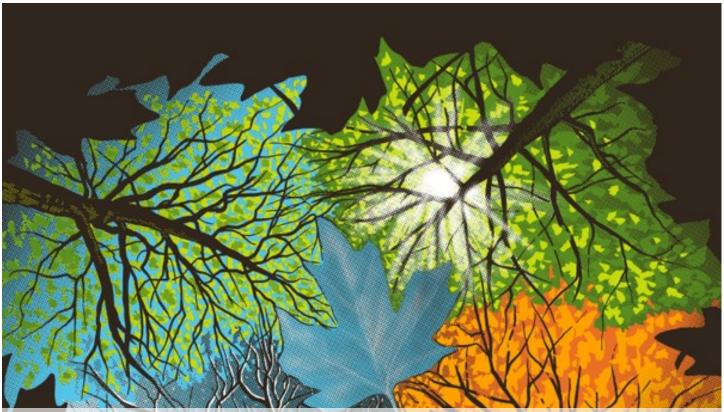


Changes in the Season & Weather Forecasting

Seasons • Weather • Cycle • Change • Passage of Time



Unit Essential Question

What are the differences in the four seasons, and how is a weather forecast created?

UNIT DESCRIPTION

This unit integrates and helps to strengthen the arts, science, math, and language arts through innovative first grade projects. Students will engage in the process of examining changes in weather throughout the year. Students will have the opportunity to experience music and theatre as they role play and discover all of the four seasonal changes. They will be actively engaged in an exploration of seasonal poetry through a variety of artistic processes. The students will also learn about the importance of weather forecasting as they use dance/body movements to interpret daily weather events.

PROJECTS (2-4 Weeks)

- Season Role Plays
- Season Poetry in Performance
- Wonderful Weather Forecasting

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Units provide differentiated ideas and activities aligned to a sampling of standards.

The units do not necessarily imply mastery of standards, but are intended to inspire and equip educators.

Produced through the U.S. Department of Education: Arts in Education—Model Development and Dissemination Grants Program Cherokee County (GA) School District and ArtsNow, Inc.

UNIT OVERVIEW

Duration: 2-4 Weeks

Unit Description	Table of Contents
This unit integrates and helps to strengthen the arts, science, math, and language arts through innovative first grade projects. Students will engage in the process of examining changes in weather throughout the year. Students will have the opportunity to experience music and theatre as they role play and discover all of the four seasonal changes. They will be actively engaged in an exploration of seasonal poetry through a variety of artistic processes. The students will also learn about the importance of weather forecasting as they use dance/body movements to interpret daily weather events.	Project 1: Season Role Plays Project 2: Season Poetry in Performance Project 3: Wonderful Weather Forecasting

UNIT ESSENTIAL QUESTION

What are the differences in the four seasons, and how is a weather forecast created?

CROSS-CUTTING INTERDISCIPLINARY CONCEPT

Cycle

REAL WORLD CONTEXT

Learning about the seasons helps students understand the passage of time and teaches them about change. We all experience the four seasons, and it is important for children to be able to recognize the different changes that occur during the seasonal changes. In this unit, students will explore how the ending of one season marks the beginning of a new season and this repeats annually, again and again. Learning about the weather and how we are able to forecast the weather is important for understanding what our outdoor activities may be, the types of clothing we should wear, etc.

STANDARDS

Curriculum Standards	Arts Standards
ELACC1RL Describe characters, settings, and major events in story, using key details	M1GM.6. Listening to, analyzing, and describing music a. Distinguish between contrasts (pitch, dynamics,
ELACC1RL7 Use illustrations and details in a story to describe its characters, setting, or events	tempo, timbre) in various pieces of music b. Describe music using appropriate vocabulary (e.g., high, low, loud, quiet, fast, and slow)
RL.1.4 Identify words and phrases in stories or poems that suggest feelings or appeal to the senses	TAES1.3. Acting by developing, communicating, and sustaining roles within a variety of situations
SL1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and large groups	and environments b. Makes movement choices in assuming roles c. Uses body and voice to communicate ideas, emotions, and character actions



- **S1E1.** Students will observe, measure and communicate weather data to see patterns in weather and climate
- a. Identify different types of weather and the characteristics of each type
- c. Correlate weather data (temperature, precipitation, sky conditions, and weather events) to seasonal changes

