

TECHNOLOGY UNIT

3rd Grade Unit Study of Weather

Standards:

- **I used the following State Standards in my unit:**
CCSS.ELA-LITERACY.CCRA.W.3 - Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.
CCSS.ELA-LITERACY.CCRA.L.3 - Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.
CCSS.ELA-LITERACY.RL.3.1 - Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
CCSS.ELA-LITERACY.SL.3.1.B - Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
CCSS.ELA-LITERACY.SL.3.1.C - Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.
CCSS.ELA-LITERACY.SL.3.4 - Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.
- **I used the following ISTE NETS-T Standards in my unit:**
1c - Promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
2a - Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
2b - Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
3d - Model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning
4a - Advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
5b - b. Exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others

Pre Assessment:

- I used Google Drive to create a form to pre-assess students' knowledge of weather:
https://docs.google.com/forms/d/1PvQiS_5RXsvr2SNhl-Mor4oyJpg47tt4p34f1_M6VjM/edit?usp=sharing

- Most students had a basic concept of the definition of weather; however, students had difficulty defining key terms associated with weather.
- The average score for the pre-assessment was 48%.
- I used the data gathered from the pre-assessment to help design lessons for the weather unit.

Teaching Strategies:

I used the following technology tools in my unit:

- I used a Promethean SmartBoard to guide students to web sites, demonstrate presentations, and preview folders that I created in Google Drive with shared resources for students. Students worked in groups and used the document camera to display their group poster about their specific cloud type. Each student used their Samsung Chromebook to access and research websites, complete pre and post assessments forms in Google Drive, and worked in groups to create a Google presentation of a particular weather event.
- I tried the following new and innovative technology idea:
 - Jog the Web: an online tool that allows users to present a series of websites through a synchronous guide. This is a great resource for projects that require several websites to visit or for students in elementary that have difficulty getting to websites.
<http://www.jogtheweb.com/run/habq6dOnU7XR/Weather-Unit>
- The following is a list of resources I used while teaching my weather unit:
 - I shared a pre-assessment form with students through Google Drive:
https://docs.google.com/forms/d/1PvQiS_5RXsvr2SNhl-Mor4oyJpg47tt4p34f1_M6VjM/edit?usp=sharing
 - I shared my weather unit folder with students:
<https://drive.google.com/folderview?id=0B-F0KRUK0uvsLUIBWVRuVmZ2RTg&usp=sharing>
 - The students and I worked together simultaneously on a KWL chart about weather using Google Drive:
<https://docs.google.com/document/d/1uRlBONmUHzU-egBR1RJRmoipnyYRVzfhlgWCMhNTH4/edit?usp=sharing>
 - After an introductory question: What is precipitation? I used Google Drive to share and display The Water Cycle presentation for students.
https://docs.google.com/presentation/d/1mGvsYdf7yNk8Bnkz_rh9TS2gXn0gaHhNf_gd78PI3GA/edit?usp=sharing
 - I shared a video link about precipitation through the Clark County Public Library:
http://www.tumblebooks.com/library/asp/home_tumblebooks.asp
 - Students viewed a BrainPop video about clouds:
<http://www.brainpop.com/science/weather/clouds/preview.weml>
 - Students will post a note about their particular cloud type on a Linoit public canvas to emphasize distance learning:

<http://linoit.com/users/iowasciencegal/canvases/NGSS%20Weather%20%26%20Climate>

- Students used Web Weather for kids to research information for their group project: <http://eo.ucar.edu/webweather/cloud3.html>
- Students used Weather Wiz Kids website to research information for their group projects: <http://www.weatherwizkids.com/>
- Students used an encyclopedia resource for their research:
<http://www.infoplease.com/encyclopedia/weather/cloud-formation-clouds.html>
<http://www.infoplease.com/weather.html>
- Students viewed a BrainPop video about natural disasters:
<http://www.brainpop.com/science/earthsystem/naturaldisasters/preview.weml>
- Students used Creative Commons Image Search for noncommercial reuse with modification: <http://search.creativecommons.org/>
- Students used the Kids Crossing website to research the difference between climate and weather: <http://www.eo.ucar.edu/kids/green/what1.htm>
- Students viewed Scholastic Study Jams video to review:
<http://studyjams.scholastic.com/studyjams/jams/science/weather-and-climate/weather-and-climate.htm>
- I shared a post-assessment form with students through Google Drive:
https://docs.google.com/forms/d/1H3yNa_aGlcnlRno2JMKLISU-SEFenLaxA3rFcKqV2FY/edit?usp=sharing
- I incorporated the following to support the use of distance learning systems appropriate in a school environment:
 - I used a Linoit public canvas as a distance learning system. I used the Smart Board to display the public canvas, as a whole group, we posted a note about the 3 key ingredients needed to form a cloud. Each group then posted a note with their particular cloud definition. I explained to students that this is a creative way to connect with students in other countries with different cultures or languages.
<http://linoit.com/users/iowasciencegal/canvases/NGSS%20Weather%20%26%20Climate>

Classroom Management Strategies

Students are assigned seats in groups of six tables. Each student has a Chromebook with their own unique username and password. For this technology unit, students are expected to submit their work electronically through Google Drive and email.

