Grade Level Cluster 1-2       Unit Overview

Content Area: English as a Second Language

Unit Title: Weather           Program Design: Pull out across grade levels and proficiency levels; 45 minute class period.

Target Proficiency Level: Level 1 Entering to Level 5 Bridging
www.wida.us/standards/perfdefs.pdf

Unit Summary:
In “Weather” students will explore a variety of weather concepts including air movement, clouds, precipitation, and temperature using a range of culturally authentic learning materials such as websites, graphs, science equipment, chants, songs, and literature both fiction and nonfiction. Students will reflect on how weather affects their daily lives and influences their daily activities. Through a series of scaffolded learning activities, they strengthen their linguistic complexity, vocabulary usage and language control necessary to demonstrate mastery about weather.

Interdisciplinary Connections: Language Arts Literacy, Math, and Science.


Unit Rationale:
By utilizing a variety of linguistically complex and content vocabulary embedded assignments, students will demonstrate appropriate language control. Developing awareness of weather and its impact on the students’ daily lives is important in preparing students for understanding their environment in the 21st century. Students will have an opportunity to use language and technology to reflect on how weather influences their daily lives.

Learning Targets

<table>
<thead>
<tr>
<th>WIDA</th>
<th>English Language Proficiency Standards</th>
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<tbody>
<tr>
<td>ELP Standard 1</td>
<td>English language learners communicate for Social and Instructional purposes within the school setting.</td>
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<tr>
<td>ELP Standard 2</td>
<td>English language learners communicate information, ideas and concepts necessary for academic success in the content area of Language Arts.</td>
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<tr>
<td>ELP Standard 3</td>
<td>English language learners communicate information, ideas and concepts necessary for academic success in the content area of Mathematics.</td>
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<tr>
<td>ELP Standard 4</td>
<td>English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science.</td>
</tr>
<tr>
<td>Language Domains</td>
<td>Each standard encompasses four language domains that define how ELLs process and use language: listening, speaking, reading, writing</td>
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2010 Common Core Standard

<table>
<thead>
<tr>
<th>English Language Arts Speaking and Listening</th>
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<tbody>
<tr>
<td>Presentation of knowledge and ideas 1.4</td>
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2009 NJCCCS

<table>
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<tr>
<th>Science</th>
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<tr>
<td>Earth System Science: 5.4</td>
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</table>
system of the universe.

Climate and Weather: Earth’s weather and climate systems are the result of complex interactions between land, ocean, ice and atmosphere.

8.1 Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.

Unit Essential Question
What language do students need in order to demonstrate comprehension and engage in the topic of weather?

Unit Enduring Understandings
• Listening, speaking, reading, and writing about weather require specific academic language.
• Weather impacts students’ daily lives.

Evidence of Learning

Summative Assessment: You are a meteorologist predicting the weather according to the information collected in your weather journal. Using the information you will write a weather forecast and present it to the class in front of a weather wall. As a forecaster you also offer recommendations on what to wear and what you can do based on the weather for the day. All forecasts will be videotaped and uploaded to appropriate locations, i.e. teacher’s home page, ipod, etc. Classmates will use a weather forecast checklist to demonstrate understanding of the presentation.

Equipment needed: computer, Internet, whiteboards, projectors, speakers, writing instruments, paper, journals, flip camera

Teacher Resources: Teacher designed rubric, weather forecast checklist

Unit Learning Targets
Students will create a weather forecast in writing using key vocabulary and key language structures. Students will then present their forecast orally to their classmates using cue cards, if necessary.

• Observe daily weather
• Record daily weather
• Graph daily weather
• Describe daily weather
• Compare and contrast daily weather from one day to the next.
• Draw conclusions about how weather impacts activities
• Interpret how weather impacts what people wear
• Evaluate how weather impacts our environment

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<th>Lesson</th>
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<td>Lesson 1 What is weather?</td>
<td>5 days</td>
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<td>Lesson 2 Clouds</td>
<td>7 days</td>
</tr>
<tr>
<td>Lesson 3 Precipitation</td>
<td>7 days</td>
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<tr>
<td>Lesson 4</td>
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<tr>
<th>Weather Forecasting</th>
<th>3 days</th>
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**Teacher Note:** The language functions utilized are cross-curricular and students should be able to transfer these functions across subject areas. These lessons build upon previously learned vocabulary and grammatical structures. Teachers must reactivate the needed vocabulary and structures prior to teaching these lessons or must pre-teach these concepts.