\$1C\$5. Students will communicate scientific ideas and activities clearly

c. Use simple pictographs and bar graphs to communicate data

d. Collaborates and cooperates in theatre experiences

Duration: 2-4 Weeks

e. Assumes roles in a variety of dramatic forms such as narrated story, pantomime, puppetry and role play

VA1PR.1. Creates artworks based on personal experience and selected themes

b. Creates artworks emphasizing one or more elements of art (e.g. color, line, shape, space, form, texture)

D1CR.1 Demonstrates an understanding of creative and choreographic principles, processes, and structures

VA1MC.1 Engages in the creative processes to generate and visualize ideas

ASSESSMENTS

Summative Assessments

- Students will use the 3-Part Retell Document (see Downloads) to retell their 3-Part Winter Story.
 This document could be used as a performance-based task.
- Students will complete the **Season Roleplay Rubric** (see Downloads) once they have acted out & performed their 3-Part Winter Story.
- Students will use the **Haiku Template** (see Downloads) to create 4 haiku poems for each season. They will then create choreography for their haikus.
- Students will create a four-season 3D mobile in the correct cycle. They will have the opportunity to paint a season setting or rewrite their season haiku for each section.
- Students will have the opportunity to record their season haiku's while reading them aloud for a digital storytelling piece.
- Students can use a recording device to record their 5-day weather forecast. The class will then
 view each recorded forecast. (See Downloads for My 5-Day Weather Forecast and the
 Wonderful Weather Forecasting Recording Sheet.)
- Instead of the students video recording their 5-day weather forecast, they could present it to the class in person.
- Students will use the Weather Forecast Rubric (see Downloads) to critique their 5-day weather forecast.

PARTNERING WITH FINE ARTS TEACHERS

Music Teacher:

- Additional support in Project 1: Season Role Plays
 - Assist with providing additional information about the music history and style of Vivaldi's Four Seasons

Theatre Teacher:

- Additional support in Project 1: Season Role Plays
 - Assist with teaching proper actor techniques, like strong voice and body movements, to boost students' confidence for performance
 - Assist with providing "seasonal props" from props storage



Visual Arts Teacher:

- Additional support in Project 2: Season Poetry in Performance
 - Assist with painting or collage techniques
 - Assist with finding examples of how visual artists have chosen to represent poetry through paintings or collages.

Dance Teacher:

- Additional support in Project 3: Wonderful Weather Forecasting
 - Assist with suggestions of body movements that could represent the weather

CHARACTER EDUCATION COMPONENTS

In this unit there are ample opportunities to address the concept of service learning, where students have the opportunity to teach a concept to other students. Consider pairing up with a Kindergarten class and having first grade students perform their plays for kindergarteners. This may help with 3-part retelling, which is a strong kindergarten standard in ELA. Also consider pairing up with 4th grade since they learn about how the earth's rotation and revolution relate to time of day and time of year in this particular grade level. Perhaps collaboration could occur that helps first graders understand why we actually have four seasons and why we have a cycle. Fourth graders could present/perform for first graders and visa versa.

CHARACTER ATTRIBUTES

Duration: 2-4 Weeks

In this unit there are ample opportunities to address the concept of being a tolerant person. As the seasons change, so do people. Every person may have one particular season that they enjoy the most. While others have specific seasons that they dislike. We cannot control which season it may be, just like we cannot control the way others behave. However, we must learn how to tolerate others who may be different than us. There are many pieces of literature available to assist with teaching this concept:

- *Up the Learning Tree* by Marcia Vaughan
- Shark vs. Train by Chris Barton
- Stand Tall, Molly Lou Melon by Patty Lovell
- Odd Velvet by Mary E. Whitcomb

APPENDIX (see Downloads)

- Pre-Test
- Suggested Seasonal Props List
- 3-Part Retell Document
- Season Roleplay Rubric
- Haiku Template
- My 5-Day Weather Forecast
- Wonderful Weather Forecasting Recording Sheet
- Weather Forecast Rubric

ADDITIONAL RESOURCES

Books

- Leaf Jumpers by Carole Gerber
- Handsprings by Douglas Florian
- Spring-An Alphabet Acrostic by Steven Schnur
- Weather: Poems for All Seasons by Lee Bennett Hopkin
- Oh Say Can You Say What's the Weather Today? By Tish Rabe
- Weather Forecasting by Gail Gibbons
- What Will the Weather Be Like Today? By Paul Rogers



Duration: 2-4 Weeks

- Freddy the Frogcaster and the Terrible Tornado by Janice Dean
- Seasons by Marie Greenwood
- True or False? Seasons by Daniel Nunn
- Winter by Ailie Busby
- Spring by Ailie Busby
- Summer by Ailie Busby
- Fall by Ailie Busby
- Over and Under the Snow by Kate Messner
- Summer Is Summer by Phillis & David Gershator

CREDITS

U.S. Department of Education

Arts in Education--Model Development and Dissemination Grants Program

Cherokee County (GA) School District and ArtsNow, Inc.