Each student is expected to bring their Chromebook to class each day fully charged. If a student does not bring their Chromebook, or it is not fully charged, they will be required to move their clip down on the classroom behavior management chart. Students will also move their clip down if they use their Chromebook inappropriately, i.e. playing on a game website instead of following directions or carrying Chromebook with one hand. After moving their clip down once, students begin to miss five minutes of recess each time their clip is moved. If a student moves

their clip more than four times in one day, then a note or phone call will be made to parents. If a student moves their clip more than five times in one day, then the student will be referred to the principal.

If a student does not have access to their Chromebook, they may ask permission to use one of two desktop computers in the classroom. If students are working in groups, they may be allowed to share their Chromebook with another student in their group.

When students have issues or suspect damage to their Chromebook, they are required to log off, shut down, and reboot their computer. If they are still experiencing problems, they need to make their teacher aware. If the teacher is unable to resolve the issue, students will then submit their Chromebook to the technology coordinator for repair.

Unit:

Day 1

Objective:

Student will form predictions about how the water cycle works and affects the weather we experience. They will be able to explain how water moves through the water cycle

Vocabulary:

Evaporation: water changes from a liquid to a gas; occurs more rapidly at warmer temperatures.

Atmosphere: the gases the surround the earth.

Condensation: water changes from a gas to a liquid; occurs when water vapor gets cold.

Precipitation: water falling to the earth in the form of rain, hail, mist, sleet, or snow.

Accumulation: the water falls as precipitation comes together in bodies of water such as oceans, rivers, lakes, and streams, or underground.

Introduction:

Ask students what is weather? Explain to students that we will be studying several aspects of weather. Each student will remain at their desk and log into their Chromebook. Students will then take a pre-assessment about their knowledge of weather through a shared document in Google Drive:

https://docs.google.com/forms/d/1PvQiS_5RXsvr2SNhl-Mor4oyJpg47tt4p34f1_M6VjM/edit?usp=sharing

Activity:

After completing the pre-assessment, students will work as a whole group to describe their prior knowledge of weather. Teacher will display KWL chart on the Smart Board and students will simultaneously complete using Google forms:

<https://docs.google.com/document/d/1uRlbONmUHhU-egBR1RJrMoipnyYRVzfhlGwCMcHNTH4/edit?usp=sharing>

Once the K and W portions of the KWL chart have been completed, teacher will have students use their Chromebook to review the Jog the Web page created for this unit:

<http://www.jogtheweb.com/run/habq6dOnU7XR/Weather-Unit>

Teacher will ask students if they know what precipitation is. After several responses are provided, teacher will acknowledge or provide the correct definition of precipitation. Teacher will use the Smart Board to display a short video clip from the Clark County Library, Tumble Book titled *Precipitation*: http://www.tumblebooks.com/library/asp/home_tumblebooks.asp

Teacher will then use the Smart Board to present the Water Cycle presentation with students and explain how precipitation plays a role in the water cycle and how it affects the weather:

<https://docs.google.com/document/d/1uRlbONmUHzU-egBR1RJrMoipnyYRVzfhlgWCMchNTH4/edit?usp=sharing>

Day 2

Objective:

Student will be able to explain how precipitation plays an important role in weather. They will examine and explain various cloud formations.

Vocabulary:

Cirrus Clouds: the most common of the high clouds. They are composed of ice and are thin, wispy clouds blown in high winds into long streamers.

Cumulus Clouds: white, puffy clouds that look like pieces of floating cotton. Cumulus clouds are often called "fair-weather clouds"

Cirrocumulus Clouds: appear as small, rounded white puffs that appear in long rows.

Cumulonimbus Clouds: also known as thunderstorm clouds. High winds can flatten the top of the cloud into an anvil-like shape.

Stratus Clouds: uniform grayish clouds that often cover the entire sky.

Stratocumulus Clouds: low, puffy and gray. Most form in rows with blue sky visible in between them.

