Polar Explorer Relays

OBJECTIVE

Students will discover some of the necessary equipment a polar explorer uses on an expedition to the North or South Pole.

ACTION

1. Divide students into two teams.
2. Set safety cones at least 9 m (30 ft.) apart from each other to designate two end lines.
3. Have each team stand in a line (single file) behind a safety cone on the same side.
4. Near the opposite pylon, line up gear in the following order: hat, goggles, scarf, jacket, mittens, backpack, water bottle, lunch box, compass, map, first aid kit, boots. Each line of gear should have one of these items.
5. Tell students this game is a relay race. The object is to put on or carry all the gear past the finish line.
6. At GO!, each first student runs to the opposite cone, puts on the hat, runs back, and gives the hat to the next person in the team line. The next team member puts on the hat, runs to the equipment line at the opposite cone, puts on the goggles, runs back to the team, and gives both the hat and goggles to the next team member. The relay race continues until the last player in one of the lines is wearing all the items, and crosses the finish line to win.
7. After the race, discuss why a person would need to wear or bring each item in order to survive in the harsh climate of the North and South Pole. Do animals need these items? What animal adaptations take the place of warm clothing, goggles, lunch boxes, and maps and compasses?
8. Work with students to create a list of other items a polar explorer might need on a trip to the North Pole such as a method for travel, a way to create shelter at night or when resting, or a way of communicating with with others not on the trip.
**BACKGROUND**

To survive in the harsh cold of the arctic environment, polar explorers need warm clothes, water, a nutritious diet, and emergency first aid for frostbite and hypothermia. Being properly equipped and prepared for all weather conditions can mean the difference between survival or injury and death.

**MATERIALS**

- four orange safety cones
- two of each:
  - winter knit hat
  - ski goggles
  - snow jacket
  - pair of snow boots
  - scarf
  - water bottle
  - lunch box
  - pair of mittens
  - compass
  - backpack
  - first aid kit (bandages)
  - map

A polar bear’s thick fur, tough hide, and insulating layer of blubber help retain heat and maintain normal body temperature. In contrast, a person must wear a heavy coat, gloves, and a hat for protection against cold weather.