Ideas contributed and edited by: Robin Hatcher, Jody Staab, Ta-Tanisha Harris, Jessica Espinoza,





Project 1: Season Role Plays

Cycle • Season • Change







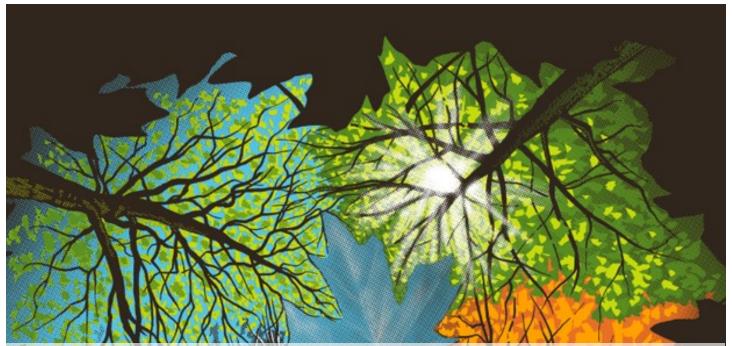












Project Essential Questions

- What changes in nature occur during each season?
- What sort of activities do we associate with each season?
- How do settings change throughout the course of the four seasons cycle?
- How can we use key details to describe how the setting changes in a story?

PROJECT DESCRIPTION

This project uses music and theatre to investigate the changes in nature during each season. This arts integrated project includes students using their bodies and props to role play activities you may do in the various seasons. Vivaldi's Four Seasons music arrangements are incorporated into the dramatizations. This project then connects seasonal changes to literature through analyzing how characters and settings change in a story.

LEARNING TARGETS

"I Can..."

- Use my body and props to role play each season
- **Explain the changes in the seasons**
- Connect the changes in season to changes in a story's setting

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Produced through the U.S. Department of Education: Arts in Education—Model Development and Dissemination Grants Program Cherokee County (GA) School District and ArtsNow, Inc.

DURATION: 1-2 days

Project Description	Learning Targets
This project uses music and theatre to investigate the changes in nature during each season. This arts integrated project includes students using their bodies and props to role play activities you may do in the various seasons. Vivaldi's <i>Four Seasons</i> music arrangements are incorporated into the dramatizations. This project then connects seasonal changes to literature through analyzing how characters and settings change in a story.	 "I Can" Use my body and props to role play each season Explain the changes in the seasons Connect the changes in season to changes in a story's setting

ESSENTIAL QUESTIONS

- What changes in nature occur during each season?
- What sort of activities do we associate with each season?
- How do settings change throughout the course of the four seasons cycle?
- How can we use key details to describe how the setting changes in a story?

STANDARDS

Curriculum Standards	Arts Standards
ELACC1RL3 Describe characters, settings, and major events in story, using key details	M1GM.6. Listening to, analyzing, and describing music
ELACC1RL7 Use illustrations and details in a story to describe its characters, setting, or events	 a. Distinguish between contrasts (pitch, dynamics, tempo, timbre) in various pieces of music b. Describe music using appropriate vocabulary (e.g., high, low, loud, quiet, fast, and slow)
S1E1. Students will observe, measure and communicate weather data to see patterns in weather and climate a. Identify different types of weather and the characteristics of each type c. Correlate weather data (temperature, precipitation, sky conditions, and weather events) to seasonal changes	TAES1.3. Acting by developing, communicating, and sustaining roles within a variety of situations and environments b. Makes movement choices in assuming roles c. Uses body and voice to communicate ideas, emotions, and character actions d. Collaborates and cooperates in theatre experiences e. Assumes roles in a variety of dramatic forms such as narrated story, pantomime, puppetry and role play