**Curriculum Development Resources**
- WIDA Proficiency Standards and Can Do Descriptors, [www.wida.us](http://www.wida.us)
- NJCCCS/CC Standards [www.13.state.nj.us/standards](http://www.13.state.nj.us/standards)
- [www.13.state.nj.us/NJCCCS/Technologytoolbox](http://www.13.state.nj.us/NJCCCS/Technologytoolbox)
**Weather Lesson Plan #1**

**Content Area:** English as a Second Language

**Lesson Title:** What is weather?  
**Timeframe:** 5 days

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<tr>
<th><strong>Lesson Components</strong></th>
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<td>X Global Awareness</td>
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<tr>
<td>Financial, Economic, Business, and Entrepreneurial Literacy</td>
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<tr>
<td>Civic Literacy</td>
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<td>Health Literacy</td>
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<tr>
<th><strong>21st Century Skills</strong></th>
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<tbody>
<tr>
<td>Creativity and Innovation</td>
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<tr>
<td>X Critical Thinking and Problem Solving</td>
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<td>X Communication</td>
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<td>X Collaboration</td>
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**Interdisciplinary Connections:** Language Arts Literacy, Math, Science

**Integration of Technology:** Websites, video

**Equipment needed:** Computers, cameras, TV/VCR, balloons, thermometer

**Goals/Objectives**

<table>
<thead>
<tr>
<th>Speaking/Listening</th>
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<tr>
<td>Discuss why weather is important.</td>
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<tr>
<td>Answer teacher questions about the weather.</td>
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</table>

**Reading/Writing**

| Identify different types of weather. Report and graph the weather in a daily journal. |
| Identify changes in the weather. |
| Make statements about weather from personal observation and visual images. |
| Give examples of some weather conditions that can be |

**Key Vocabulary:**
Weather, temperature, moisture, thermometer, weather forecast, meteorologist, air pressure, wind vane

**Key Language Structure:**
Predict, observe, graph, report, journal

**Warm-up:**
Teacher: Brings in weather realia (umbrella, sunglasses, hat and gloves, kite, beach shovel and pail etc.). Discuss what the items would be used for and what they all have in common.

**Lesson Sequence:**
1. Students: Draw a picture of your favorite thing to do outside (make sure students include the type of weather required for the activity). Discuss the weather required for that activity and if the weather was different, whether it would be possible to do what they wanted.
2. Students: Generate a list of weather vocabulary based on realia and student pictures. Write on

**Assessment Tasks**

**Formative**

- Student oral responses to realia discussion
- Pictures of outdoor activities
- Student generated list of weather words
- Weather journal/chart
- Temperature recording worksheet

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<table>
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<tr>
<th>measured.</th>
<th>• Describe ways of measuring weather.</th>
<th>chart paper to remain hanging on the wall.</th>
<th>• Wind direction recording sheet</th>
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<tbody>
<tr>
<td>2. Teacher: Introduces weather words using the book <em>Weather Words and What They Mean</em> (pages 2 – 16).</td>
<td>3. Teacher: Reads aloud book and lists key vocabulary on the board (add to weather word chart if not previously listed).</td>
<td>4. Teacher: Describes how these components combined compose daily weather.</td>
<td>• Air pressure observation sheet</td>
</tr>
<tr>
<td>5. Teacher: Introduces a weather chart to record weather information.</td>
<td>6. Teacher: Introduces thermometer using power point to enlarge fine detail of thermometer and to enable students to see components.</td>
<td>7. Teacher: Introduces thermometer using power point to enlarge fine detail of thermometer and to enable students to see components.</td>
<td>• Teacher observation of pair/small group reading activity</td>
</tr>
<tr>
<td>8. Students: Use thermometers to measure temperature themselves and record temperature.</td>
<td>9. Students: Make a wind vane to record wind direction.</td>
<td>10. Students: Blow up balloons to demonstrate air pressure.</td>
<td>11. Teacher: Places half the balloons in the refrigerator/freezer for 15 minutes to demonstrate the changes in dimensions.</td>
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**Expansion/Extension/Homework:**
Students: Write about the weather, clothes they wore, and activities students did over the weekend.

