

ACTIVITY 17.1

Resources

	Length of longest ship	Number of masts on longest ship	Number of ships in fleet	Number of crew members in fleet
Explorer A				
Explorer B				

When did each explorers' society develop the following technologies?

	Explorer A	Explorer B
Axial rudder	_____ century	_____ century
Multiple masts and sails	_____ century	_____ century
Watertight compartments in ship hulls	_____ century	_____ century
Leeboard	_____ century	_____ century
Magnetic compass	_____ century	_____ century

ACTIVITY 17.2

Explorer A

This explorer was seeking a better trade route. After looking to several governments to fund his expedition, he finally found enough financial support from one reluctant government and some private investors. If his expedition succeeded, he would be given many rewards, including the rank of Admiral of the Ocean Sea. He would also be appointed Viceroy and Governor of all the newly colonized lands. In addition, he would receive a portion of all profits from the expedition. Although the rulers financially supported him, they thought that the odds of his success were very low. It was a very risky venture. They were willing to take a chance because success would give them a trade advantage over neighboring countries. The goals of this voyage were exploration, wealth, alternative trade routes, spices, and gold. His first voyage used three ships and a crew of 90 men, the largest ship being 85 feet long, with three masts and a crew of 40.

Explorer A's society developed the following technologies:

Axial rudder	12th century
Multiple masts and sails	14th century
Watertight compartments in ship hulls	18th century
Leeboard	16th century
Magnetic compass	12th century

ACTIVITY 17.3

Explorer B

This explorer led seven expeditions. The ruler of his country funded his voyages in an effort to make the country more prosperous and powerful than it had been under other rulers. He also wanted to increase his own status as a regional leader. The voyages were also an effort to promote trade and collect tribute (taxes) from neighboring countries. The explorer's first expedition included over 300 ships with a crew of more than 28,000 men. His fleet included supply ships to carry horses, troop transports, patrol boats, warships, and tankers to carry fresh water. The largest ship in his fleet was reported to be 400 feet long, with nine masts and a crew of over 1,000 men.

During his seven expeditions, he explored the coasts of faraway places, visited many ports, and gained prestige for his accomplishments. As a result of his voyages, merchants from his country settled in busy trade centers. Surrounding countries feared this country's power and strength. The country had little desire to establish colonies; its focus was trade in goods that were not readily available at home.

Explorer B's society developed the following technologies:

Axial rudder	1st century
Multiple masts and sails	2nd century
Watertight compartments in ship hulls	2nd century
Leeboard	8th century
Magnetic compass	9th–11th centuries

ACTIVITY 17.4

Zheng He and Chinese Exploration

Between 1405 and 1433 C.E., the Chinese government sent seven naval expeditions south and west to India, Persia, Arabia, and Africa. The leader of these voyages was Zheng He, who sailed most of these voyages during the reign of Emperor Yung-lo (1403–1425). Many of these expeditions included several hundred ships and thousands of sailors and soldiers.

After 1433, the Chinese government launched no further naval expeditions. In 1436, the emperor forbade the building of ships for overseas voyages. Forty years later, the government destroyed the records of the voyages of Zheng He. While Spanish and Portuguese explorers claimed the lands of Central and South America, the Chinese withdrew from the seas.

Why did China not follow up on its technological superiority? There are several theories:

- The spending of Yung-lo's government greatly exceeded the tax revenue that could be collected. Although the Chinese system of taxation was the most advanced in the world, even the emperor could not continue to fund massive fleets on the scale of those used by Zheng He.
- In the mid-1400s, Mongols began frequent attacks on China's northern border. The attacks may have forced China to devote more resources to the defense of the border.
- Neo-Confucian scholars held many important government posts. Neo-Confucian philosophy encouraged the suppression of desire for worldly things. Trade and profits were held in contempt. Particularly after Yung-lo's death, the influence of the Neo-Confucian scholars grew.
- Some of the Chinese people at the time were concerned about the influence that foreign goods and ideas had on Chinese culture.

All of these reasons changed the incentives for exploration. Zheng He is said to have died returning from his final expedition in 1433 C.E.

"We . . . have beheld in the ocean huge waves like mountains rising sky high, and we have set eyes on barbarian regions far away hidden in a blue transparency of light vapors, while our sails, loftily unfurled like clouds day and night, continued their course [as rapidly as] a star, traversing those savage waves as if we were treading a public thoroughfare."

– Zheng He, 1432