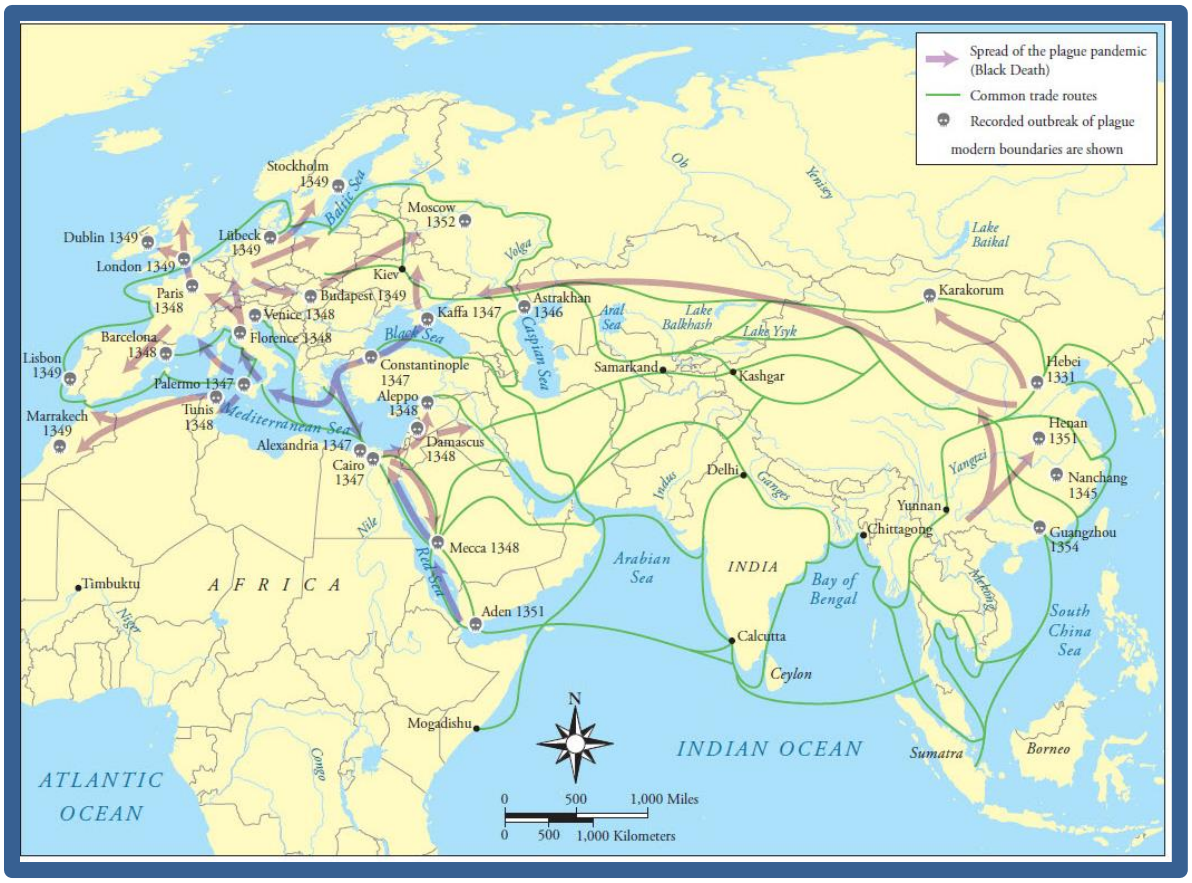
6th Grade Black Death Inquiry

Can Disease Change the World?



Map depicting the spread of the Black Death. Created for the New York K-12 Social Studies Toolkit by Agate Publishing.

Supporting Questions

1. What was the Black Death?
2. How did the Black Death spread so quickly?
3. How did the Black Death affect people in the 14th century?

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6th Grade Black Death Inquiry

Can Disease Change the World?

New York State Social Studies Framework Key Idea & Practices	**6.7 INTERACTIONS ACROSS THE EASTERN HEMISPHERE (ca. 600 CE–ca. 1450):** Trade networks promoted the exchange and diffusion of language, belief systems, tools, intellectual ideas, inventions, and diseases. ✔ Gathering, Using, and Interpreting Evidence ✔ Geographic Reasoning ✔ Comparison and Contextualization
Staging the Question	Discuss an example of a recent outbreak of infectious disease and how public officials responded to the outbreak.