Introduction:

Students will use their Chromebook to access the Jog the Web page and follow the instructions for day 2: <http://www.jogtheweb.com/run/habq6dOnU7XR/Weather-Unit>

Ask students how clouds impact our lives? After several responses, ask students how clouds form? Teacher will then use the Smart Board to display a BrainPop video about clouds:

<http://www.brainpop.com/science/weatherandclimate/clouds/preview.weml>

Activity:

Students will work in their table groups to collaborate and create a poster about their randomly assigned cloud type. Each group will receive a Ziplock bag of supplies and construction paper to create their poster. Each poster should include: names of everyone in the group, definition of their cloud type, list the 3 ingredients to form a cloud, describe how clouds form, and facts about their particular cloud type. Students will use the following web sites for their research:

<http://www.weatherwizkids.com/weather-clouds.htm>

<http://eo.ucar.edu/webweather/cloudhome.html>

<http://www.superteacherideas.com/science9-weather.html>

Teacher will display a Linoit public canvas using the Smart Board. As a whole group, we will post a note about the 3 key ingredients needed to form a cloud. Each group will then post a note with their particular cloud definition. I will explain to students that this could be useful way to connect with students in other countries with different cultures.

<http://linoit.com/users/iowasciencegal/canvases/NGSS%20Weather%20%26%20Climate>

Day 3

Objective:

Student will be able to explain what a meteorologist does. Students will collaborate in groups and design a presentation to summarize a severe weather event.

Vocabulary:

Severe rain and floods: results from days of heavy rain and/or melting snows, when rivers rise and go over their banks.

Tornado: a violent rotating column of air extending from a thunderstorm to the ground.

Hurricane: a huge storm that can be up to 600 miles across. It has strong winds spiraling inward and upward at speeds of 75 to 200 mph.

Winter Storm: result from the clash of two air masses of different temperatures and moisture levels. Winter storms usually form when an air mass of cold, dry, air moves south and interacts with a warm, moist air mass moving north.

Thunderstorm: produced by a cumulonimbus cloud, usually producing gusty winds, heavy rain and sometimes hail.

Lightning: an electric current within a thundercloud. Produced by many small bits of ice (frozen raindrops) bumping into each other as they move around in the air.

Introduction:

Students will access the Jog the Web page and follow the instructions for day 3:

<http://www.jogtheweb.com/run/habq6dOnU7XR/Weather-Unit>

Each group will use the document camera to display their cloud poster.

After each group has presented, teacher will ask students what is a meteorologist? After several responses, ask students what severe weather is? Teacher will then use the Smart Board to display a BrainPop video about severe weather:

<http://www.brainpop.com/science/earthssystem/naturaldisasters/preview.weml>

Activity:

Students will work in their table groups to collaborate and create a digital presentation in Google Drive. Teacher will explain that each group will be assigned a severe weather event to research. Each presentation should include: title page with the assigned severe weather event and names of everyone in the group, definition of their severe weather, include 3 images of your weather event, include 4 important details about your weather event, and the last slide should include a works cited page for any books, images, and web sites used. Teacher sample presentation:

<https://docs.google.com/presentation/d/1yjjeBRatNR2pHF0I92z05MRUHHEVRXbyq0OmNmoIQUA/edit?usp=sharing>

Teacher will explain copyright laws related to images, web sites, videos, music, and other formats. Explain the importance of using web sites such as Creative Commons Search and creating a works cited page.

Students will use the following the web sites for their research:

<http://www.weatherwizkids.com/index.htm>

<http://search.creativecommons.org/>

<http://www.superteacherideas.com/science9-weather.html>

<http://www.infoplease.com/encyclopedia/weather/cloud-formation-clouds.html>

<http://www.infoplease.com/weather.html>

<http://www.jogtheweb.com/run/habq6dOnU7XR/Weather-Unit>

Day 4

Objective:

Students will collaborate in groups and design a presentation to summarize a severe weather event. Students will be able to tell the difference between weather and climate.

Vocabulary:

Weather: events that happen each day in our atmosphere. It relates to the day to day temperature, cloudiness, and precipitation.

Climate: the average weather in a particular place over many years.

Introduction:

Students will access the Jog the Web page and follow the instructions for day 4:

<http://www.jogtheweb.com/run/habq6dOnU7XR/Weather-Unit>

Students will continue to collaborate in their groups to complete their digital presentation of their assigned weather event.

Activity:

Students will continue to work in their table groups to collaborate and create a digital presentation in Google Drive. Teacher will review the requirements for the digital presentation including copyright information and works cited page.

