorology