



Clouds of Changing Times

Grade Levels: 2-4

Objective: To learn about the history of rainfall, snowfall, ice melt, and seasons in the area by conducting interviews with family and local elders.

Materials:

- One piece of poster board or butcher paper (approximately 2ft. x 3 ft.) in a color other than white
- Glue and/or tape
- Markers, crayons, colored pencils
- 8 ½” x 11” plain white paper (about 5 sheets)
- 11” x 14” plain white paper (1 sheet)
- Scissors
- Cotton balls, glitter (optional)
- Paper and pencil to record interviews

Important Points to Understand:

- Some of the best evidence for climate change is changes in seasons and seasonal patterns. These can be changes in duration, severity, snow/rainfall, sunshine, or temperature.
- The best resources to get information from are family members and local elders that have been witness and subject to these changes. Traditional ways of life are dependent on the consistency of these factors.
- Many lifestyle changes have been made in response to these climate changes.

Procedure:

- 1.) Interview family members such as grandparents, aunts, uncles, and even parents about climate changes that they have experienced. If you don't have as many family resources as you'd like, interview a community elder or two. Try and get a total of five interviews.

- 2.) Some topics you might like to ask about are the histories of rainfall, snowfall, land and sea ice melt, average temperatures, seasonal durations, and abundance or lack of animals and plants (berries).
- 3.) Collect pictures or draw pictures of the different people that you interviewed.
- 4.) Make some snowflakes
 - a. Fold a smaller piece of white paper in half. Draw a semi-circle with the straight edge of the semi-circle being the folded edge of the paper.
 - b. Cut along the line, unfold and you have (or should have) a perfect circle!
 - c. Fold the paper in to a semi-circle again, and then fold it again so you have a quarter circle. If you want, you can fold it again...what fraction of a circle will you have now?
 - d. Cut semi-circles, triangles, slits and other shapes out of the edges. Be sure to leave part of every edge in tact (un-cut) or you might slice your snowflake in half!
 - e. Unfold the paper – you should have a beautiful snowflake!
 - f. You can make different sizes of snowflakes by starting with different sizes of semi-circles.
- 5.) Using the large piece of white paper, make a cloud and glue it to the top of your poster board/butcher paper. Feel free to jazz it up with cotton balls, glitter, etc.
- 6.) Under the cloud, attach the different snowflakes that you made, leaving a bit of space between them.
- 7.) Glue or tape the picture that you collected or drew of your interviewees to the different snowflakes.
- 8.) Next to the picture, write a brief summary of the interview from that person.
- 9.) Take turns presenting your cloud to the class. Give an oral summary of each interview making sure to point out which interviewee you are talking about. Be sure to ask if there are any questions!

**You now have a cloud that presents a historical view
of the changing climate in your region!**

North Slope Borough School District Standards

http://www.nsbds.org/district/nsbds_standards.cfm

Second Grade

Language Arts

- 2C – Be able to conduct research (locate, observe and gather, analyze, conclude).
- 5A – Print correctly and neatly so that others are able to read it. W1.1.1a
- 5H – Use a variety of simple and complex sentences in written work. W1 .1.3
- 6 – Be able to discuss and give a brief speech using description and stating facts and opinions about one thing or idea.
 - a. Keep feet still, enunciate clearly, and speak with correct volume for both small and large groups.
 - b. Tell the main idea and show something to make the idea clearer.
- 7C – Listen for main ideas, to recall sequences and important details.
- 7D – Ask appropriate questions.
- 7E – Read and follow multi-step directions to perform procedures and complete tasks.
RI .2.3

Social Science

- 2 – Be able to apply social studies knowledge and skills to a variety of purposes.
 - a. Be able to conduct and present research (locate and organize information, write, and present).
 - b. Be able to relate social studies to self.
 - view life from other perspectives and others' point of view;
 - explain the effects important inventions, events, people, and moments have on self;
 - c. Possess technical skills:
 - listen/read/write/present: instructions, chart, thank you letter, letter of request, proposal, report, summary;
 - technology: word processing, Internet, AV production.

Science

- 7B – Know ways that weather can be harmful.
- 7C – Know how weather affects plants, animals, and people.

Art

- 1C – Be able to make shapes in the same size and smaller or larger.
- 3B – Be able to plan the art before you do it.

Computer (Applicable if summary is typed, not handwritten.)

