## **Lesson Description: Lesson 7 Predicting the Weather**









Grade: **Subject:** Science

Unit: Predicting the Weather

**Driving Questions:** How do we predict the Weather?



### rriculum Outcomes:

#### Science:

- using a variety of sources, gather information to describe the key features of weather systems and identify weather-related technological innovations and products that have been developed by cultures in response to weather conditions (107-14, 205-8, 302-11)

### **Technology Integration:**

BOC 6.5 (relates to 3.4) safely exchange electronic mail and attachments with students and others selected by the teacher for curriculum research and communication purposes, with teacher supervision.

### **English Language Arts:**

- 1.1 contribute thoughts, ideas, and experiences to discussions, and ask questions to clarify their ideas and those of their peers
- 6.2 support their opinions about texts and features of types of texts
- 7.1 use their background knowledge to question and analyze information presented in print and visual texts
- 8.2 expand appropriate note-making strategies from a growing repertoire (e.g., outlines, charts, diagrams)

# **Expected Time:** 70 Minutes (2 x 35 minutes) Resources: - "Weather Broadcast Notes" This outline was to be completed previously. - Global Warming Reading: To be completed for next lesson. - Websites: Puffin Browser, Edheads Weather and the National Weather Service. - Link to Technology Screencasts 21st century skills **Lesson Procedure Predicting the Weather Introductory Lesson** ⊠ find, validate Lesson 7: Discussion and where we are going (20 Minutes) $\square$ remember. understand Tell the students we will be working towards creating a TV style weather $\Box$ collaborate. report over the next several lessons. The next three lessons will lead us communicate toward that goal. Everything we have done to this point in the weather unit ☐ citizenship will culminate in the final weather broadcast. We will have a number of lessons that will lead us toward the final project and teach us skills we need to understand how we can predict the weather. There are a series of screencasts that will help you to use the camera equipment, laptop computers and Pinnacle 17 software if you choose to work with the PC's as opposed to iMovie and your iPad tablet. Begin by taking a look at the "Weather Broadcast Notes" that students made from watching weather broadcast the previous evening. Discuss what they found interesting and any questions that they might have. This lesson is designed to continue to prepare students for the culminating activity. The following activity works best with the group of four divided into pairs of two to a computer otherwise students may get left out. All students should all go to Edheads Weather Activity. Click Here or Below Activate Your Mind! Before trying to run this particular activity on their tablets students should download and install Puffin Browser. (This will allow you to use the iPad tablets) Has to do with the iPads using "Adobe Flash."

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ⊠ find, validate                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| <b>Predicting the Weather Small Group Activity</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | $\square$ remember,                                            |
| Lesson 7: Discussion and Where we are going (20 Minutes)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | understand                                                     |
| This activity will guide them through what a meteorologist does. As they work through the activity one of the pair should be making notes about the different aspects of a meteorologist's job, such as the "trends looked for by meteorologists" and how that effects what is reported to the public on TV.  After completing that activity the students should take a virtual tour of the National Weather Centre in Ontario. They should click on the "Office Tour"                                                                                                                                  | □ collaborate, communicate □ citizenship                       |
| Predicting the Weather Lesson Wrap-up Lesson 7: Class Share (15 Minutes)  Bring the students back together as a class after their tablet investigations of the Edheads weather and National Weather Service site and our discussions on the weather reports done on the weather broadcasts that they watched the previous evening. Using their iPad tablets in "Pages" have students respond to the question: "What do meteorologists do?" (This is their "exit pass") once they have responded to this question and airdropped their response to the teachers tablet they may be dismissed from class. | □ analyze, synthesize □ critical thinking □ evaluate, leverage |
| For next class: Students should read the selection: Global Warming Reading in preparation for tomorrow's class. (There will be a Socrative Quiz) Student's should also begin to watch the "Tech Tutorial Screencasts" by Mr. Eisnor on how to operate the filming technology they will need in the coming lessons. Link to Technology Screencasts. The following topics are covered in the screencasts:                                                                                                                                                                                                 |                                                                |
| Futorial 1 Video Capture and Camera Basics<br>Futorial 2 Chroma Key<br>Futorial 3 General editing<br>Futorial 4 Adding Captions and Text                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                |

| Tutorial 5 Adding Sound Effects Tutorial 6 Adding Background Music Tutorial 7 Adding Voiceovers Tutorial 8 Storyboard That Tutorial Tutorial 9 Using YouTube Footage |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Differentiation/Modification/Enrichment:                                                                                                                             |
| For differentiation weaker students can be paired with stronger ones in the small groups when creating the questions on weather.                                     |
| Assessment:  Observation and participation in small group and class discussions.                                                                                     |
| Teacher Reflection:                                                                                                                                                  |
|                                                                                                                                                                      |