When groups finish their presentation, they will meet with the teacher to review their slides for any comments or suggestions. After their conference with the teacher, students will follow the prompts on Jog the Web to read about the difference between weather and climate.

<http://www.eo.ucar.edu/kids/green/what1.htm>

Students will use their Chromebook and ear buds to view a BrainPop video about climate types:

<http://www.brainpop.com/science/weather/climatetypes/preview.weml>

Day 5

Objective:

Students will collaborate in groups to summarize and present their severe weather event. Students will evaluate and explain what they have learned during the weather unit. Students will exhibit good listening skills.

Vocabulary:

Review vocabulary for the entire unit.

Introduction:

Students will access the Jog the Web page and follow the instructions for day 5:

<http://www.jogtheweb.com/run/habq6dOnU7XR/Weather-Unit>

Each group will use the Smart Board to present their digital weather presentation. We will briefly review vocabulary for the unit. Following the presentations, teacher will display KWL chart on the Smart Board and students will simultaneously complete the L portion of the chart:

<https://docs.google.com/document/d/1uRlbONmUHZU-egBR1RJrMoipnyYRVzfhlGwCMcHNTH4/edit?usp=sharing>

Teacher will use the Smart Board to display a video to wrap up the unit:

<http://studyjams.scholastic.com/studyjams/jams/science/weather-and-climate/weather-and-climate.htm>

Students will use their Chromebook to complete the weather post assessment in Google Drive folder.

https://docs.google.com/forms/d/1H3yNa_aGlcnlRno2JMKLISU-SEFenLaxA3rFcKqV2FY/viewformSt

Student Inquiry and Research:

Students used the following technology to do research:

- Students used their Samsung Chromebook to research web sites, communicate and collaborate with peers to create posters and a presentation using Google Drive.
- Students were encouraged to work together to follow the requirements for their projects. If a student had a question they were instructed to try at least two times to figure the problem on their own. If they could not solve the problem on their own, they were instructed to ask a peer before asking the teacher. This helped students to grow more independent and encouraged them to solve problems on their own.
- Students were instructed on copyright laws for images, web sites, videos, music, and other formats. They were also instructed on how to properly cite material and the use of a works cited page at the end of their slide presentation.

List examples of technology resources that affirm diversity and address cultural and language differences such as websites that provide translations, introductory lessons and other resources which help in the educational technology instruction of students with diverse backgrounds.

- I used several video clips to introduce and explore topics for students with diverse learning styles. The videos also address language differences and allow students to listen in English, Spanish, and French.

The following adaptive/assistive hardware and software helped to assist students with special needs:

- Each student had a Samsung Chromebook to use in the classroom. Students were able to magnify their screen to enhance their view. Students also used headphones or ear buds to adjust the sound level to assist with hearing difficulties.
- One special needs student with a profound disability had difficulty during one lesson. The student was agitated and could not maintain self-control. The student's special needs teacher had to visit the classroom and offered the student a break from the classroom. The student eventually rejoined the classroom and his group collaboration after several minutes.

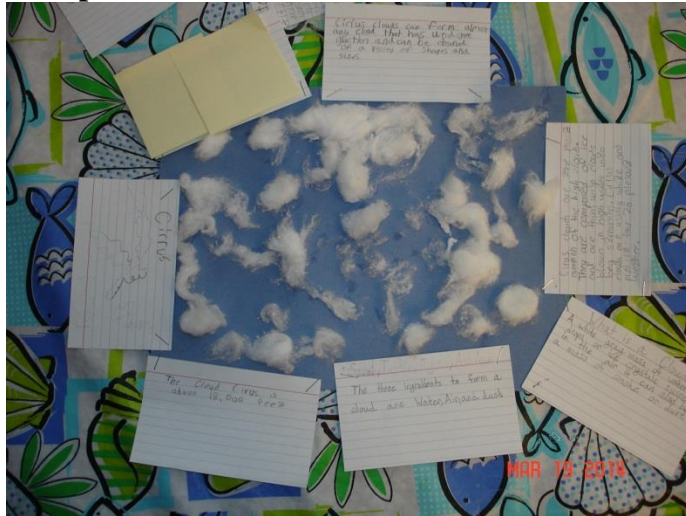
I included the following technology resources to affirm diversity and address cultural and language differences:

- I used several video clips to introduce and explore topics for students with diverse learning styles. The video websites also address language differences and allow students to listen in English, Spanish, and French.