KEY VOCABULARY

Content Vocabulary	Arts Vocabulary
 Seasons (Spring, Summer, Winter, and Fall/Autumn) Change Cycle Setting 	 Tempo (fast, medium, slow) Volume (loud, medium, soft) Instruments (families, such as percussion, brass, woodwinds) Orchestra



Illustrations	Scene
Key details	Role play
Order/sequence	Vivaldi
	Characters
	Props

TECHNOLOGY INTEGRATION

- Audio Equipment to play seasonal music
- Promethean Board
- Vivaldi's Four Seasons (Spring, Summer, Autumn, Winter)
- Youtube video clip of music found here: https://www.youtube.com/watch?v=GRxofEmo3HA

ASSESSMENTS

Formative	Summative
 Anecdotal Notes during Class Discussion Small-Group Dramatizations Season's Visual Arts Project 	 3-Part Retell Document (see Downloads) Season Roleplay Rubric (see Downloads)

MATERIALS

Vivaldi's Four Seasons (Spring, Summer, Autumn, Winter); Music player; *The Tiny Seed* by Eric Carl; 4 baskets of seasonal props (See Downloads for a list of **Suggested Seasonal Props**.)

Activating Strategy (5-10 min)

- Play classical music representing each season in Vivaldi's Four Seasons. https://www.youtube.com/watch?v=GRxofEmo3HA
- Ask students to describe what they hear and why that song goes with a particular season.
- Play a clip of the music for 30 seconds-1 minute. Then pause the music and have a class
 discussion about what they noticed when listening to the music. Do this four times, once for each
 season. While students are telling you what they hear or notice, teacher takes notes on chart
 paper or the board.

Questions to ask between each song:

- Discuss tempo (fast/slow), volume (loud/soft).
- What did you hear in this particular season? Did the tempo get faster or slower? Did the music get louder or softer?
- What instruments do you hear in this particular season, why?
- What changed between the Spring song and the Summer song?
- Why do you think the composer made this artistic choice?



Main Activity

Part 1:

Read-Aloud Focused on Setting:

- Keep the class list of words for each season nearby for this next part.
- Read The Tiny Seed by Eric Carl.
- As you read, add season words to your existing class list.
- Ask students to notice closely how the setting changes in each season.
- Ask students to notice closely how the character changes as the seasons change.

Part 2:

Devising Role Plays with Props:

*Before this lesson, organize 4 baskets of "seasonal props." (See Downloads for a list of **Suggested Seasonal Props**.)

- Divide the class into 4 small groups.
- Assign a season for each group.
- Give each group a basket of props that correspond with their season.
- Direct students to use their props and bodies to create a 3-part role play for their assigned season.

Ex: The winter play may consist of students first making snow angels, then throwing snowballs, and finally sitting by the fireplace drinking cocoa. Students would act out their 3-part Winter Story.

- Scaffold your directions to first direct students to work only on determining as a group their first season activity they will roleplay, then focus on determining their second part and finally their third part.
- Refer to the 3-Part Retell Document (see Downloads) for an assessment of this performance-based task.
- Direct students to do all of their acting using only props, body movements, and no speaking.

Part 3:

Performance:

- When the groups are ready to share-out their Season plays, ask students to help you come up
 with a performance order based on the order of the seasons we saw happen in the book we read,
 The Tiny Seed.
- During the performance, play the Vivaldi music that corresponds with their season.
- After the entire 4-season cycle has been performed, announce that you are now going to do something very tricky.
- Call out a different starting season and see if the students can still perform their plays in the correct order of the cycle.

REFLECTION

Reflective Questions

- How were the characters in our season roleplays different based on the season?
- How does weather change a setting? What sort of weather did we observe in our different season plays?
- What was the mood in each season? Why do you think that was?
- How did acting out your role plays help you remember the cycle of seasons?



DIFFERENTIATION

Above Grade-Level: Give above-level small groups differentiated instructions when creating their 3-part role play of their season. Ask them to create dialogue in the form of a script for each part of their role play. So the role play would consist of 3 scenes. All scenes must include a spoken line by every group member. The lines should help us understand how characters respond to their setting in this specific season.

Below Grade-Level/EL Students: A week prior to the unit, begin letting below-level and EL students get familiar with grade-level specific informational texts on weather. Help build their background knowledge by introducing weather/season vocabulary.

