

## Details



**Completion Time:** Varies

**Permission:** Download, Share, and Remix

# The Five Themes of the Geography of Antarctica

## Overview

We go places, but what do we do with the billions of snippets of information we absorb? How do we process the information so that it means something to us when we can no longer be there? As a geographer, my objective was to be able to observe, participate and categorize the billions of pieces of visual information of my adventure which defined my time in Antarctica. "Never stop exploring, for once you stop exploring here, you need to return home and know that place for the first time." - T.S. Elliot

## Objectives

After reviewing the pictures from the PolarTREC expeditions (see links below) to Antarctica, students develop a photo essay illustrating the Five Themes of Geography as they relate to the Antarctic region. Students will explain how the images selected accurately portray the theme. The photo galleries of the PolarTREC teachers include a variety of maps that can be incorporated to help identify the location of each theme portrayed.

## Lesson Preparation

Integrated teaching practices provide the opportunities to develop critical thinking, vocabulary enhancement and creative application of content to student-based learning activities. Expository writing is one method to foster creative expression while utilizing the appropriate topical vocabulary however, it is not the only way to make the geography of a place come alive and have a meaningful purpose to a student. Geographic curriculum is brought to life through vivid descriptions of places, regions, and interactions between peoples, ideas and the environment at different levels of scale through a spatial context over time. Ultimately, we aim to foster a contact between our students and the material they are learning about so that they develop a connection between their actions and/or inactions and thus be-

## Materials

- Computer with power point or Photo Story.

come advocates for sustainable preservation and conservation of the world around them.

In 1984, the National Council for Geographic Education and the Association of American Geographers developed the Five Themes of Geography in an effort to make the world a more manageable unit of study. The themes of location, place, human-environment interaction, region and movement help to categorize the human and physical world into manageable units of study at varying levels of scale in a spatial pattern. These themes are:

**Geography Theme #1: Location – Addresses:** “Where are we?” Location is Relative or Absolute. A relative location is described by direction to the location, its place in time, adjacent landmarks, and distance from one place to another and may associate places with each other. An absolute location refers to a specific point on the Earth’s surface indicated by latitude and longitude coordinates or by a street address.

**Geography Theme #2: Place – Addresses:** “What kind of place is it?” May be described by both physical and human characteristics. The physical characteristics of a place include topography, geology, climate and weather patterns, and natural features on the landscape. The human characteristics of a place include man-made features such as towns and cities, farm and agricultural land, roads and railroads, buildings, infrastructure, architecture, cultural habits, and more. Different people form different perceptions of place based on their own experiences and knowledge. This reveals their attitude, values and perceptions of a place.

**Geography Theme #3: Human-Environment Interaction – Addresses:** “How humans and the environment affect one another?” This theme asks how humans adapt to the environment, how humans modify the environment, and how humans depend on the environment. The consequences, both positive and negative of human environment interaction are also evaluated. For example, what are all the outcomes of damming a river? A reservoir for human use and water consumption is created, but the landscape has also been altered.

**Geography Theme #4: Movement - Addresses:** “How does the movement of people, goods, and ideas progress at different levels of scale.” People interact with one another, exchange goods and services, and exchange ideas. These movements have all played formative and major roles in shaping our world over time. They are particularly important in our current era of globalization, with an ever increasing politically, culturally, and economically globalizing world.

**Geography Theme #5: Regions – Addresses:** “ How to categorize or classify the world into more manageable units of study.” The use of formal, functional, or vernacular regions defines these units of study. Formal regions are defined by administrative and governmental boundaries, such as specific sovereign countries. Physical regions also fall under this category. A functional region is defined by its specific function (such as a television network’s market coverage area). A vernacular region is a perceived region, loosely defined by the perceptions held by people.

### Procedure

1. Review and read through the photo galleries of the 2007 PolarTREC teachers to Antarctica.
2. Design a power point slide set of no more than 10 slides. Photo Story can be used instead of Power Point. Select backgrounds, colors, fonts, and plan the details of what you want to portray for each region.
3. Cut and paste/ copy the photos from the photo galleries into your slides, reducing, cropping, editing as needed to portray the theme addressed. You should use many more than 10 pictures. Multiple pictures should be used to represent a theme.
4. Use textboxes to annotate how each picture reflects the theme.
5. Use textboxes with each picture to give credit to the polar researcher's picture
6. Present your presentation to the class explaining how you saw the theme illustrated by each picture and by each polar researcher.

### Extension

1. Written application: Ask students to apply the Five Themes of Geography to their world around them. Asking them to explain where and how they see the themes in their daily lives.
2. Photo essay: Ask students to create another photo essay illustrating the Five Themes of their World similar to what the PolarTREC teachers photographed.

### Resources

References or for more information:

<http://www.nationalgeographic.com/resources/ngo/education/themes.html>

<http://www.polartrec.com/gallery/2007/>

<http://www.polartrec.com/human-impacts-in-antarctica>

<http://www.polartrec.com/gallery/2007/antarctic-undersea-rov>

<http://www.polartrec.com/gallery/2007/oden-antarctic-expedition-07>

### Assessment

A traditional evaluation method is not the best measurement of a student's understanding and application of the Five Themes of Geography based on this learning activity. As an integrated exercise asking students to apply what field researchers were seeing and evaluating through these images requires a degree of interpretation and application of a conceptual topic. The teacher should give credit to a student for following the methodology and the understanding of each theme through the explanation provided.

### Credits

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**National Science Education Standards (NSES):**

**Content Standards, Grades 5-8**

Content Standard A: Science As Inquiry

- a. Abilities necessary to do scientific inquiry
- b. Understandings about scientific inquiry

Content Standard C: Life Science

- a. Populations and ecosystems
- b. Diversity and adaptations of organisms

Content Standard F: Science In Personal and Social Perspectives

- a. Populations, resources, and environments

**Content Standards, Grades 9-12**

Content Standard A: Science As Inquiry

- a. Abilities necessary to do scientific inquiry
- b. Understandings about scientific inquiry

Content Standard E: Science and Technology

- a. Abilities of technological design
- b. Understandings about science and technology

Content Standard F: Science In Personal and Social Perspectives

- a. Personal and community health
- b. Population growth

**Other Standards:**

N/A