- 1A – Know and be able to use a basic keyboard. [Primary]
- 1B – Know and be able to use a computer keyboard (enter, esc, alt). [Primary]

Third Grade Language Arts

- 2C - Be able to conduct research (locate, observe and gather, analyze, conclude).
- 5A - Print and use cursive writing correctly and neatly so that others can read it. (Applicable if summary is handwritten, not typed.)
- 5E - Clearly communicate a main idea, proper details, and a correct sequence.
- 5G - Write clear, correct, organized, and brief summaries.
- 6 - Be able to organize thoughts before speaking or discussing, use visual supports, and speak in complete sentences.
 - a. Stand straight, face group, keep feet still, make eye contact, enunciate clearly, and speak with proper volume.
 - b. Organize thoughts before speaking.
 - c. Use complete sentences to explain the main idea and fully explain it with a prepared sequence.
 - d. Add good ideas in small and large group discussions in turn.
 - e. Answer questions briefly and clearly.
 - f. Speak in complete sentences.
- 7D - Summarize verbally and in writing descriptions, stories, and informational presentations.
- 7E - Follow multi-step directions to perform procedures and complete tasks. RI .2.3

Social Science

- 2A - Be able to conduct and present research (locate and organize information, write, support, and present).
- 2B - Be able to relate social studies to self:
 - view life from other perspectives and others' point of view;
 - understand key forces (inventions, discoveries, people, events, moments) which have shaped our world;
 - explain the causes and effects key forces have on self, the present, the future;
- 2C - Possess technical skills:
 - read/write/present: instructions, chart, thank you letter, letter of request, letter of response, proposal, research report, summary;
 - technology: word processing, database, Internet, AV production.
- 7D - Know what is important to a community (pride and culture).

Art

- 2D - Be able to create examples of balance, imbalance, and unity in your art and in designing objects and decorating.
- 3B - Be able to plan the art before you do it.

Computer (Applicable if summary is typed, not handwritten.)

- 1A - Know and be able to use a basic keyboard. [Primary]
- 2B - Know and be able to use a computer keyboard (enter, esc, alt). [Primary]

Fourth Grade

Language Arts

- 2C - Be able to conduct research (locate, observe and gather, analyze, conclude).
- 2D - Possess technical skills:
 - read, write and present: instructions, table, chart, thank you letter, letter of request, letter of response, inquiry, proposal, lab report, checklist, research report, summary;
 - technology: word processing, database, Internet, AV production.
- 5B - Fully explain the main idea with a logical sequence of ideas and details.
- 5D - Write clear, correct, organized, and brief one paragraph summaries, descriptions, and narratives.
- 6B - Use correct voice (volume, pace, clarity) and body language (eye contact, erect and still stance, gestures, handling of notes and visual aids).
- 6F - Give an oral report (book report, current event, hobby talk, and demonstration).
- 7A - Demonstrate the social skills of audience behavior (eye contact, quiet and still, attentive, responsive).

Social Science

- 2 - Be able to apply social studies knowledge and skills to a variety of purposes.
 - a. Be able to conduct and present research (locate and organize information, write, support, and present).
 - b. Be able to relate social studies to self:
 - view life from other perspectives and others' point of view;
 - understand key forces (inventions, discoveries, people, events, moments) which have shaped our world
 - explain the causes and effects key forces have on self, the present, the future;
 - c. Possess technical skills:
 - read/write/present: instructions, table, chart, thank you letter, letter of request, letter of response, inquiry,
 - proposal, lab report, checklist, research report, summary;
 - technology: word processing, database, Internet, AV production.
- 4B - Possess a logical sense of what life was like when key influences occurred.
- 4C - Know causes and effects of key influences.
- 7 - Understand how living in a geographical region affects how people live.
 - a. Know how climate affects the way people live.
 - b. Know how regional situations affect the way people live.
 - c. Know how the availability of natural resources affect the way people live.
 - d. Know how people and the environment interact.

Science

- 2B - Be able to conduct research (field research, library research, experimentation).
- 2E - Possess technical skills:
 - read/write/present: instructions, table, chart, thank you letter, letter of request, letter of response, inquiry, proposal, lab report, research report, summary;
 - technology: word processing, database, Internet, AV production.
- 5A - Know how regional situations affect weather.
- 6F - Know how humans change the earth's surface.

Art

- 3B - Be able to preplan the work.

Computer (Applicable if summary is typed, not handwritten.)

- 1A - Know and be able to use a basic keyboard. [Primary]
- 1B - Know and be able to use a computer keyboard (enter, esc, alt). [Primary]
- 3 - Be able to use a word processing program. [Fourth-Sixth Grade]
 - a. Be able to write and edit documents.
 - b. Be able to load and save documents.
 - c. Be able to print.
 - d. Be able to use graphics and fonts (print shops, logowriter, writing center).