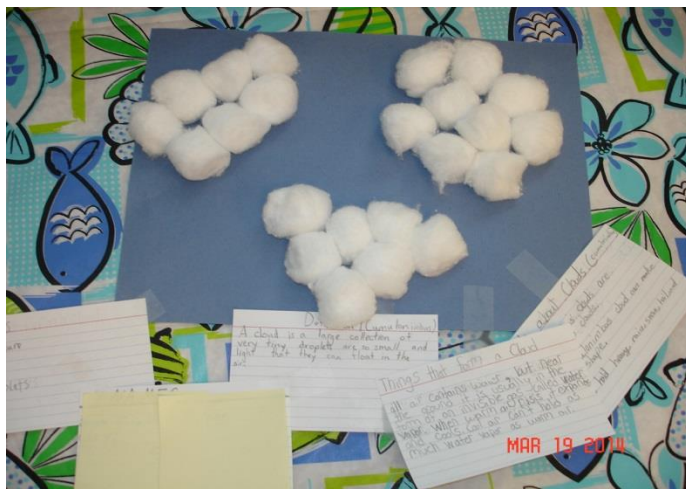
Post Assessment:

- The average score for the post-assessment was 74%.
- The average score for the group cloud poster was 100%.
- The average score for the presentation was 98%.
- Students increased their knowledge of weather and key terms associated with weather.
- Students demonstrated their understanding of Google Drive, sharing files, works cited page, and copyright laws. Students also increased their communication and collaboration skills while working in groups to create cloud posters as well as a Google presentation of a weather event.
- I used Google Drive to create a form to post-assess students' knowledge following the week-long unit study of weather:
https://docs.google.com/forms/d/1H3yNa_aGlcnlRno2JMKLISU-SEFenLaxA3rFcKqV2FY/edit?usp=sharing
- I used a scoring rubric to grade the Google slide presentations:
https://docs.google.com/document/d/1Z_UUASr16mfyi33vt4tY8qHAJeRkFEiFyu_fEvjxTA4/edit?usp=sharing

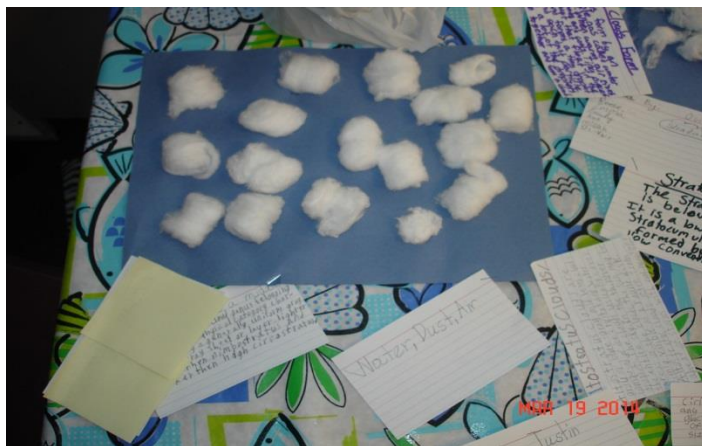
Group Posters:



