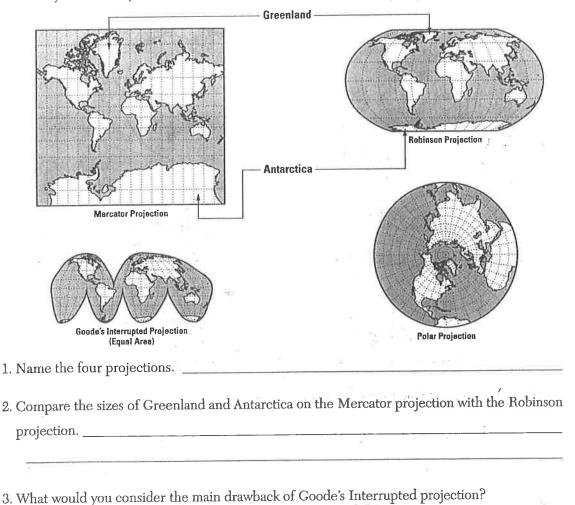


GEOGRAPHY SKILLS 1 Understanding Projections

The earth is a sphere and is best shown as a globe. For books and posters, though, the earth has to be represented as a flat object. To do this, mapmakers create various plans called projections.

A projection turns every location on earth into a corresponding location on a map. However, all projections distort to some degree. Flat maps cannot show size, shape, and direction all at once with total accuracy. That is why the look and location of

Earth's features will not totally agree on maps of different projections. For example, areas such as Greenland and Antarctica, farthest from the Equator, are often stretched. Goode's Interrupted avoids stretching and is more accurate for land areas. Polar projections show the earth from above either the North Pole or South Pole. Below are four common projections.





4. Why do you think that the Mercator projection is considered the best for plotting direction?



GEOGRAPHY SKILLS 2 Recognizing Latitude and Longitude

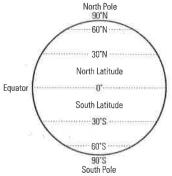
Most maps contain imaginary horizontal and vertical lines of measurement. Horizontal lines, running east and west, are called latitude lines or parallels. Vertical lines, running north and south, are called longitude lines or meridians. The lines are numbered in degrees (shown by the symbol °).

Latitude starts at 0°, known as the equator, where the earth is at its widest. There are 90

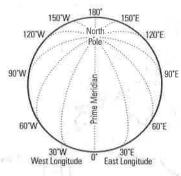
degrees north of the equator and 90 degrees south of it. Longitude starts at 0°, the Prime Meridian, and goes 180 degrees west and 180 degrees east.

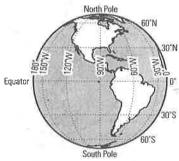
Because latitude and longitude cross and form a grid, the use of these lines to locate places is called the grid system. Every place in the world has a single grid location—where its latitude and longitude intersect. Study the maps below.

Latitude Lines (Parallels)



Longitude Lines (Meridians)





Equator SOUTH AMERICA 30'N 60'S 60'S 90'S 60'S 90'S

Latitude and Longitude Grid

North and South America

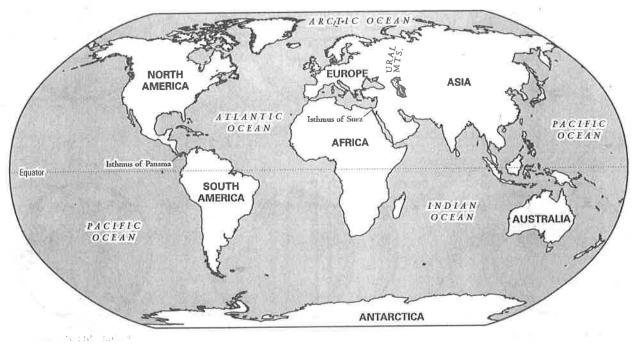
- 1. How many degrees separate the North Pole from the South Pole?
- 2. Between about what longitude and latitude degrees does most of the connected United States fall?
- 3. An airplane lost from radar at 5° S and 55° W was over which continent?
- 4. Mark the map titled "North and South America" at the approximate point where a ship in distress at 45° S and 5° E might be found.

Date

GEOGRAPHY SKILLS 3 Recognizing Continents and Oceans

Complete knowledge of the features of the earth's surface is only a few hundred years old. As recently as the 1300s, the Atlantic Ocean was a mysterious "Sea of Darkness" on a flat surface. The regions of the Arctic, Pacific, and Antarctic oceans were unknown. There were also great misconceptions about the world. For example, Europeans knew of the region of the Indian Ocean but thought it was a great salt lake surrounded by land. They assumed Asia could be reached from the west only by land.

Today the earth is completely mapped and classified. The largest units of Earth's land are called continents. Except for the division between Europe and Asia, they are generally well defined. Two continents are islands, and isthmuses—narrow necks of land—clearly separate others. The oceans are merely names given to the largest sections of the body of salt water that covers 71 percent of the globe. Study the map below.



- 1. What are the seven continents?
- 2. Which geographical formation separates the Americas? separates Asia from Africa?
- 3. What appears to divide Asia from Europe?
- 4. Where is most of the earth's land mass—north or south of the equator?
- 5. A trip from Australia to Africa would cross which ocean?





