THE GEOGRAPHY OF ANTARCTICA THROUGH ELA, MATHEMATICAL AND SCIENTIFIC LITERACY

First Name _____ Last Name _____

Date _____ Class _____

Grade 6 | Five Day Reading and Reasoning RST

Essential Question

How do polar geography, ice and climate processes, and quantitative evidence shape research, movement, and environmental decisions in Antarctica?

Learning Targets

Interpret three maps; analyze three source readings; explain geographic cause and effect; calculate scale, precipitation, density, and percentage quantities; evaluate a budget choice; and write a supported RACE response.

Five Themes of Geography

Location identifies where a place is. Place describes physical and human characteristics. Human environment interaction examines adaptation and change. Movement follows people, materials, and ideas. Region groups places by shared features.

Reading and Annotation Protocol

Underline central ideas. Circle unfamiliar vocabulary. Box quantities and units. Note cause and effect. Cite Source One, Two, or Three and Map A, B, or C when using evidence.

Map and Data Guidance

The polar projection preserves distance outward from the South Pole. North is away from the pole; directions vary around it. Read the local compass at 0° longitude. The bar is a radial scale, not a guarantee for every pair of points.

All numerical community, site, supply, and budget datasets are fictional instructional models, not measured regional statistics.

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Source One Physical Geography, Ice, and Human Presence

Antarctica is a continent centered on the geographic South Pole and surrounded by the Southern Ocean. It is land covered largely by ice, unlike the Arctic Ocean around the North Pole. The Antarctic Peninsula reaches toward South America. East Antarctica and West Antarctica are broad geographic regions separated in part by the Transantarctic Mountains. A polar map provides a useful view of this arrangement, but its direction and scale must be read carefully.

An ice sheet is a large mass of land ice. An ice shelf is a floating extension of land ice along the coast. Sea ice forms when ocean water freezes. These features are connected but are not interchangeable. The Ross and Weddell seas lie beside different parts of the continent. Ice and mountains shape routes and research access. A coastline on an overview map cannot show every changing ice edge or crevasse.

Antarctica has no Indigenous human population and no ordinary permanent resident population. Researchers and support workers live at stations for limited assignments, and staffing changes seasonally. McMurdo lies near the Ross Sea; Palmer is in the Antarctic Peninsula region; the Amundsen Scott station lies at the South Pole. South Africa operates SANAE IV. A station is a research facility, not a national capital or proof of sovereign ownership.

The Antarctic Treaty provides a framework for peaceful activity and scientific cooperation. Article I states that Antarctica shall be used for "peaceful purposes only." Article IV preserves differing positions on sovereignty and prevents new claims or enlargement of existing claims while the Treaty is in force. The Treaty does not turn research stations into country borders. Environmental agreements also guide activities and protection.

The Five Themes of Geography remain useful here. The South Pole describes location; terrain and ice describe place; station design illustrates human environment interaction; supply voyages illustrate movement; and the Peninsula forms a region. Human presence depends on energy, shelter, food, waste handling, and transport. Explain access using both natural conditions and planning rather than assuming that cold alone determines every decision.

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