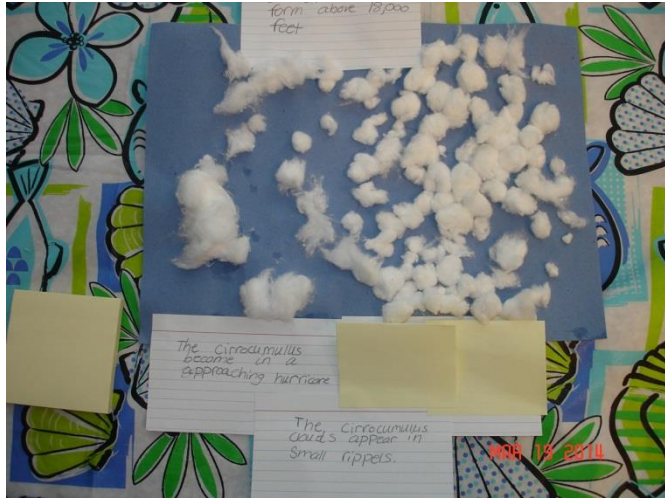
Group 1



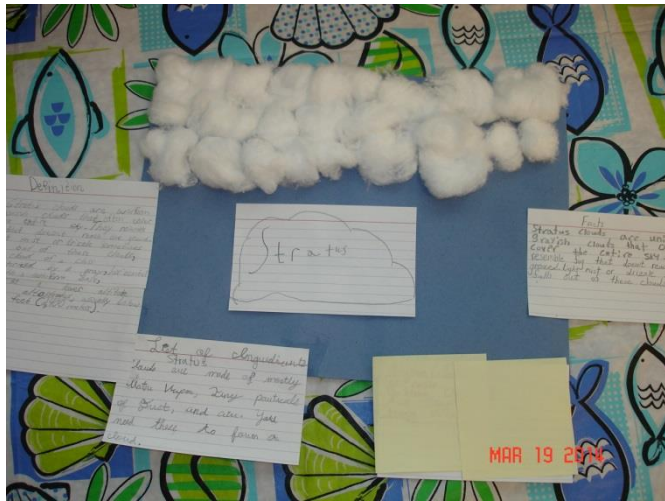
Group 2



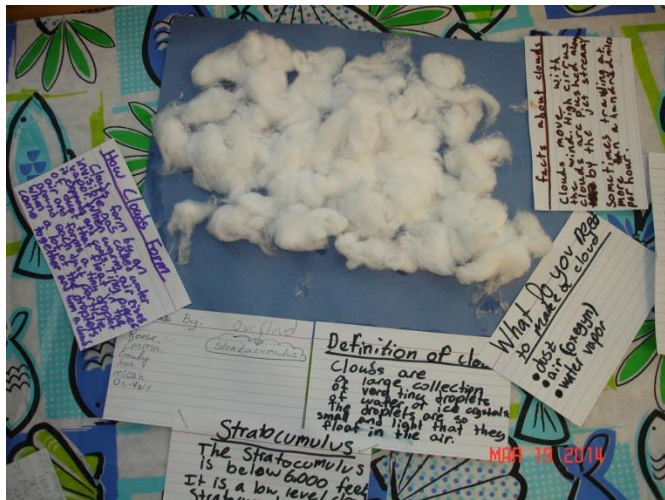
Group 3



Group 4



Group 5



Group 6

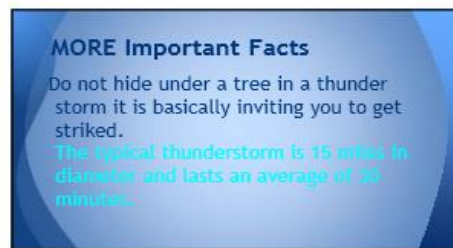
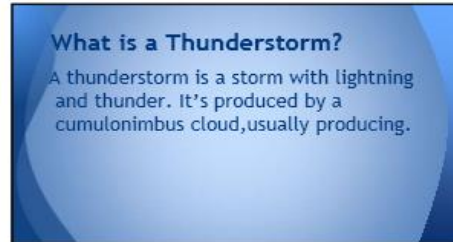
Name: _____

Poster Rubric

	Poor: 1 point	Fair: 2 points	Very Good: 3 points	Excellent: 4 points	Total
Topic/Content	Content is inaccurate and information is difficult to follow.	Content is questionable. Information is not presented in a logical order, making it difficult to follow.	Content is accurate but some required information is missing and/or not presented in a logical order, but is still generally easy to follow.	Content is accurate and all required information is presented in a logical order.	
Mechanics	Many spelling and or grammar errors. Text is copied.	Some spelling errors. Some grammar errors. Text is in authors' own words.	Few spelling errors. Few grammar errors. Text is in authors' own words.	No spelling errors. No grammar errors. Text is in authors' own words.	
Cooperative Group Work	Cannot work with others in most situations. Cannot share decisions or responsibilities.	Works with others but has difficulty sharing decisions and responsibilities.	Works well with others. Takes part in most decisions and contributes fair share to group.	Works well with others. Assumes a clear role and related responsibilities. Motivates others to do their best.	
Oral Presentations Skills	Great difficulty communicating ideas. Poor voice projection, little preparation or incomplete work.	Some difficulty communicating ideas due to voice projection, lack of preparation, or incomplete work.	Communicates ideas with proper voice preparation. Adequate preparation and delivery.	Communicates ideas with enthusiasm, proper voice projection, appropriate language and clear delivery.	
Comments					

Group Presentations:

4/15/2014



4/15/2014



**SOME RANDOM THUNDERSTORM
FACTS**

Some American Indians believe that the sacred thunderbird made thunder by enormous wings, and that lightning flashed its beak.

