

# Seasons - Always Changing

## Grade Cluster - K-2

### NETS-S- 5 - Digital Citizenship

#### Quick Look:

Students realize that the seasons are not the same all over the world. They work in groups to study a country and its seasons, and learn the relationship between weather and seasons. They will produce a Travel Fair to share their information with friends and family.

#### Scenario:

A student in Mrs. T's second grade class, Gregory, proudly announces to his class that he is going to New Zealand over the holiday break and it is going to be summer there. "How can it could be summer in December in New Zealand? Where IS New Zealand???" the rest of the class asks. Mrs. T. goes over to the computer and brings up [Google Earth](#). She puts New Zealand into the search and the students watch as they virtually fly to New Zealand. "This is where you are now and this is where Gregory is traveling," Mrs. T. shares, "Do you think the seasons are the same everywhere?" Students start asking more questions about the seasons, so Mrs. T. decides this is a good lead into her unit on the seasons and weather. She will have the students research the different seasons found in different parts of the world and compile a brochure about them.

She asks her students, "What are the four seasons here in Vermont?" The [interactive whiteboard](#) is divided into four sections, and as the students identify each season, she writes it in one of the sections. She then has students come up and draw something that represents each of the seasons. After students finish their drawing, she asks them to think about each season and identify something that reminds them of that season. Students excitedly share their thoughts and she writes these words and phrases in the corresponding sections as well. Soon they are discussing the weather, animals, and plants related to each of the seasons found in Vermont. She reminds the class about their initial question. "Do you think the seasons are the same all over the world?" A tweet is sent out on [Twitter](#) asking teachers from around the world to send information about the seasons found in their geographic location of the world.(6b) They also send out a tweet asking for the current weather and they record this with location, temperature, and type of weather (snow, rain, sunny, cloudy, etc.). Since this is the first time that the class has asked for information from other schools, and Mrs. T. discusses with the children the importance of being respectful and safe when using these online tools. (5a, 5b)

Students soon decide that they want to explore two distinct parts to this project. The first part focuses on learning more about weather, and then recording the local weather and collaborating with another school to learn more about their weather. The second part involves researching a different country and the seasons found there, and then learning

more about the specific characteristics of those seasons. Students wonder if weather and seasons connect in some way.

As part of their long-term project, students observe and record the local weather outside their school each week. Students take the temperature outdoors and measure the amount of precipitation with a rain or snow gauge. Whenever possible, students use a windssock or anemometer to measure the amount of wind that whistles by. Students record this information into a collaborative form that is shared with other schools. Students decide that they want to participate in the [seasonal recording project](#) that involves numerous schools around the world. Schools submit their weather information from their area of the world and then the data is available for all the participants to use. (5b)

As the seasons change, students look at the data and make inferences about the weather. “How does the weather change throughout the year? What patterns do you see?” They collaborate with another school in the world to compare the seasons in their country. They look for a school to work with, using an online collaborative website. Students develop a list of questions to ask their cooperating school. Both schools commit to sharing, long-term information about their respective weather changes. Knowing that a picture is worth a thousand words, the schools share photos illustrating their weather and seasons taken at different times of the year, to compare. Mrs. T. uses this opportunity to remind her children about the importance of the appropriate use of technology by not sharing personal information with others on the computers. (5a)

Mrs. T. decides now is a good time to have students start studying multiple other countries and the seasons of those countries. Students work in groups of three and choose from a list of countries that represent a variety of regions of the world. They find out when the seasons occur in that country and the characteristics of each season. Students use kid-friendly websites to research their country. This is one of the first times that students have used the Internet to do research so Mrs. T. uses this opportunity to discuss how to do [safe searches](#), and what to do if they have something show up on their monitor that is inappropriate. The reading level is at a higher level than they can read so [ReadPlease](#) is available for students to listen to the information on the website. (6b) (5a) Mrs. T. also collects travel guides and brochures from a local travel agency, as another way for students to gather information about their country. Using their sources, students find average temperatures for each season, types of precipitation that characterize the seasons, as well as fun activities or festivals that occur during each season. Students collect this information in a simplified word-processing program such as [Abiword](#). Using a simple brochure template made by the teacher, students input their travel information. (6b) Students then present the information that they have obtained at a Travel Fair. Students also work as a class to present this information in a [Voice Thread](#) document that can be viewed by their families.

Parents and community members are invited in to see what the students have learned about weather and seasons around the world at the Travel Fair. Students proudly have their brochures available for parents to see, to show them the experts that they have become!

**Student Standards** – The following NETS-S are noted in the Scenario:

5. Digital Citizenship – A,B
6. Technology Operations and Concepts – A, B

**Teacher Standards** – Teachers who teach this unit address the following NETS-T:

1. Facilitate and Inspire Student Learning and Creativity- A, B, C
2. Design and Develop Digital-Age Learning Experiences and Assessments- A, B, C
3. Model Digital-Age Work and Learning – A, B, C
4. Promote and Model Digital Citizenship and Responsibility – B, C,
5. Engage in Professional Growth and Leadership

## **Content Grade Expectations**

The scenario writer has identified the following content grade expectations that s/he felt might be assessed in this scenario. In most of these scenarios, there may well be opportunities to assess other or additional content grade expectations across a variety of disciplines. If you are interested in developing a unit or lessons based on the following scenario, and you don't see any grade expectations in your content area, we encourage you to capture the ideas presented in the scenario and make it your own by adding components that address the grade expectations you are most interested in assessing.

### **S 1-2: 2 - Students demonstrate their understanding of PREDICTING AND HYPOTHESIZING by...**

- Predicting a logical outcome to a situation, using prior knowledge, experience and/or evidence.
- Explaining reasons for that prediction.

### **S 1-2:6 -Students demonstrate their ability to ANALYZE DATA by...**

- Sorting and classifying objects based upon observations, prior knowledge, or experience and justifying groupings.
- Identifying and describing the pattern in diagrams and charts (e.g., model, bar graph, pictograph, diagram or chart).

### **S1-2:7 -Students demonstrate their ability to EXPLAIN DATA by...**

- Developing a reasonable explanation based upon observations (e.g., I found out.).

### **S1-2:48-Students demonstrate their understanding of Processes and Change over Time within Earth Systems by...**

- Observing and recording weather data through the seasons and identifying and drawing conclusions based on the patterns in the data collected.

### **Standard 1.8: Reports**

### **Standard 1.19: Research**

### **Informational Writing: Reports**

- Using a given organizational structure (e.g., template, frame, graphic organizer)