Activites could include:

- Matching games with vocabulary word cards and matching illustrations that demonstrate meaning
- Direct students to write vocabulary words and illustrating the meaning of each word
- Youtube video songs that reinforce concepts and vocabulary:
 - https://www.youtube.com/watch?v=hSshYqDrKTo
 - https://www.youtube.com/watch?v=RmSKsyJ15yg
 - https://www.youtube.com/watch?v=8Zjpl6fgYSY

APPENDIX (see Downloads)

- Suggested Seasonal Props
- 3-Part Retell Document
- Season Role Play Rubric

CREDITS

U.S. Department of Education

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Cherokee County (GA) School District and ArtsNow, Inc.

Ideas contributed and edited by: Robin Hatcher, Jody Staab, Ta-Tanisha Harris, Jessica Espinoza,





Project 2: Season Poetry in Performance

Cycle • Season • Change • Poetry







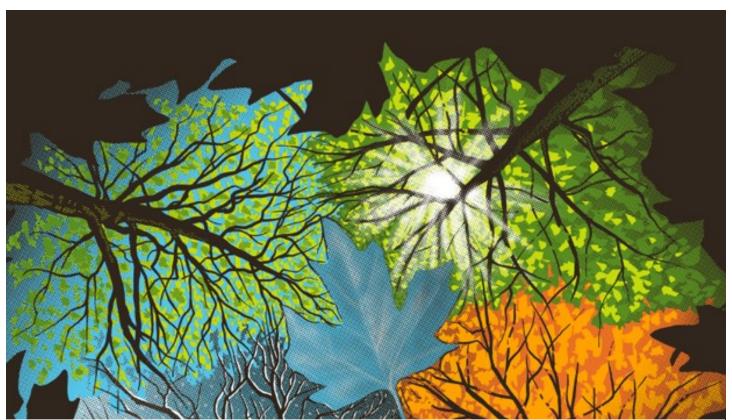












Project Essential Question

How can I use poetry to express the seasons and how they change throughout the cycle?

PROJECT DESCRIPTION

This arts integrated project immerses students in exploring Season Poetry through a variety of different artistic processes. Students engage in writing, rehearsing, and performing Season Haikus and then using this poetry to create a Visual Arts piece. 3-dimensional Season Mobiles are created using their student-created haikus. Additional options to collage and create digital art projects with voice recordings of students' season poetry are also included.

LEARNING TARGETS

"I Can..."

- Use a haiku to describe each season
- Create a haiku using my season vocabulary
- Use a haiku to express seasonal changes
- Place the four seasons in an order that makes a complete cycle

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Produced through the U.S. Department of Education: Arts in Education—Model Development and Dissemination Grants Program Cherokee County (GA) School District and ArtsNow, Inc.

DURATION: 3-6 days

Project Description	Learning Targets
This arts integrated project immerses students in exploring Season Poetry through a variety of different artistic processes. Students engage in writing, rehearsing, and performing Season Haikus and then using this poetry to create a Visual Arts piece. 3-dimensional Season Mobiles are created using their student-created haikus. Additional options to collage and create digital art projects with voice recordings of students' season poetry are also included.	 "I Can" Use a haiku to describe each season Create a haiku using my season vocabulary Use a haiku to express seasonal changes Place the four seasons in an order that makes a complete cycle

ESSENTIAL QUESTIONS

How can I use poetry to express the seasons and how they change throughout the cycle?

STANDARDS

Curriculum Standards	Arts Standards
RL.1.4 Identify words and phrases in stories or poems that suggest feelings or appeal to the senses	VA1PR.1 Creates artworks based on personal experience and selected themes. b. Creates artworks emphasizing one or more
SL1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and large groups	elements of art (e.g. color, line, shape, space, form, texture)
S1E1: Students will observe, measure and communicate weather data to see patterns in weather and climate a. Identify different types of weather and the characteristics of each type c. Correlate weather data (temperature, precipitation, sky conditions, and weather events) to seasonal changes	TAES1.3 Acting by developing, communicating, and sustaining roles within a variety of situations and environments b. Makes movement choices in assuming roles c. Uses body and voice to communicate ideas, emotions, and character actions d. Collaborates and cooperates in theatre experiences e. Assumes roles in a variety of dramatic forms such as narrated story, pantomime, puppetry and role play

KEY VOCABULARY

Content Vocabulary	Arts Vocabulary
 Seasons (Spring, Summer, Winter, and Fall) Cycle Change Poem Poetry Haiku 	 Volume Tempo Pitch Expression Rehearse Perform Texture



