

**North Rowan Elementary School**  
**Collaborative Unit**  
**Grade: 2nd**



**Title of Unit:** Weather

**NCSCOS Goals**

**Science:**

Competency Goal 2: The learner will conduct investigations and use appropriate tools to build an understanding of the changes in weather.

2.01 Investigate and describe how moving air interacts with objects.

2.02 Observe the force of air pressure pushing on objects.

2.03 Describe weather using quantitative measures of:

- Temperature.
- Wind direction.
- Wind speed.
- Precipitation.

2.04 Identify and use common tools to measure weather:

- Wind vane and anemometer.
- Thermometer.
- Rain gauge.

2.05 Discuss and determine how energy from the sun warms the land, air and water.

2.06 Observe and record weather changes over time and relate to time of day and time of year.

**Language Arts:**

3.02 Connect and compare information within and across selections (fiction, nonfiction, poetry, and drama) to experience and knowledge.

3.03 Explain and describe new concepts and information in own words (e.g., plot, setting, major events, characters, author's message, connections, topic, key vocabulary, key concepts, text features).

3.04 Increase oral and written vocabulary by listening, discussing, and composing texts when responding to literature that is read and heard. (e.g., read aloud by teacher, literature circles, interest groups, book clubs).

3.05 Locate and discuss examples of an author's use of:

- kinds of sentences (declarative, interrogative, exclamatory).
- capitalization (titles, dates and days, names of countries).
- punctuation (exclamation marks, commas in dates, and to introduce dialogue and quotations).
- use of paragraphs in texts and their effects on the reader.
- genre(s) and specific word choice(s).

- 4.01 Begin to use formal language and/or literary language in place of oral language patterns, as appropriate.
- 4.02 Use expanded vocabulary to generate synonyms for commonly over used words to increase clarity of written and oral communication.
- 4.03 Read aloud with fluency and expression any text appropriate for early independent readers.
- 4.04 Use oral communication to identify, organize, and analyze information.
- 4.05 Respond appropriately when participating in group discourse by adapting language and communication behaviors to the situation to accomplish a specific purpose.
- 4.06 Plan and make judgments about what to include in written products (e.g., narratives of personal experiences, creative stories, skits based on familiar stories and/or experiences).
- 4.07 Compose first drafts using an appropriate writing process:  
planning and drafting.  
rereading for meaning.  
revising to clarify and refine writing with guided discussion.
- 4.08 Write structured, informative presentations and narratives when given help with organization.
- 4.09 Use media and technology to enhance the presentation of information to an audience for a specific purpose.
- 5.04 Use the following parts of the sentence:
- subject.
  - predicate.
  - modifier.

**Math:**

Competency Goal 4: The learner will understand and use data and simple probability concepts.

- 4.01 Collect, organize, describe and display data using Venn diagrams (three sets) and pictographs where symbols represent multiple units (2's, 5's, and 10's).
- 4.02 Conduct simple probability experiments; describe the results and make predictions

**Technology:**

- 2.03 Enter/edit data in a prepared spreadsheet as a class/group and observe the changes that occur to make predictions.
- 2.04 Use spreadsheet software in content areas to enter, display, and identify sources of data as a class
- 2.09 Identify and use multimedia tools to combine text and graphics as a class/group assignment.

**Information Skills:**1.01, 4.05, 4.09, 5.01, 5.02

**Essential Question:**

How can we use different tools to help us understand the weather over time?

## Activities:

- Explore weather websites/Promethean Flipcharts using worksheets to guide them through the activities.
- Conduct air experiments and analyze results.
- Observe/record daily weather, graph on a pictogram using <http://gwydir.demon.co.uk/jo/numbers/pictogram/pictogram.htm> and answer questions about it
- Host a guest meteorologist from a local TV station as a guest speaker
- Connect the book “Cloudy with a Chance of Meatballs” and go to the theatre to watch the movie version
- Field Trip to Horizons
- Last Day: Use a template for a Weather Passport to get stamps/stickers from 4 seasonal weather centers:
  - Fall - Water Cycle, Cloudy with a Chance of Meatballs
  - Winter - Solid, Liquid, Gases (Stages of Water)
  - Spring - Air activities - paper airplanes in a fan
  - Summer - Solar Energy - using Promethean Flipchart and activotes