Supporting Question 1	Supporting Question 2	Supporting Question 3
What was the Black Death?	How did the Black Death spread so quickly?	How did the Black Death affect people in the 14th century?
Formative Performance Task	**Formative Performance Task**	**Formative Performance Task**
Write a description of the Black Death that includes its symptoms and where outbreaks occurred in Europe and Asia.	Construct a diagram illustrating how the Black Death spread.	Create an annotated illustration depicting how the Black Death affected different groups of people in the 14th century.
Featured Sources	**Featured Sources**	**Featured Sources**
Source A: Excerpts from *Decameron* **Source B:** Illustration of the Black Death	**Source A:** Plague Ecology visual **Source B:** Map depicting spread of the Black Death	**Source A:** Bubonic plague statistics **Source B:** Illustration of the persecution of Jews during the Black Death **Source C:** *Social and Economic Effects of the Plague*

Summative Performance Task	**ARGUMENT** Can disease change the world? Construct an argument (e.g., detailed outline, poster, essay) that discusses the impact of the Black Death using specific claims and relevant evidence from historical sources while acknowledging competing views that people had about the nature of the Black Death in the 14th century.
Taking Informed Action	**UNDERSTAND** Find current examples of how we prevent, detect, and minimize the spread of diseases in homes, schools, and communities (e.g., washing hands, vaccinations). **ASSESS** Think of at least one way we might improve the prevention or control the spread of diseases in homes, schools, and communities. **ACT** Create a public service announcement to advocate for improved methods of prevention, detection, and control of diseases.

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Overview

Inquiry Description

This inquiry is framed by the compelling question "Can disease change the world?" Among the many catastrophic global pandemics in history, perhaps none achieved the notoriety of the Black Death. The Black Death was a massive outbreak of the bubonic plague caused by infectious bacteria. Thought by scientists to have been spread by contaminated fleas on rats and/or other rodents, the Black Death quickly decimated entire families and communities. In doing so, the Black Death led more than one observer of the time to ponder whether the apocalypse had begun. The Black Death began and first spread on the Silk Roads through central Asia in the early 14th century, and by mid-century moved via merchant ships into North Africa and Europe, where it would kill nearly one-half of the population. It took almost 150 years for Europe's population to recover. By investigating the compelling question "Can disease change the world?" students consider the causes, symptoms, and reasons for the rapid geographic expansion of the disease and how this pandemic affected people of the 14th century and beyond. Through their investigation of sources in this inquiry, students should develop an understanding of the consequences of the Black Death and an informed awareness of the importance of preparing for future diseases and possible pandemics.

In addition to the Key Idea listed earlier, this inquiry highlights the following Conceptual Understanding:

- 6.7a The Silk Roads, the Indian Ocean, and the Trans-Saharan routes formed the major Afro-Eurasian trade networks connecting the East and the West. Ideas, people, technologies, products, and diseases moved along these routes.

NOTE: This inquiry is expected to take three to five 40-minute class periods. The inquiry time frame could expand if teachers think their students need additional instructional experiences (i.e., supporting questions, formative performance tasks, and featured sources). Teachers are encouraged to adapt the inquiries in order to meet the needs and interests of their particular students. Resources can also be modified as necessary to meet individualized education programs (IEPs) or Section 504 Plans for students with disabilities.

Structure of the Inquiry

In addressing the compelling question "Can disease change the world?" students work through a series of supporting questions, formative performance tasks, and featured sources in order to construct an argument with evidence and counterevidence from a variety of sources.

Staging the Compelling Question

In this staging task, teachers may begin the inquiry by helping students understand that disease is a part of our everyday modern life and that the implications of the compelling question, "Can disease change the world?" are as well. To accomplish this goal, teachers may engage students in a discussion about a recent outbreak of infectious disease (e.g., SARS, Ebola, MERS) and how public officials responded to the outbreak.

Supporting Question 1

The first supporting question—"What was the Black Death?"—introduces students to the catastrophic pandemic known as the Black Death. The formative performance task calls on students to describe the Black Death by focusing on the symptoms of the disease and the geographic areas most affected by it. Featured Source A is an eyewitness account from 14th-century writer Giovanni Boccaccio about the symptoms of the Black Death. Featured Source B is a painting from 1411 of two patients suffering from the disease.

Supporting Question 2

The second supporting question—"How did the Black Death spread so quickly?"—invites students to examine why the Black Death became so widespread and how it was possible for the mortality rate to be so high. The formative performance task calls on students to construct a diagram depicting how the Black Death spread. Featured Sources A and B are visuals about the spread of the Black Death. The first is a contemporary illustration showing the general pattern of transmission of plague bacteria from natural to human environments; the second is a cartoon-style visual that illustrates the role of fleas and rats in spreading the disease. Featured Source C is a map showing the ways in which the disease spread from Asia to Europe in the 1340s and within Europe after 1348.

Supporting Question 3

The third supporting question—"How did the Black Death affect people in the 14th century?—asks students to explore how the Black Death changed people's lives and how those affected by the plague responded to it. The formative performance task calls on students to create an annotated illustration depicting how the Black Death affected different groups of people in the 14th century. The featured sources include a set of graphs illustrating the dramatic decline in population as a result of the Black Death and a painting and accompanying text about the false claim that Jewish people were to blame for the Black Death. The final featured source is a text that shows the effect of the Black Plague on the European economy and feudal society.

Summative Performance Task

At this point in the inquiry, students have examined the causes and symptoms of the Black Death. Students have also examined where, when, and how the disease spread as rapidly as it did and how the people were affected by this catastrophic pandemic. Students should be able to demonstrate the breadth of their understanding and the ability to use evidence from multiple sources by constructing an argument in response to the compelling question "Can disease change the world?" It is important to note that students' arguments could take a variety of forms, including a detailed outline, poster, or essay.