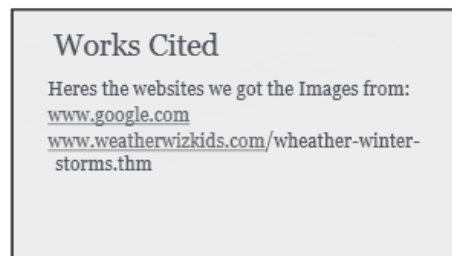
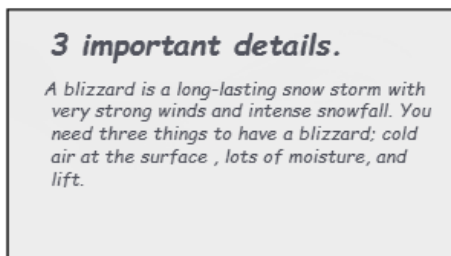
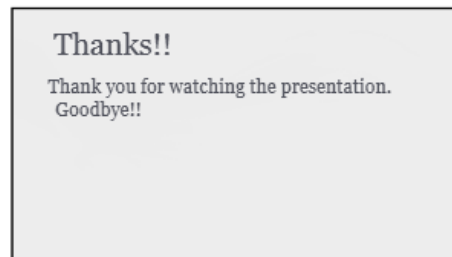
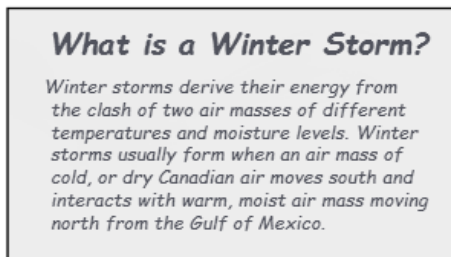
Works cited

Weather by John Farndon published in unknown. The Big Storm by Bruce Hiscock published in 1920. Rain, Wind, and Storm by Nicola Baxter published in 1998.

Works Cited

Creative Commons images and Weather Wiz kids, also google images.

4/15/2014



4/15/2014

Tornadoes

By: S, L, D, and M

Facts about tornadoes

Cold air from hot air come in to make a twister.
Tornadoes can occur at any time of the year.
No terrain is safe from tornadoes.
2% of tornadoes are labeled and can last over an hour.

Tornadoes

A tornado is a violently rotating column of air that is in contact with both the surface of the earth and a cumulonimbus cloud or, in rare cases, the base of a cumulus cloud.



Fact's about how to keep your self safe for tornadoes

When a tornado is happening you need to go to a basement or to a bathroom that does not have any windows and get in the bathtub.



Works Cited

www.jogtheweb.com
www.weatherwizkids.com
www.creativecommons.org

4/4/2014

Severe Rain and Floods

By: L, A, G, N, and C

Definition of Flood

A flood results from days of heavy rain and/or melting snows, when rivers rise and go over their banks.

Facts about Floods

Floods could be dangerous.
You are most likely to die in a flood.
You could drown in a flood.



Works Cited

www.weatherwizkids.com/weather-rain
s0.geograph.org.uk/photos/66/55/665543_eb7ba85d
pg
search.creativecommons.org

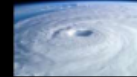
4/4/2014

Hurricanes

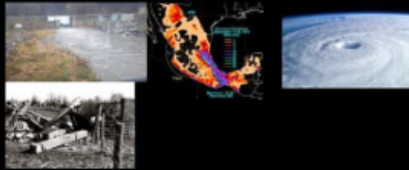
A, B, G, C, and J

Hurricanes

Hurricanes are very dangerous and scary.
Hurricanes are very big too.
Hurricanes can reach the wind speed of 600 miles per hour.



Hurricanes Picture



Hurricanes Facts

Hurricanes only form over really warm ocean of 80 f or warmer.
The atmosphere air must cool off quickly the higher you go.

Hurricanes

Bye
Thank you for watching!!!!!!!!!!

