

# Black Death Math/Economics

## Main Core Tie

Social Studies - 6th Grade

[Standard 2 Objective 3](#)

## Background for Teachers

In the Middle Ages, a horrifying disease swept across Asia, North Africa, and Europe. The disease became known as the "Black Death" because of the dark blotches that appeared on the skin of its victims.

A disease that strikes over a large area is called a plague. The medieval plague struck in two ways. One form, called bubonic, was caused by rat fleas carrying the disease. People bitten by these fleas got sick in a week, and most died within 36 hours.

The other form, pneumonic, spread when somebody with the disease coughed or sneezed on somebody else. The pneumonic form spread and killed even more quickly than the bubonic. Bubonic plague had struck Asia and Europe in earlier centuries, but never as in the 1300's. New land and sea trade routes helped to spread further and faster. In western Europe alone, the Black Death claimed up to 25 million lives, roughly one-third of the population.

The outbreak of the plague spread across Eurasia and North Africa. Caravans carried the disease east into China during the 1320s. The disease then turned west to the Black Sea and along sea routes through the Mediterranean in the late 1340s and early 1350s. The death rate in some plague-ridden cities was around 50 percent. All these deaths convinced some people that the end of the world had come.

This terrible disaster stopped trade and resulted in a severe labor shortage. Oddly, this shortage helped many of Europe's poorest people. There were so few workers left that wages rose and workers gained a higher standard of living. These new economic conditions helped to end the serf labor system in Europe. (Text is directly from book) Bednarz, S (2003). Discover Our Heritage. Morris Plains, NJ: Houghton Mifflin.

The pandemic is thought to have begun in Central Asia, India, or possibly Africa, and spread to Europe during the 1340s. The total number of deaths worldwide is estimated at 75 million people; approximately 25-50 million of which occurred in Europe. The Black Death is estimated to have killed 30% to 60% of Europe's population. It may have reduced the world's population from an estimated 450 million to between 350 and 375 million in 1400.

Raw Data: Death Toll For Europe: Approx 25 million 30%-60% of Europe population dead in some European cities 50% dead

Death Toll for world: Estimated at least 75 million people Reduced worldwide population from 450 million to 350 in 1400 AD

Compare with the current population. Population as of June 21, 2008, the world's population is believed to be 6,704,845,726.

## Instructional Procedures

### Activity:

Use the information to help your students put the Black Death into perspective. Use fractions, percents, proportions, and other math concepts to integrate social studies and math.

How does the Black death affect your class? -physically -how many die?

How many die in your grade? School? Community? State? Country? World?

Other questions:

How does that truly affect the way you live?

How does that make you feel?

How does that affect the economy?

This event ended feudalism and helped to fully develop the middle class because of the labor shortage.

Potentially, what group in society would advance if this happened today? (We are thinking the immigrant population, talk about how this would drastically change US.)

Apply the avian (bird) flu here. What are its potential effects?

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