Student arguments likely will vary, but could include the following:

- The Black Death changed the world by spreading quickly from Asia to Europe, where half of the population died.
- The Black Death did not change the world, but large numbers of Jews were blamed and persecuted unfairly.
- The shortage of labor in Europe that resulted from the Black Death changed the world by creating labor unrest and new social arrangements.

Students have the opportunity to Take Informed Action by drawing on their knowledge of how pandemics spread and impact society. Students show that they u*nderstand* by finding current examples of how we prevent, detect, and minimize the spread of diseases in homes, schools, and communities (e.g. washing hands, vaccinations). They can then *assess* at least one way people might improve the prevention or control the spread of diseases in homes, schools, and communities. And they can *act* by creating a public service announcement to advocate for improved methods of prevention, detection, and control of diseases.

Supporting Question 1	
Featured Source	**Source A:** Giovanni Boccaccio, novel about the Black Death, *Decameron* (translated by David Burr, excerpts), 1353

Boccaccio on the Plague

Translated by David Burr, History Department, Virginia Tech, Blacksburg, VA.

The following is taken from Giovanni Boccaccio, the Decameron, Introduction. Boccaccio lived through the plague and wrote this description shortly thereafter, but he borrowed liberally from an earlier writer who was describing a completely different plague.

I say, then, that in the year 1348 after the Son of God's fruitful incarnation, into the distinguished city of Florence, that most beautiful of Italian cities, there entered a deadly pestilence. Whether one believes that it came through the influence of the heavenly bodies or that God, justly angered by our iniquities, sent it for our correction, in any case it had begun several years earlier in the east and killed an innumerable mass of people, spreading steadily from place to place and growing as it moved west.

No human wisdom or provision was of any help. Huge amounts of filth were removed from the city by officials charged with that task; sick people were forbidden to enter the city; advice was given on how to stay healthy; devout persons made humble supplication to God not once but many times, in processions and by other means; but in the spring of that year the sad effects of the plague nonetheless began to appear in an almost miraculous manner. It was not as it had been in the east, where nosebleeds had signaled that death was inevitable. Here the sickness began in both men and women with swelling in the groin and armpits. The lumps varied in size, some reaching the size of an ordinary apple and others that of an egg, and the people commonly called them gavoccioli. Having begun in these two parts of the body, the gavoccioli soon began to appear at random all over the body. After this point the disease started to alter in nature, with black or livid spots appearing on the arms, the thighs, everywhere. Sometimes they were large and well spaced, other times small and numerous. These were a certain sign of impending death, but so was the swelling.

No doctor's advice, no medicine seemed to be of any help. Either the disease was incurable or the doctors simply didn't know how to cure it. Many tried, though. The number of doctors became huge as a multitude of people, male and female, with no medical training whatsoever took their place alongside those who were properly educated. But no one knew the cause of the pestilence and thus no one could do much about curing it, so not only were few people healed but most of them died by the third day after the aforementioned signs appeared, some a bit sooner or a bit later. Most of them died without any fever or other symptoms.

This pestilence was so powerful that it spread from the ill to the healthy like fire among dry or oily materials. It was so bad that it could be communicated not only through speaking or associating with the sick, but even by touching their clothing or anything else they had touched. What I must say here is so strange that if I and others had not seen it with our own eyes I would hesitate to believe it, let alone write about it, even if I had heard it from trustworthy people. The pestilence spread so efficiently that, not only did it pass from person to person, but if an animal touched the belongings of some sick or dead person it contracted the pestilence and died of it in a short time. I myself witnessed this with my own eyes, as I said earlier. One day when a poor man had died and his rags had been thrown out in the street, two pigs came along and, as pigs do, they pushed the rags about with their snouts and then seized them with their teeth. Both soon fell down dead on the rags, as if they had taken poison. Such experiences or others like them gave birth to a variety of fears and misconceptions among the living, and the cruel strategy they pursued was to avoid, even flee the sick and their belongings. They thought that by doing so they could stay healthy themselves.

There were some who thought moderate living and the avoidance of excess had a great deal to do with avoiding illness, so they lived apart from others in small groups. They congregated and shut themselves up in houses where no one had been sick, partaking moderately of the best food and the finest wine, avoiding excess in other ways as well, trying their best not speak of or hear any news about the death and illness outside, occupying themselves with music and whatever other pleasures they had available.

Others were of the opposite opinion. They believed that drinking a good deal, enjoying themselves, going about singing and having fun, satisfying all their appetites as much as they could, laughing and joking was sure medicine for any illness. Thus, doing exactly as they prescribed, they spent day and night moving from one tavern to the next, drinking without mode or measure, or doing the same thing in other people's homes, engaging only in those activities that gave them pleasure. They found this easy to do because people had abandoned their possessions as if they no longer had to cope with the problem of living, and most of the houses had become common property with complete strangers making use of whatever homes they arrived at as if they owned them. And they combined this bestial behavior with as complete an avoidance of the sick as they could manage.