Work Cited

www.weatherwizkids.com/weather-hurricane.htm
search.creativecommons.org

4/4/2014



Name: _____

Multimedia Project Rubric

	Poor: 1 point	Fair: 2 points	Very Good: 3 points	Excellent: 4 points	Total
Topic/Content	Includes little essential information and one or two facts.	Includes some essential information with few citations and few facts.	Includes essential information with most sources cited. Includes enough elaboration to give readers an understanding of the topic.	Covers topic completely and in-depth. Includes properly cited sources and complete information. Encourages readers to know more.	
Technical Requirements	Includes 2 slides or less, no graphics from outside sources. No title page or works cited page.	Includes 3 slides or less, with 1 graphic from outside sources. Includes either a title page or works cited page.	Includes at least 4 slides, at least 2 graphics from outside sources. Includes a title page and works cited page with some errors.	Includes at least 5 slides, 3 or more graphics from outside sources. Includes a title page and works cited page with no errors.	
Mechanics	Includes more than 6 grammatical errors, misspellings, punctuation errors, etc.	Includes 3-4 grammatical errors, misspellings, punctuation errors, etc.	Includes 2-3 grammatical errors, misspellings, punctuation errors, etc.	Grammar, spelling, punctuation, and capitalization are correct. No errors in the text.	
Cooperative Group Work	Cannot work with others in most situations. Cannot share decisions or responsibilities.	Works with others but has difficulty sharing decisions and responsibilities.	Works well with others. Takes part in most decisions and contributes fair share to group.	Works well with others. Assumes a clear role and related responsibilities. Motivates others to do their best.	
Oral Presentations Skills	Great difficulty communicating ideas. Poor voice projection, little preparation or incomplete work.	Some difficulty communicating ideas due to voice projection, lack of preparation, or incomplete work.	Communicates ideas with proper voice preparation. Adequate preparation and delivery.	Communicates ideas with enthusiasm, proper voice projection, appropriate language and clear delivery.	
Comments					

Gradebook:

Technology/Weather Unit						
(not included in letter grade)						
Scoring Results						
Student	Pre Assessment	Poster	Presentation	Post Assessment	Student Average	Letter Grade
A.D.	60.00%	100.00%	100.00%	80.00%	93.33%	A
A.S.	50.00%	100.00%	100.00%	80.00%	93.33%	A
A. T.	60.00%	100.00%	100.00%	75.00%	91.67%	A-
B.C.	50.00%	100.00%	100.00%	80.00%	93.33%	A
B.S.	60.00%	100.00%	100.00%	50.00%	83.33%	B
C.V.	70.00%	100.00%	100.00%	50.00%	83.33%	B
C.P.	50.00%	100.00%	100.00%	60.00%	86.67%	B
D.B.	30.00%	100.00%	95.00%	60.00%	85.00%	B
E.M.	40.00%	100.00%	100.00%	80.00%	93.33%	A
E.S.	60.00%	100.00%	100.00%	85.00%	95.00%	A
G.G.	30.00%	100.00%	100.00%	70.00%	90.00%	A-
G.S.	30.00%	100.00%	100.00%	60.00%	86.67%	B
J.K.	40.00%	100.00%	100.00%	90.00%	96.67%	A
J.S.	50.00%	90.00%	90.00%	80.00%	86.67%	B
J.H.	40.00%	100.00%	95.00%	80.00%	91.67%	A-
L.M.	40.00%	100.00%	100.00%	80.00%	93.33%	A
L.H.	50.00%	100.00%	95.00%	70.00%	88.33%	B+
M.B.	30.00%	100.00%	95.00%	60.00%	85.00%	B
M.D.	30.00%	100.00%	100.00%	80.00%	93.33%	A
N.R.	0.00%	100.00%	100.00%	60.00%	86.67%	B
O.P.	50.00%	100.00%	100.00%	80.00%	93.33%	A
P.C.	40.00%	100.00%	100.00%	90.00%	96.67%	A
R.P.	50.00%	100.00%	100.00%	90.00%	96.67%	A
R.S.	70.00%	100.00%	95.00%	90.00%	95.00%	A
S.La.	50.00%	100.00%	95.00%	70.00%	88.33%	B+
S.Lo.	50.00%	90.00%	95.00%	80.00%	88.33%	B+
S.W.	50.00%	90.00%	100.00%	70.00%	86.67%	B
Class Average	46.00%	100.00%	98.00%	74.07%	90.69%	

Data Analysis:

At the end of the unit, the average score from the pre-assessment to post-assessment increased by 26%. The post-assessment revealed students had increased their knowledge of weather vocabulary and understanding of weather functions such as cloud formation and severe weather events. Students also increased their understanding of research, copyright laws, plagiarism and the use of a works cited page. Students were eager to use technology and work in groups to communicate and collaborate for their group presentations.

If I were to teach this unit again, I would allow more time for student's to research and collaborate on the Google slide presentation. Due to time constraints, some students were rushed to present without having sufficient time to conference with me.

Video of Lesson:

Due to my schools privacy policy, I am not able to load my teaching videos to my public Weebly page. However, the following are links to my videos through my private IU Box:

- Video #1 <https://iu.box.com/s/fyfcfsjh6uzcgju01008>
- Video #2 <https://iu.box.com/s/dm8u5l6mkpgb6i7o88ri>
- Video #3 <https://iu.box.com/s/aedbj3yzls0tmqhljlfj>

If you do not have permission and would like to view these videos, please feel free to email me at sansajon@gmail.com and I will add you as a collaborator in my IU Box.