Key details	Collage
	Layer
	 Sound scaping
	 3-dimensional mobile

TECHNOLOGY INTEGRATION

iPads

Examples of Digital Story-Telling Apps:

- Adobe Voice
- Voicethreading.com
- Scratch

ASSESSMENTS

Formative	Summative
 Questioning Teacher Observations during Artistic Process 	 Haikus (See Downloads for a Haiku Template.) 3-Dimensional Season Mobile Digital Storytelling Piece

MATERIALS

Season Poetry selections (see Additional Resources); Cardboard pizza trays; Scissors; Glue; Tape; Ribbon; Paint; Coloring utensils; Scrapbooking materials; Magazines

Activating Strategy (5-10 min)

- As a class, read aloud some preselected Season Poems (see Additional Resources for a suggested book list).
- Direct students to sound-scape the sounds you may hear in the poems as you read.
- Model how to perform poetry using an expressive voice: you may find words that you want to say softly/loudly, quickly/slowly, high pitched/low pitched.
- Read a poem a few times modeling different musical elements you can apply using your voice.

Classroom Tip: When doing the soundscaping, give students visual cues that indicate you want to hear sounds (Ex: Cup hand to hear) and another cue when you want students to silence (Ex: finger on lips).

Main Activity

Part 1:

Give students directions on how to write a Haiku:

- A haiku should contain only three lines, totaling 17 syllables throughout. The first line is only 5 syllables. The second line is 7 syllables. The third line is 5 syllables again.
- Direct students to create a haiku for each season. (See Downloads for a Haiku Template.)
- Remind students to refer back to the class list of season words we created during Project 1.
- Perform your haikus either in small groups or as a class.

Possible Extension:



- Allow students to then work in small groups to create choreography for their haikus.
- Review locomotive and non-locomotive movements they could use to develop their choreography.

Part 2 (OPTION A):

- Give students a large circular cardboard cut-out (pizza pie size).
- Poke a hole in the center of the circle.
- Partition the circle into fourths.
- Talk about each fourth of the circle representing a season, in the correct order of the cycle.
- Students either paint a season setting for each fourth OR rewrite their season haiku for each fourth
- Give out ribbons, strings, construction paper, glue, and tape.
- Direct students to use the ribbons and paper to create items associated with the season that could then hang down from each season quadrant.
- This mobile could then be attached to a coat hanger to hang.
- Students could see how the cycle moves through the seasons.
- Exhibit the mobiles in a place where other students can come see.

Part 2 (OPTION B):

- Use a digital storytelling app to record students reading aloud their Season Haikus.
- Direct students to create a photo collage that represents each season.
- Magazines, children's book sleeves, dried flowers, and scrapbooking materials can be used.
- Take a photo of the artwork.
- Voice thread the student's voice recording to each illustration.
- Provide an opportunity for these Season Digital Storytelling Projects to be viewed together as an audience.

*This project could be done in groups of 4 students (each student can represent a different season) or done independently if time permits.

REFLECTION

Reflection Questions

- Go through your poem and find your favorite word in your haiku. Why did you choose to include this word in your poem?
- What are things that begin to happen in the end of one season that may give us a clue that the season is about to change?
- How did you use the visual arts to represent your season poetry? How did it help you remember the different seasons?

DIFFERENTIATION

Below Grade-Level:

- You could place students in groups of four and direct each student to write a haiku for each of the four different seasons.
- They could just focus their energy on one season and then work together as a group to determine what order they should perform their poetry, in sequence with the cycle of the seasons.

Above Grade-Level:

• See the "possible extension" on part one. Students can take poetry and then stage choreography to the words in their haikus. They could rehearse and perform their poetry in motion.



 Also the above-level group could do more with integrating the digital arts into their study of the seasons. They could work on recording their voices reading their poetry and then add images for each season. This digital storytelling project could be an ideal project for above-level students.

EL Students:

- Work with EL students before they write their haikus to remind them of key vocabulary words they
 may choose to use in their season poetry.
- Review with them how to clap out the syllables.
- Together identify the number of syllables in the words they choose to use in their poems so that the writing of the haiku is easier.
- Also see below grade level instructions for ways to modify the small group project.