As our city sunk into this affliction and misery the reverend authority of the law, both divine and human, sunk with it and practically disappeared, for those who were supposed to be its ministers and executors were, like other people, either dead, sick or so taken up with the needs of their own families that they could not perform their offices. That left everyone else free to make his or her own arrangements.

Many took a middle way between these two extremes, neither limiting themselves like the first group nor engaging in dissolute behavior as the second did. This group used things as they felt the need of them and, instead of shutting themselves in, they went about carrying flowers, fragrant herbs or various spices which they often held to their noses, assuming that the best thing for the brain was to comfort it with such odors, since the air was filled with the stench of dead bodies and illness and medicine.

Some were of a crueler opinion, though perhaps a safer one. They said there was no better medicine against the plague than to escape from it. Moved by this argument and caring from nothing except themselves, a large number of men and women abandoned their city, houses, families and possessions in order to go elsewhere, at least to the Florentine countryside, as if the wrath of God punishing humankind with this pestilence would not follow them there, but would content itself with oppressing only those found within the city walls, or as if they had concluded that no one would remain there and that the final hour of their city had arrived.

Not all of these variously-opinioned people died, but not all of them lived by employing these measures, either. And, having given an example to others while they were healthy, when they themselves fell sick they were in turn left abandoned by all. And we will pass over the fact that one citizen avoided another, no neighbor took care of another, and family members rarely if ever visited one another, in fact they stayed far apart. This tribulation struck such fear in the hearts of men and women that one brother abandoned another, uncles abandoned nephews, sisters abandoned brothers, often wives abandoned their husbands, and (a greater thing and barely believable) fathers and mothers abandoned their children, as if they were not even theirs.

The countless number of people who fell sick could look for help only to the charity of friends (and there were few of them) or to the avarice of servants, who received huge salaries without being required to do much and yet were still hard to find. They tended to be men or women with little intelligence or training who were good for little else except bringing the sick person whatever they requested or watching over them as they died. They often lost their own lives and profits in the process.

This situation in which the sick were abandoned by neighbors and families and could find few servants led to a practice practically unheard of earlier: A woman, no matter how attractive or beautiful she might be, did not hesitate to have as her servant a man, be he young or old, and show him every part of her body just as she would have done with a woman, as long as the needs of her illness required it. That practice may have contributed to those who survived having looser morals afterward.

It followed from this situation that many people died who might have lived if they had been cared for. Thus, between the lack of decent servants and the force of the pestilence, so many people died day and night in the city that it was a shock to hear about it, say nothing of seeing it. And thus, among those who remained alive, there developed, almost by necessity, ways of behavior contrary what had previously been the prevailing customs.

It had been the custom (and is again today) for female family members and neighbors to gather in the home of a dead person and mourn along with the female members of the household, while the male family members, neighbors and other townsmen gathered outside; and the clergy came in accordance with the dead person's rank. Then, with funereal pomp, candles and singing, he was carried on the shoulders of his equals to the church he had selected before his death. Once the ferocity of the plague began to increase, such things ceased either entirely or in large part, other new practices taking their place. Accordingly many died, not only without many women around them, but with not a single witness present. Few were those to whom was conceded the pious plaints and bitter tears of their family. On the contrary, most relatives managed to be somewhere else laughing, joking and having fun. The women learned that behavior too, abandoning their womanly compassion in the interests of their own health. And few were those who were accompanied to the church by more than ten or twelve neighbors, nor were they carried on the shoulders of honorable and worthy citizens, but rather by gravediggers from the lower class called becchini, who did it for pay. They picked up the coffin and hurried off, not to the church chosen by the deceased, but normally to the closest one, accompanied by four or six clergy and a few candles, and often none at all. These clergy, with the help of the becchini and without tiring themselves with any lengthy, solemn services, found whatever unoccupied sepulcher they could and put the body there.

The poor and even the middling classes faced an even grimmer prospect. Most of them stayed in their own homes and neighborhoods, either because they hoped they would be safe there or because they could afford to do no other. They fell sick by the thousands every day, and having neither servants nor anyone else to care for them they almost always died. Many of them died in the street either during the day or by night, while those who died in their homes were noticed by their neighbors only when the smell of their decomposing bodies brought them to public attention.

There were dead bodies all over, and all were treated in pretty much the same manner by their neighbors, who were moved no less by fear that the corrupted bodies would infect them than by any pity they felt toward the deceased. They would drag the dead bodies out of their homes (either themselves or with the aid of porters, when they could get them) and left them in front of their doors. In the morning great numbers of them could be seen by any passerby. At that time they were laid out and carried away on biers or, if none were available, on planks. Nor did a bier carry only one. Sometimes it carried two or three at a time, and there were occasions when a husband and wife, two or three brothers, or a father and son were carried off together. Any number of times two priests with a cross would be on the way to the church with someone and porters would fall in behind with two or three more biers, so that the priests, who thought they were on their way to bury one person, eventually found that they had six, eight or even more.