**Differentiation:**
Use flexible grouping; deliberately pair students homogeneously or heterogeneously by proficiency level depending on the objective. Weather literature will be available on a variety of reading levels to accommodate ELP Levels

**ELP 1 and 2** - Use pictures/drawings to chart weather in their weather journals.
ELP 3 to 5 - Write words/sentences to record weather in their journals.

Suggested Resources
http://www.edheads.org/activities/weather/frame_loader.htm ending activity
Weather Lesson Plan #2

**Content Area:** English as a Second Language

**Lesson Title:** Clouds  
**Timeframe:** 5 days

### Lesson Components

#### 21st Century Themes

<table>
<thead>
<tr>
<th>X</th>
<th>Global Awareness</th>
<th>Financial, Economic, Business, and Entrepreneurial Literacy</th>
<th>Civic Literacy</th>
<th>Health Literacy</th>
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#### 21st Century Skills

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<th>X</th>
<th>Creativity and Innovation</th>
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<th>Critical Thinking and Problem Solving</th>
<th>X</th>
<th>Communication</th>
<th>X</th>
<th>Collaboration</th>
</tr>
</thead>
</table>

#### Interdisciplinary Connections:
Language Arts, Science, Social Studies

#### Integration of Technology:
- Power Point,
- [http://imnh.isu.edu/digitalatlas/teach/lsnplns/fogbotlp.htm](http://imnh.isu.edu/digitalatlas/teach/lsnplns/fogbotlp.htm)
- [http://paos.colorado.edu/~wxp/labs/localobs/ObservingClouds.html](http://paos.colorado.edu/~wxp/labs/localobs/ObservingClouds.html)

#### Equipment needed:
- Computer/projection setup, student computers, Internet, digital camera

### Goals/Objectives

**Listening/Speaking**
- Retell a story using magnetic board and sentence strips.
- Explain what makes clouds and fog and how clouds and fog form.
- Chant the Water Cycle Rap and sing song.

**Listening**
- Identify the three main types of clouds (cirrus, cumulus, stratus)

### Learning Activities/Instructional Strategies

**Key Vocabulary:**
- Clouds, fog, atmosphere, condensation, evaporation, precipitation, collection, water cycle, cumulus, cirrus, stratus

**Key Language Structures:**
- Sequence, compare and contrast
- Yesterday, it was ________.
- Today is ________.
- Tomorrow, it will be ____________.

**Warm-up:**
- Teacher: Plays “Get Off of My Cloud” as background music.
- Students: Go outside with the teacher and look at clouds.
- Students: Write/illustrate and log observations.

### Assessment Tasks

**Formative**
- Evaluate weather journal.
- Water cycle sequencing activity.
- Shaving cream clouds to demonstrate understanding of cloud types.
- True and false questions about
Speaking
- Describe the three main types of clouds (cirrus, cumulus, stratus).

Reading
- Read cloud poems with a partner and make statements about clouds from pictures and photographs.

Writing
- Record cloud observations in a journal.
- Predict weather based on cloud formation.
- Compare and contrast differences in clouds using a graphic organizer.

Lesson Sequence:
1. Teacher: Conducts a shared reading of *It Looked Like Spilt Milk*.
2. Teacher: Retells using magnetic board pictures and sentence strips
3. Teacher: Reads various fiction and non-fiction books about clouds, how they develop and the characteristics of three main types including fog.
5. Students: Complete a graphic organizer showing type of cloud, description and weather observed when the specific cloud type is present (cumulus, cirrus, stratus).
6. Students: Make a cloud finder, develop an observation chart, record observations over a period of time, take daily digital pictures of sky and record all in a learning journal.
8. Students: Research how clouds influence weather using Dan’s Wild Wild Weather Page
10. Students: Sequence how clouds are formed (water cycle).

Closure: Students: Play “Pass it Down the Lane” (first person tells second person, second person tells third person, etc) their information learned each day.

Expansion/Extension/Homework:
Students: Report weekend cloud/fog formation.
Students: Tell peer/parent what type of clouds are present each day.

Differentiation: Use flexible grouping; deliberately pair students homogeneously or
heterogeneously by proficiency level depending on objective
Partner students at **ELP Level 1 with students at Level 3** when reading pocket poems.

