Unit of Inquiry Name: Wild About Weather Estimated Time: 60 minutes Lesson # 17

NGSS 3 Dimensional Lesson Concept: Use media to describe and record the weather and to notice patterns over time.

SEP SEP3 - Planning and Carrying Out Investigations: Make observations (firsthand or from media) to collect data that can be used to make comparisons.

SEP8 - Obtaining, Evaluating, and Communicating Information: Read grade-appropriate texts and/or use media to obtain scientific information.

DCI ESS2.D - Weather and Climate: Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time. (K-ESS2-1)

CCC CCC1 - Patterns: Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.

Anchor Phenomenon: A meteorologist forecasts the weather. (<u>Jodi Kodesh Weather Forecast</u>)

Lesson Objective: Students deliver a weather forecast for their school community.

CA Art Standards: Anchor Standard 5: Develop and refine artistic techniques and work for presentation.

K.Theater: Performing 5a. With prompting and supports, understand that voice and sound are fundamental to dramatic play and guided drama experiences.

Anchor Standard 6: Convey meaning through the presentation of artistic work.

K.Theater: Performing 6: With prompting and supports, use voice and sound in dramatic play or a guided drama experience and share with others.

ELD Language Target: Plan and deliver brief oral presentations.

Key Vocabulary: forecast

<u>Habit of Mind #9</u>: Thinking and Communicating with Clarity and Precision (Communication): Supports thoughts with explanations and evidence. Knows social rules for interacting with others. (I can be clear!)

Materials Needed	Seesaw Activities	Prepare
 Resource Slides Weather Observation Notebook Class Weather Calendar CBS 8 Weather website Weather Forecast Plan Option: Weather Forecast Cue Cards HOM #9 Self-Assessment 	 Real Weather Forecast Anchor Phenomenon Assessment: Jodi Kodesh Weather Forecast Reflection HOM #9 Self-Assessment 	 Determine a method for students to deliver their forecasts to the school community. See the <u>Final Product</u> document for more information. Print: <u>HOM #9: Thinking and Communicating with Clarity and Precision Self-Assessment</u> for each student or assign <u>HOM #9 Seesaw Activity</u>. Create a custom forecast background using this <u>template</u>

Stage	Teacher Does	Student Does
Lesson 17		
Launch/ Engage	Note: Prior to this lesson, you should determine if students will do the forecast individually, in partnerships, or groups. Decide the method for doing the forecast. Options may include: Announcing the forecast over the	
10-12 min.	intercom, a live forecast at a school assembly, a live forecast in classrooms, recording the forecast and sending a link to teachers, etc. See the Final Product document for more information.	
	DCI - ESS2.D. Weather and Climate	
	Hello, meteorologists. We all know that Jodi Kodesh asked us to help her by giving weather forecasts to our school community. She wants us to help prepare students at our school for the weather.	
	But did you know that kindergarteners all over the United States are helping their schools? A kindergartener in Nashville, Tennessee made a	Students watch <u>Kindergarten Weather Report</u> . (2 minutes)
	weather forecast that over 2 million people have now watched. Let's watch and see why we think so many people have watched his weather	
	forecast. Watch Kindergarten Weather Report.	Chudonto turn and talk to abore why they think as
	Turn and talk: Why do you think so many people have watched Carden's weather forecast?	Students turn and talk to share why they think so many people have watched Carden's weather forecast. (1 minute)
	Carden did a lot to make his forecast interesting! We will also want to make our forecasts interesting.	
	SEP3 - Planning and Carrying Out Investigations	
	Meteorologists, we have been collecting a lot of data about the weather in	Students observe and record their weather
	San Diego. This data helps us learn about the weather in San Diego and it helps us prepare for our weather forecasts. Invite students to take out their	observations in the <u>Weather Observation</u> <u>Notebook</u> . (5 minutes)
	Weather Observation Notebook to observe and record the weather.	The class meteorologist shares observations with
	Invite the next class meteorologist to report the weather to the class and to use intonation and expression like Carden did. <i>Thank you for reporting the</i>	the class. (1 minute)

	weather,!		
	Record weather and temperature on a class calendar.	Students share patterns they notice in the class weather calendar. (1 minute)	
	CCC1 - Patterns What patterns do you notice in our class weather calendar? Look at the class weather calendar and try to find as many patterns as possible.		
	Each day, we have been reporting the weather for our class. Now, we are going to plan our weather forecast that will help our entire school community. We will need to be able to tell everyone what the weather will be like tomorrow and how to prepare. How do you think we could find out what the weather will be like tomorrow? Turn and talk: How do you think we could find out what the weather will be like tomorrow? Revoice students' conversations to the class.	Students turn and talk to share how they think they can find out what the weather will be like tomorrow. (1 minute)	
Lesson 17 Explore/ Explain 20-30 min.	SEP8 - Obtaining, Evaluating, and Communicating Information Those are excellent ideas, scientists! Weather scientists use many tools and sources to determine the weather for the next day. Just like Jodi Kodesh uses many websites to help her determine the weather, we are going to use a website, too! This website comes from CBS News in San Diego.		
	Pull up the <u>CBS 8 Weather website</u> . Invite students to explore the website on their Chromebooks in partnerships and come back as a class to discuss what they noticed. Roam the room to record what students' are noticing. Take notes to share students' observations with the class.	Students explore the <u>CBS 8 Weather website</u> and share noticings. (3 minutes)	
	CCC1 - Patterns Call the students back to the carpet and focus their attention on the ten-day forecast. What patterns do you notice? How can we tell what the weather will be tomorrow?	Students observe the ten-day forecast and share patterns they notice as well as how they know what the weather will be tomorrow. (2 minutes)	
	Meteorologists, we are one step closer to reporting the weather, now that we know what the weather will be tomorrow. Now, we need to prepare what we will say and do. We want to use our Habit of Mind of thinking and	Students practice current San Diego weather forecasts. Students might complete the Weather Forecast Plan to prepare. (10 minutes)	

communicating with clarity as we plan. It's important that we communicate clearly in our forecasts so everyone can understand how to prepare for the weather.