Nor were these dead honored with tears, lights or companions. Things sunk to the level that people were disposed of much as we would now dispose of a dead goat. Thus it became clear that what the wise had never learned to suffer with patience when, in the natural course of things, it struck less dramatically and less often, became a matter of indifference even to the simple thanks to the sheer scale of this misfortune.

The amount of holy ground available for burials was insufficient for the huge quantity of corpses arriving at the church every day and even every hour, especially if they wished to follow the old custom and give every body its own place; so when all individual places in a churchyard was taken they dug huge trenches and put people in them by the hundreds like merchandise in the hold of a ship, then covered them over with a little dirt, until the ditch was filled to the top.

But I shall spare you a detailed description of the miseries visited upon us and simply mention that the ill winds blowing through our city did not spare the surrounding countryside. There, to say nothing of the towns (which were like smaller versions of the city), throughout the villages and fields the poor, miserable peasants and their

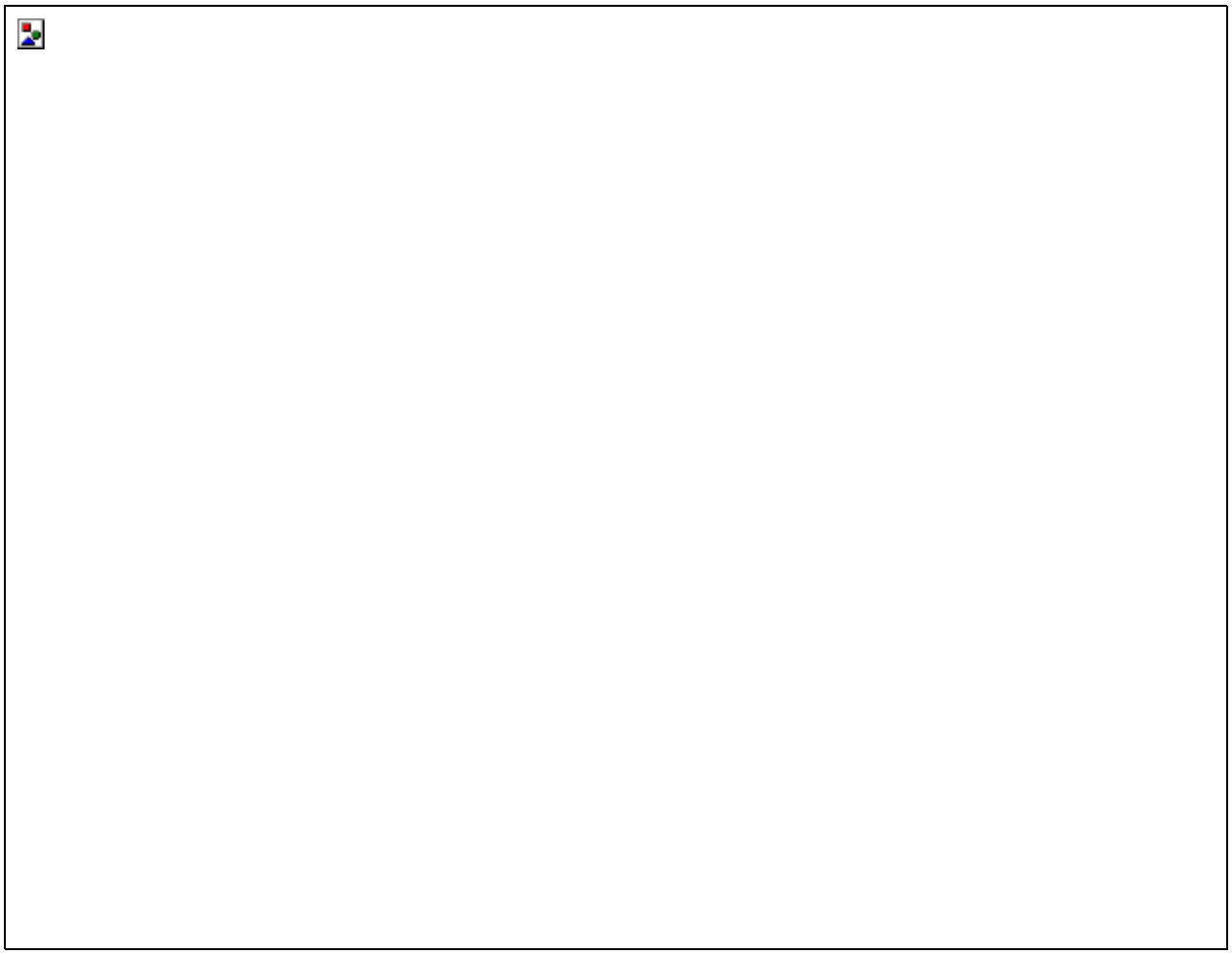
families, who lacked the care of doctors or the aid of servants, died more like beasts than humans, day and night, on the roads and in their fields, And thus like the city-dwellers they became loose in their behavior and stopped taking care of their possessions and occupations, and all of them, once they began to anticipate their deaths, stopped caring about what they might do in the future with their beasts and lands and simply concentrated on consuming what they had. Thus their cattle, donkeys, sheep, goats, pigs, chickens and even their dogs, man's best friends, were driven off into the fields where the wheat stood abandoned, not merely unharvested but not even cut. These animals were allowed to roam where they pleased, and many, like rational beings, returned home each night after eating well during the day, without being encouraged to do so by a shepherd.