**ELP 1** - Point to responses, follow one step directions, and draw responses.

**ELP 2** - Match oral descriptions to illustrations, follow two step directions, and respond with drawings and labels.

**ELP 3** - Follow multi-step directions, and respond with short phrase and simple sentence responses.

**ELP Level 4 & 5** - Follow multi-step directions and respond using more complex sentences.

**Suggested Resources**:
- Fog in a Bottle Experiment [http://imnh.isu.edu/digitalatlas/teach/lsnplns/fogbotlp.htm](http://imnh.isu.edu/digitalatlas/teach/lsnplns/fogbotlp.htm)
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<th>Weather</th>
<th>Lesson Plan #3</th>
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<td>English as a Second Language</td>
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<tr>
<td><strong>Lesson Title:</strong></td>
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<td>Precipitation</td>
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<td><strong>Timeframe:</strong></td>
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<td>7 days</td>
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<td>Language Arts, Math, Science</td>
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<tr>
<td><strong>Integration of Technology:</strong></td>
<td></td>
<td>Power Point, websites</td>
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<tr>
<td><strong>Equipment needed:</strong></td>
<td></td>
<td>Computer/projector setup,</td>
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<td></td>
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<td>interactive whiteboard,</td>
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<td>speakers, Internet</td>
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### Goals/Objectives

#### Students will:

**Speaking**
- Describe activities and feelings associated with different types of precipitation.

**Speaking and Writing**
- Use words or phrases to describe precipitation (rain, sleet, and snow).
- Compare/contrast weather conditions related to precipitation.

**Listening**
- Actively listen to various weather related books.
- Construct a model by listening to oral directions.
- Predict the outcome and perform an experiment by following oral directions.

**Reading**
- Read independently about water cycle.

**Writing**
- Express feelings and thoughts through writing.
- Create precipitation vocabulary flashcards.

### Learning Activities/Instructional Strategies

**Key Vocabulary:**
Rain, sleet, snow, hail

**Key Language Structure:** If... then, I wear a…… cause/effect statements

**Warm-up:**
Teacher: Shows students a Power Point representing four basic types of precipitation, discusses that precipitation originates in the clouds and asks students their thoughts/feelings about precipitation.

**Lesson Sequence:**
1. Teacher: Begins and ends lessons with the songs such as “Rain, Rain Go Away” displayed on whiteboard.
2. Teacher: Reads various fiction and non-fiction books about precipitation: how it develops, characteristics of each type of precipitation, activities that may/may not occur in said weather and what to wear.
3. Students: Creates precipitation vocabulary flashcards with name, picture, and definition.
4. Students: Record precipitation on a chart for five days and express knowledge of the importance of precipitation or lack thereof.
5. Students: Construct take-home booklets “We Need Rain” and “Dressing for Snow,” and then read independently.
6. Teacher: Reads *Listen to the Rain* by B. Martin and J. Archambalt then works with students to create a list of sounds (plop, splash, drip, etc.).
7. Students: Select a weather sound and illustrate; construct a class book with pictures.
8. Students: Make a clay/play dough model of a hailstone and a drawing of how they form within a cloud.
10. Students: Decide if they like rain/snow and display their answers on “Do you like rain chart?” or “Have you seen snow chart?” Use raindrops or snowflakes with students’ names to tally votes.
11. Students: Make predictions, conduct an experiment “Snow vs. Sleet” and discuss results and accuracy of the predictions.

### Assessment Tasks

**Formative**
- Warm-up responses
- Homework
- Drawing to Demonstrate
- Journal Writing
- Precipitation Match test
- Weather Word Wheel Game
<table>
<thead>
<tr>
<th>vocabulary flashcards</th>
<th><strong>Learning Activities/Instructional Strategies</strong></th>
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</thead>
</table>
| **Closure:** Students: Complete a journal writing on their choice of topics:  
  - How do you feel when it rains?  
  - What activities do you like to do in the rain/snow?  
  - Where do you think rain/snow comes from?  
| **Expansion/Extension**  
Students: Follow directions on “Rain and Snow” or “Look Out the Window” worksheets at the drawing center.  
  - Vocabulary Tic-Tac-Know  
  - Riddle Cards  
| What do you do on a ______ day? worksheet  
What to wear? worksheet  
Spotting Snowflakes worksheet  
How Hailstones Form worksheet  

**Differentiation**

Use flexible grouping; deliberately pair students homogeneously or heterogeneously by proficiency level depending on objective.