ELD Language Target: Plan and deliver brief oral presentations.

Invite students to practice forecasting San Diego's weather using the information provided by the <u>CBS 8 Weather website</u>. You might want to use weather forecast cue cards like meteorologists on t.v. do. Review the <u>Weather Forecast Cue Cards</u>. Option: Invite students to prepare by completing the Weather Forecast Plan. Review the Weather Forecast Criteria.

Facilitator Questions

- How should students prepare for the weather?
- How are you making your weather forecast interesting?

Call students back to the carpet after they have had some time to practice their forecasts.

CAS - Theatre: Performing

Prepare students to perform their forecast using actor's tools: voice, body, and imagination. We want to make our forecasts interesting, just like Carden did in his forecast. Carden used his acting tools as he gave his forecast. He used his voice, body, and imagination to help deliver his forecast. We are going to do the same thing!

We are going to start by focusing on our voices. Have you ever noticed that sometimes we make words sound like what they mean? Our voices have power. We have control over our voices and we can use our voices to bring out meaning when we are talking.

Let's give it a try...

Say the word "cold" and make it sound like you are cold.

Say the word "hot" and make it sound like you are hot.

Possible Weather Forecast Script

- (Introduction) Good morning, we are reporting from ____.
- Today, the weather is ____.
- The temperature is ____.
- Be sure to ____. Don't forget to ____.
- We interrupt this report to bring you a special message from our sponsors.
- (Message from sponsor.)
- Tomorrow, the weather will be ____.
- Thank you for listening to our weather report. (Closing statement)

Students say cold and make it sound like they are cold. They may exhale air as they say cold as if to see their breath or shiver.

Students say hot and make it sound like they are hot. They may pant, exhale, fan themselves or wipe their forehead.

Now, say the word "freezing" and make it sound different than cold. You are more than cold, you are freezing. Say freezing and make it sound like you are freezing.

Model for students:

- Speak the word *breezy* and model using a soft voice that rises and falls in pitch. Model a gesture of floating arms and a soft, pleasant smile.
 Invite students to mimic.
- o Speak the word **stormy**. Use a strong, deeper voice and strong, arm gestures. Invite students to mimic.

*The voice will change in volume and/or pitch. (Example: *Breezy* would have an up and down pitch, soft voice. *Stormy* would have a louder and stronger, perhaps deeper voice.)

Invite students to stand so they can use their whole bodies to show the meaning of the words. Speak the words below to the group in a <u>neutral voice</u> (no inflection) and ask students to repeat them as a chorus with appropriate volume and pitch, and exaggerated facial expression and gestures that reflect the actual meaning of the word. Display the words from the Resource Slides as you say them.

Cold	Angry	Harsh
Hot	Нарру	Soft
Freezing	Mad	Choppy
Breezy	Glad	Smooth
Stormy	Sad	Wavy
Calm	Nervous	Quick
Shivering	Giggly	Vibrating
Soggy	Crying	Hard
Thirsty	Mean	Gentle

Students say freezing and make it sound like they are freezing. They may chatter their teeth.

Students mimic the teacher's voice and movements while saying breezy and stormy.

Students repeat the words after the teacher using the appropriate volume and pitch as well as gestures and facial expressions. (3 minutes)

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	Wow! You all are awesome at using the power of your voice! You are ready to deliver your weather forecasts! Guide students in performing their weather forecast. Weather forecasts for the school community may be done this day or over a period of weeks.				Students perform a weather forecast for the school community. Students can perform the forecast live or record the forecast using Flipgrid, the Real Weather Forecast Seesaw Activity, or Zoom.			
1 17	document	Assign Real Weather Forecast Seesaw Activity. See the Final Product for other options.						
Lesson 17 Reflect/ Evaluate 15 min.	After each	Thinking and Co	ment: tes their weather forecast, <u>mmunicating with Clarity a</u> <u>#9 Seesaw Activity</u> .		omplete a	Habit of Mind Self-Assessment: HOM #9: Thinking and Communicating with Clarity and Precision Self-Assessment. Students self-assess and draw a picture to support their reflection on the back. Students can also reflect		
	Anchor Phenomenon Assessment: Guide students in a reflective conversation around weather forecasting. Return to the anchor phenomenon: Jodi Kodesh Weather Forecast. Review students' original observations and questions about the anchor phenomenon. Return to their original responses on the Jodi Kodesh Weather Video Seesaw Activity. Invite students to share their current understanding of the anchor phenomenon using Jodi Kodesh Weather Forecast Reflection.			on their Chromebook using HOM #9 Seesaw Activity and record an explanation of their self-assessment. (5 minutes) Students share how their thinking about the anchor phenomenon has changed. (10 minutes) Expected Student Response • Jodi Kodesh shares what the weather is today and what it will be tomorrow to help people prepare for the weather. She uses tools like a radar and a satellite to help her determine the weather. • Meteorologists study weather and climate. • Meteorologists help people prepare for the weather.				
	Guided Reflection / Discussion Prompts What do you understand about the forecast video now? What do you know about meteorologists and what they do?							

The Wild About Weather project was designed by Lacy Szuwalski and Zoë Randall in collaboration with the Instructional Technology Team, the VAPA Team, the Math Team, and Meteorologist, Jodi Kodesh. Please join the Unit 2 Curriculum Discussion at https://forms.gle/gS5NGgT4iYvdPkCY6 to provide feedback on this lesson.