Enough about the countryside. Returning to the city, what more can be said except that the cruelty of heaven (and perhaps in part of humankind as well) was such that between March and July, thanks to the force of the plague and the fear that led the healthy to abandon the sick, more than one hundred thousand people died within the walls of Florence. Before the deaths began, who would have imagined the city even held so many people? Oh, how many great palazzi, how many lovely houses, how many noble dwellings once full of families, of lords and ladies, were emptied down to the lowest servant? Oh, how many memorable pedigrees, ample estates and renowned fortunes were left without a worthy heir? How many valiant men, lovely ladies and handsome youths whom even Galen, Hippocrates and Aesculapius would have judged to be in perfect health, dined with their family, companions and friends in the morning and then in the evening with their ancestors in the other world?

Supporting Question 1	
Featured Source	**Source B:** The Black Death in Tournai, Belgium (1348)

A miniature from a 14th century Belgium manuscript showing people burying the dead from the Black Death in Tournai, Belgium (1348) . This is one of the earliest known images of the plague. Drawn in 1349, during the time of the Black Death, it shows people carrying coffins of those who died of the illness in Tournai, a city in what is now Belgium.

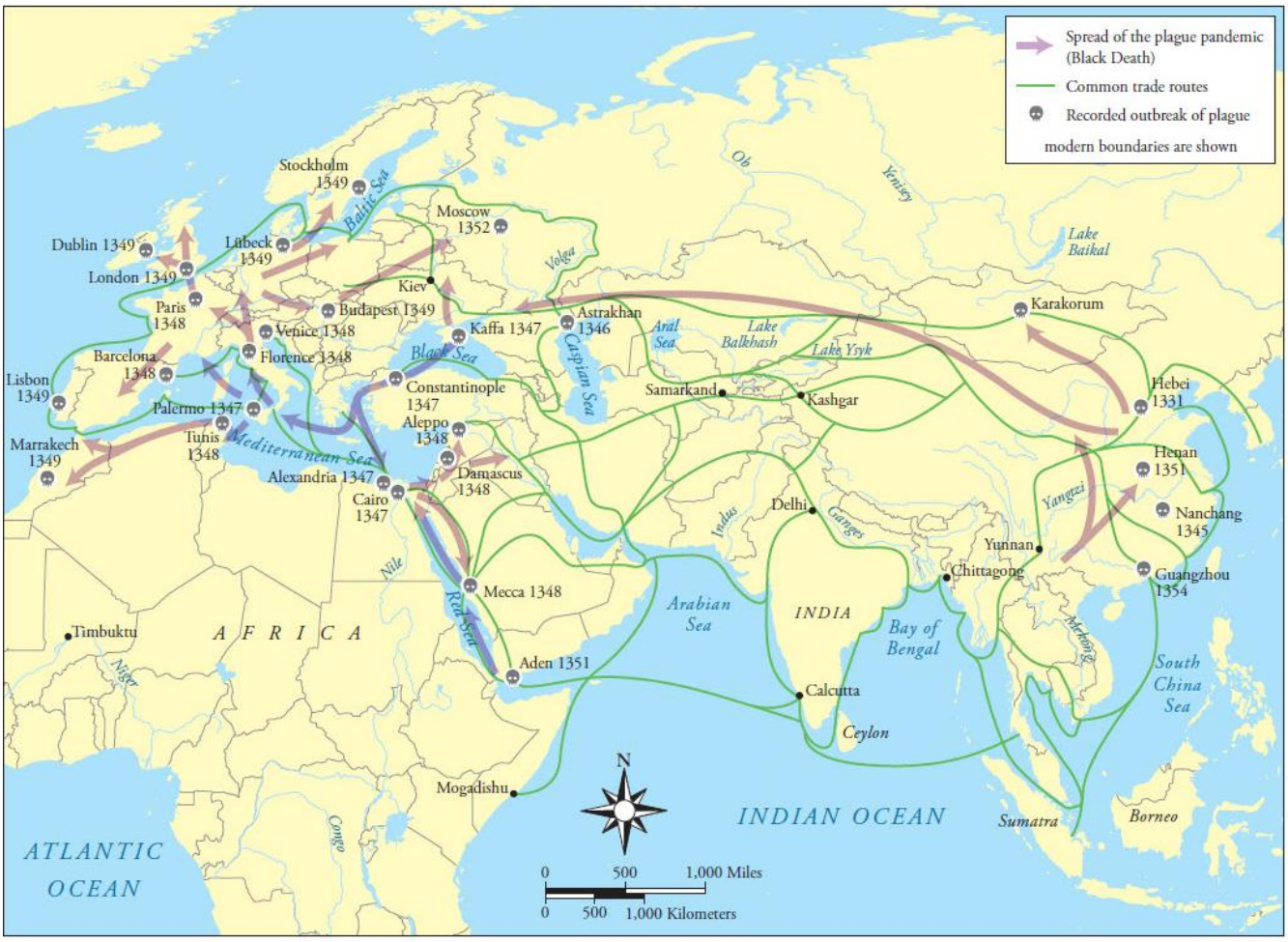
Supporting Question 2	
Featured Source	**Source A:** Center for Disease Control and Prevention, illustration of plague cycle, *Plague Ecology*, 2012