ADDITIONAL RESOURCES

Books:

- Leaf Jumpers by Carole Gerber
- Handsprings by Douglas Florian
- Spring-An Alphabet Acrostic by Steven Schnur
- Weather: Poems for all Seasons by Lee Bennett Hopkins

APPENDIX (see Downloads)

Haiku Template

CREDITS

U.S. Department of Education

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Project 3: Wonderful Weather Forecasting

Cycle • Weather • Forecast







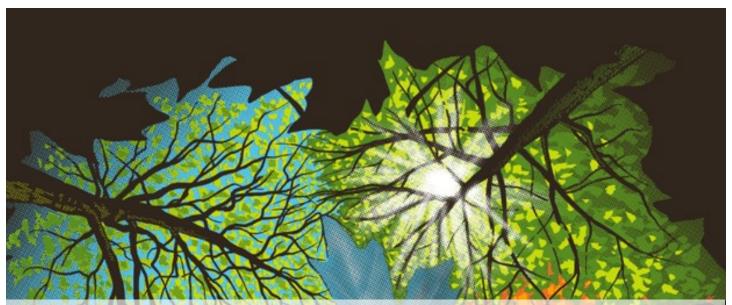












Project Essential Questions

- What are the different types of daily weather happenings and their characteristics?
- Why is forecasting the weather important to people around the world?
- Why is recording daily weather events important in order to make a weather forecast?

PROJECT DESCRIPTION

In this project, students will record two weeks' worth of weather data as a whole group. Students will use the weather data to create a tally table and then create a bar graph. The students will focus on weather forecasting and how it relates and affects the real world. Students will use body movements to represent their daily weather findings as well as perform these movements together. The students will also record their own weather data for one week, outside of the school setting. They will then use their data to create and record their own weather forecast.

LEARNING TARGETS

"I Can..."

- Understand the importance of the weather
- Forecast the weather
- Create & perform body movements to represent daily weather happenings
- Collect 2 weeks of daily weather data
- Use a tally table and bar graph to tabulate weather data
- Collect and record 1 weeks' worth of daily weather happenings
- Organize, create, and present/videorecord my own weather data forecast

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Produced through the U.S. Department of Education: Arts in Education—Model Development and Dissemination Grants Program Cherokee County (GA) School District and ArtsNow, Inc.

DURATION: 2 weeks

Project Description	Learning Targets
In this project, students will record two weeks' worth of weather data as a whole group. Students will use the weather data to create a tally table and then create a bar graph. The students will focus on weather forecasting and how it relates and affects the real world. Students will use body movements to represent their daily weather findings as well as perform these movements together. The students will also record their own weather data for one week, outside of the school setting. They will then use their data to create and record their own weather forecast.	 "I Can" Understand the importance of the weather Forecast the weather Create & perform body movements to represent daily weather happenings Collect 2 weeks of daily weather data Use a tally table and bar graph to tabulate weather data Collect and record 1 weeks' worth of daily weather happenings Organize, create, and present/video-record my own weather data forecast

ESSENTIAL QUESTIONS

- What are the different types of daily weather happenings and their characteristics?
- Why is forecasting the weather important to people around the world?
- Why is recording daily weather events important in order to make a weather forecast?

STANDARDS

Curriculum Standards	Arts Standards
S1E1. Students will observe, measure, and communicate weather data to see patterns in weather and climate. Identify different types of weather and characteristics of each type.	D1CR.1. Demonstrates an understanding of creative and choreographic principles, processes, and structures.
c. Correlate weather data (temperature, precipitation sky conditions, and weather events) to seasonal changes.	VA1MC.1. Engages in the creative processes to generate and visualize ideas. a. Recognizes and discusses how visual images can have multiple meanings.
S1CS5. Students will communicate scientific ideas and activities clearly.c. Use simple pictographs and bar graphs to communicate data.	

KEY VOCABULARY

Content Vocabulary	Arts Vocabulary
 Meteorologist Weather report Precipitation Temperature Forecasting Predicting Tally chart Bar graph Data 	 Body movements Representation Unison Facial expression Choreography



Sunny	
 Cloudy 	
 Scattered showers 	
 Thunderstorms 	
Snow	
• Ice	

TECHNOLOGY INTEGRATION

- http://pbskids.org/dragonflytv/scientists/scientist12.html (This website provides a short video in which you meet Meteorologist Howie Bluestein as he explains what his job entails.)
- http://www.air-n-water.com/weather-forcasting-for-kids.htm (This website provides a short, written explanation as to the methods in which meteorologists use when making their weather predictions/forecasts.)
- https://www.youtube.com/watch?v=qWWx3reC9qA (This YouTube video (5 min 33 seconds) features
 Weather Forecasting for Kids with Meteorologist JD Rudd is full of useful information that the students
 may enjoy watching.)