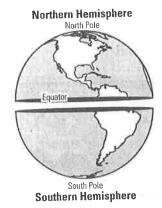
GEOGRAPHY SKILLS 4 Designating Hemispheres

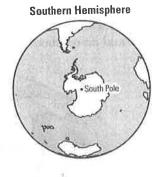
The study of the earth does not always involve the entire planet at once. Mapmakers often deal with large sections of the earth called hemispheres.

The word *hemisphere* combines *sphere*—meaning anything round, like a ball—with the prefix *hemi*—meaning "half." The world can be divid-

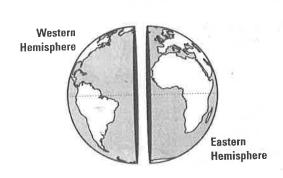
ed into any of four hemispheres—Northern, Southern, Western, and Eastern. They are illustrated below by both bird's-eye and profile views. Hemispheres are further dramatized by the cutting of the globe horizontally and vertically. Study the globes below.

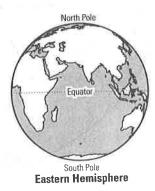












- 1. Why do you think the word *hemisphere* accurately describes the six globes shown above?
- 2. The vertically cut globe creates what two hemispheres?
- 3. Name the continents found all or mostly in the Northern Hemisphere.
- 4. Look at the globes for the northern and southern hemispheres. What is the main difference between the North and South poles?



PRIMARY SOURCE from The Execution of Louis XVI by Henry Essex Edgeworth de Firmont

Sentenced to death by the National Convention, Louis XVI was executed on January 21, 1793, As you read this eyewitness account of the king's final hours, note the different reactions of Louis XVI, the guards, and the French citizens.

The King finding himself seated in the carriage, L where he could neither speak to me nor be spoken to without witness, kept a profound silence. . . .

The procession lasted almost two hours; the streets were lined with citizens, all armed, some with pikes and some with guns, and the carriage was surrounded by a body of troops, formed of the most desperate people of Paris. As another precaution, they had placed before the horses a number of drums, intended to drown any noise or murmur in favour of the King; but how could they be heard? Nobody appeared either at the doors or windows, and in the street nothing was to be seen, but armed citizens—citizens, all rushing toward the commission of a crime, which perhaps they detested in their hearts.

The carriage proceeded thus in silence to the Place de Louis XV and stopped in the middle of a large space that had been left round the scaffold: this space was surrounded with cannon, and beyond, an armed multitude extended as far as the eye could reach. As soon as the King perceived that the carriage stopped, he turned and whispered to me, 'We are arrived, if I mistake not.' My silence answered that we were. . . . As soon as the King had left the carriage, three guards surrounded him and would have taken off his clothes, but he repulsed them with haughtiness: he undressed himself, untied his neckcloth, opened his shirt, and arranged it himself. The guards, whom the determined countenance of the King had for a moment disconcerted, seemed to recover their audacity. They surrounded him again and would have seized his hands. 'What are you attempting?' said the King, drawing back his hands. 'To bind you,' answered the wretches. 'To bind me,' said the King, with an indignant air. 'No! I shall never consent to that: do what you have been ordered, but you shall never bind me. . . . '

The path leading to the scaffold was extremely rough and difficult to pass; the King was obliged to lean on my arm, and from the slowness with which he proceeded, I feared for a moment that his courage might fail; but what was my astonishment,

when arrived at the last step, I felt that he suddenly let go my arm, and I saw him cross with a firm foot the breadth of the whole scaffold; silence, by his look alone, fifteen or twenty drums that were placed opposite to me; and in a voice so loud, that it must have been heard at the Pont Tournant, I heard him pronounce distinctly these memorable words: I die innocent of all the crimes laid to my charge; I pardon those who have occasioned my death; and I pray to God that the blood you are going to shed may never be visited on France.'

He was proceeding, when a man on horseback, in the national uniform, and with a ferocious cry, ordered the drums to beat. Many voices were at the same time heard encouraging the executioners. They seemed reanimated themselves, in seizing with violence the most virtuous of Kings, they dragged him under the axe of the guillotine, which with one stroke severed his head from his body. All this passed in a moment. The youngest of the guards, who seemed about eighteen, immediately seized the head, and showed it to the people as he walked round the scaffold; he accompanied this monstrous ceremony with the most atrocious and indecent gestures. At first an awful silence prevailed; at length some cries of 'Vive la République!' were heard. By degrees the voices multiplied, and in less than ten minutes this cry, a thousand times repeated, became the universal shout of the multitude, and every hat was in the air.

from J.M. Thompson, English Witnesses of the French Revolution, Blackwell, 1938. Reprinted in John Carey, ed., Eyewitness to History (New York: Avon, 1987), 250-252.

Discussion Questions

Clarifying

- 1. How did Louis XVI respond as he faced execution?
- 2. How did the French citizens who witnessed the king's execution react?
- 3. Making Inferences Why do you think the soldier ordered the drums to beat as Louis XVI spoke from the scaffold?