Public domain. Center for Disease Control and Prevention. National Center for Zoonotic Infectious Diseases. Division of Vector-Borne Diseases. http://www.cdc.gov/plague/transmission/index.html.

Supporting Question 2

Featured Source	**Source B:** Maps depicting the spread of the Black Death, 2015



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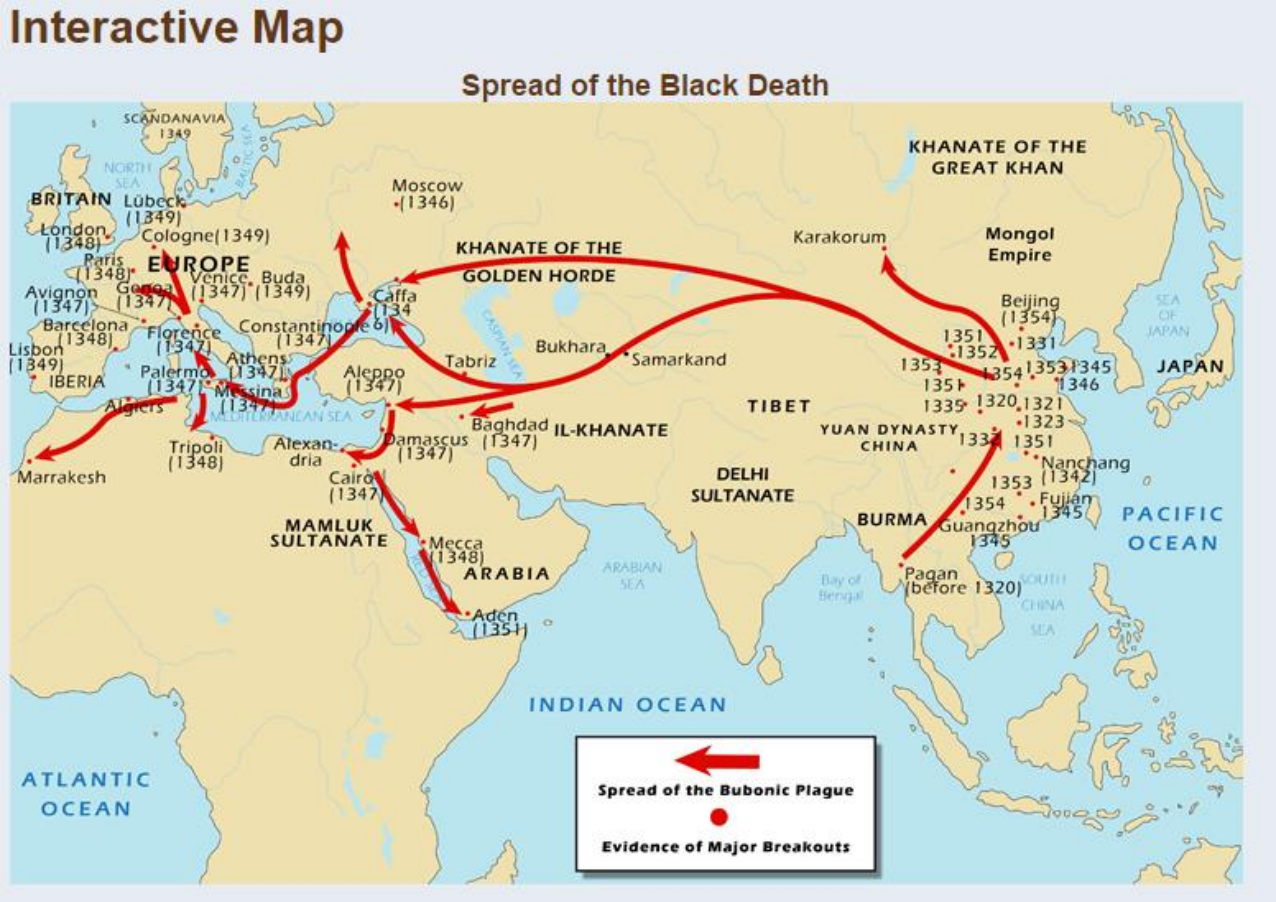