**ELP 1-2** Activity #4 Record precipitation by drawing pictures.

**ELP 3-5** Activity #4 Record precipitation by written words.

**ELP 1-2** Take-home Booklets can be accompanied by a recording.

**ELP 1-2** Closure journal activity can be adapted by having students draw pictures to answer questions.

**ELP 1-2** Vocabulary can be adapted with just pictures and words.

**Suggested Resources**

- Sample songs, two column charts, riddle, flashcards  
- Book suggestion list  
- Homework and center worksheets  
- Vocabulary Tic Tac Know Instructions  
- Weather Wheel  
- Take Home Booklets  
- Vocabulary Match  
- Precipitation record chart  
- Raindrop/snowflake cut outs  
- Instructions for experiment  
- [www.scholastic.com](http://www.scholastic.com)
• http://www.storyplace.org/preschool/activities/bellawear.asp
• http://www.wordle.net/
**NJ ESL Curriculum Exemplar**

**Aligned to the 2007 WIDA Standards**

**ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21ST CENTURY GLOBAL SKILLS**

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<tr>
<td><strong>Lesson Title:</strong></td>
<td>Weather Forecasting</td>
</tr>
<tr>
<td><strong>Timeframe:</strong></td>
<td>3 days</td>
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### Lesson Components

#### 21st Century Themes

- X Global Awareness
- X Financial, Economic, Business, and Entrepreneurial Literacy
- Civic Literacy
- X Health Literacy

#### 21st Century Skills

- X Creativity and Innovation
- X Critical Thinking and Problem Solving
- Communication
- X Collaboration

#### Interdisciplinary Connections:

Language Arts, Math, Science

#### Integration of Technology:

Forecasting websites

#### Equipment needed:

Computer/ projection setup, student computers, Internet, digital video camera

### Goals/Objectives

**Students: Speaking**

- Present a daily weather report based on weather journal records.
- Recommend clothing and accessories for the weather described.

**Listening**

- Actively listen to student presentations of weather report.

**Reading/ Writing**

- Create note

### Learning Activities/Instructional Strategies

**Key Vocabulary:** All previous weather unit vocabulary

**Key Language Structure:** Reporting information orally, and taking notes from a presentation

**Warm-up:** Teacher: Presents a weather report modeling format and content of student presentations, including poster and paper figures. Students: identify content included in the presentation.

**Lesson Sequence:**

1. Teacher: Plays several different recordings of professional weather reports.
2. Teacher: Reviews chart of required elements in weather reports: precipitation,

### Assessment Tasks

**Formative**

- Oral responses to professional weather reports
- Note cards of weather information/clothing/accessories
- Poster board of weather information
- Paper figure person with clothing and accessories

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cards listing statements about precipitation, temperature, clouds, and wind.

• Illustrate a poster board with the correct weather pictured and labeled

• Design a paper figure of a person dressed in the appropriate clothing and accessories for the weather.

• Record weather described on a chart.

temperature, clouds, wind, clothing, accessories.

3. Students: Record information in groups on recording chart.

4. Students: Use chart and weather journal information to create note cards for weather reports.

5. Students: Illustrate poster boards and create paper figure people.

6. Teacher: Introduces report opening and closing statements.

7. Students: Practice reporting weather with a partner; self assess with check off rubric.

8. Teacher: Video-record students doing weather presentations to group.

9. Students: Evaluate classmates by using check off rubric listing features required in the weather forecast.

Closure: Students: view video-taped presentations.

Expansion/Extension:
Students: Practice reporting at home,
Students: Present daily weather report to other classes

• Self assessment with check off list

Summative

• Student weather report presentation

• Student evaluations of presentations on check off rubric

Differentiation: Language objectives will be differentiated for each ELP Levels. Use flexible grouping; deliberately pair students homogeneously or heterogeneously by proficiency level depending on objective.

ELP 1 - Illustrate note cards and label with one word, present weather report with a partner

ELP 2 - Illustrate note cards and label with brief phrases, present weather report with a partner

ELP 3 - Illustrate note cards and label with simple sentences, present weather report individually

ELP 4 and 5 - Illustrate note cards and label using more complex sentences, present weather report individually

Suggested Resources

• Student weather journal
• Videotaped/downloadable professional weather reports
• Poster board, markers, colored pencils
• Paper people figures and art supplies

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• Self assessment check list
• Evaluation rubric check of features
• http://www.edheads.org/activities/weather/
• http://ww2010.atmos.uiuc.edu/(Gh)/guides/mtr/fcst/home.rxml