ASSESSMENTS

Formative	Summative
 Daily class participation in accumulating weather information as well as the body movements/dances that correspond with each specific type of weather event. 	 Video recorded weather forecast 5-day weather presentation Weather Forecast Rubric (see Downloads)

MATERIALS

• Cloudy With a Chance of Meatballs by Judi Barrett, chart paper, computer, projector, various writing utensils, video camera

Activating Strategy

- Teacher will show the class the cover of the book, *Cloudy With A Chance of Meatballs* by Judi Barrett. Teacher will ask the class: What do you think the title and cover of this book has to do with weather? Discuss as a whole group.
- Read Cloudy With A Chance of Meatballs. After you reach the part in the book where there is an example of a "real" weather forecast, spend a few minutes having a class discussion on what the students know and or do not know about the topic of weather forecasting.
- Complete the rest of the book.

Main Activity

Part 1:

 Review the YouTube video clip of a real world example of a weather forecast on the evening news with Jason Brewer, a meteorologist from Florida: (https://www.youtube.com/watch?v=i_3dZPFbsZM)



- Show the students the example of the **Wonderful Weather Forecasting Recording Sheet** (see Downloads), either via the computer & projector or you could recreate this sheet on a large piece of chart paper or butcher paper.
- Explain to the students that for the next 2 weeks they will be observing the weather, recording the weather on a daily basis, as well as coming up with a body movement/dance (choreography) that goes along with the weather. (Example: A sunny day could be represented by putting your arms above your head in an arch to make a circle, and the students could have a big smile on their faces while their arms are raised in a circle like figure.) As a whole group they will record their observations on the recording sheet.
- To keep it simple, use the following list for weather observations: sunny, cloudy, scattered showers, thunderstorms, snow, ice.
- This activity will be done on a daily basis for 2 weeks: recording the weather and using the body movement that corresponds with the weather that day.

Part 2:

- On the 10th day of recording the weather as a whole group, the class will create a tally chart
 tallying the daily weather observations. Then the class will use the tally chart to create a bar
 graph. Using the collected data, a class discussion can take place on which weather observations
 happened the most or least. Remember to use the body movements/choreography as you review
 the 2 weeks' worth of weather data.
- Review with the class what weather forecasting is. There are several books in the Additional Resources section, as well as video clips in the Technology Integration section, to assist in this class discussion.
- Explain to the class that they will be creating their own weather forecast, recording their weather observations for 5 days, and then performing their weather forecast for the class and or video recording the forecasts.
- Each student will receive a copy of the My 5-Day Weather Forecast Planning Sheet (see Downloads). Review the directions as a whole group.

Part 3:

- On the 6th day the students should return to school with their weather forecasting sheets already completed.
- At this point the teacher can decide how creative they will allow their students to get in regards to sharing their own 5-day weather forecast. It could be as simple as the students reading their forecasts in front of the class to adding more creativity to the project by adding props and recording the forecasts to reflect an actual weather forecast that is done on television.

REFLECTION

Reflection Questions

- How did adding body movements/dances to represent the daily weather help me to better understand different weather events?
- Why is it important to use voice inflection and props when producing a weather forecast on television?

DIFFERENTIATION

Below Grade-Level:

• These students could do their illustrations for their 5-day weather project. They could also write the weather word being illustrated instead of using it in a complete sentence.



Above Grade-Level:

• This group of students could do research on specific weather events such as: hurricanes, tornadoes, tsunamis, cold fronts, etc. They could in turn share this new information with the class as a whole and or in small groups.

EL Students:

• These students would highly benefit from having several different children's weather books as a resource throughout the project. They could also be partnered with an on grade-level or above grade-level student to assist with the actual presentation of the 5-day weather forecast/report.

ADDITIONAL RESOURCES

- Oh Say Can You Say What's the Weather Today? By Tish Rabe
- Weather Forecasting by Gail Gibbons
- What Will the Weather Be Like Today? By Paul Rogers
- Freddy the Frogcaster and the Terrible Tornado by Janice Dean

APPENDIX

- Weather Forecast Rubric
- My 5-Day Weather Forecast Planning Sheet
- Wonderful Weather Forecasting Recording Sheet

CREDITS

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