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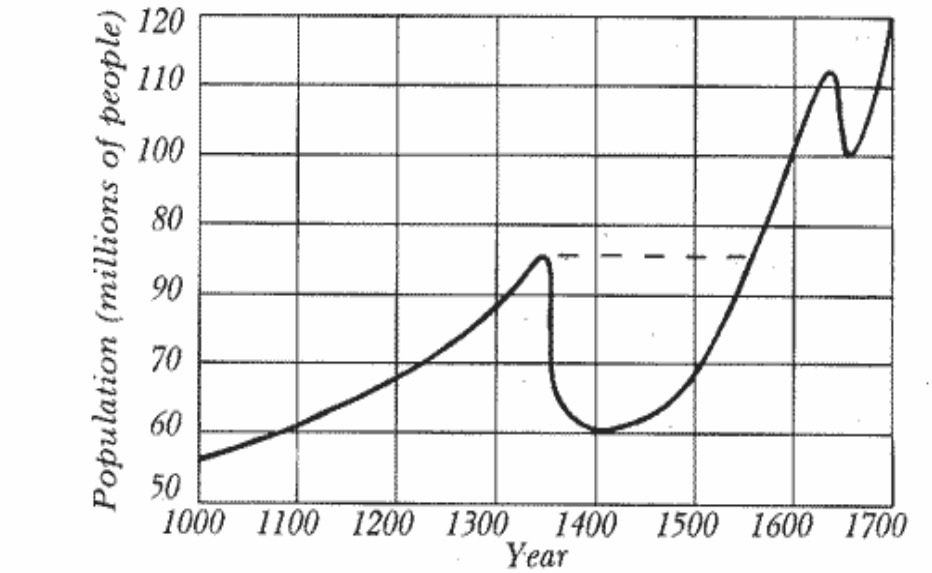
http://chssp.ucdavis.edu/programs/historyblueprint/maps/medieval-map#blackdeathanch.

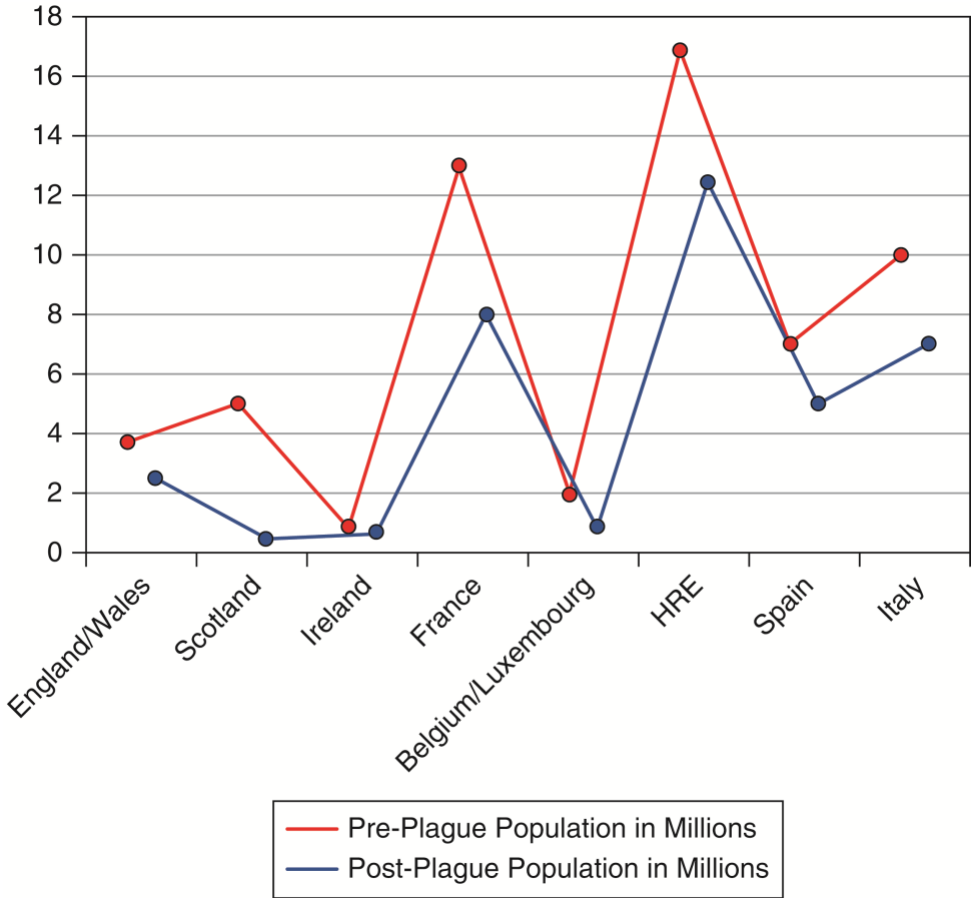
Supporting Question 3	
Featured Source	**Source A:** Data bank: Bubonic plague statistics



Recovery of European population following the plagues of 1347 was only two hundred years—an insignificant moment in the evolutionary time scale. (After Langer 1964; author)

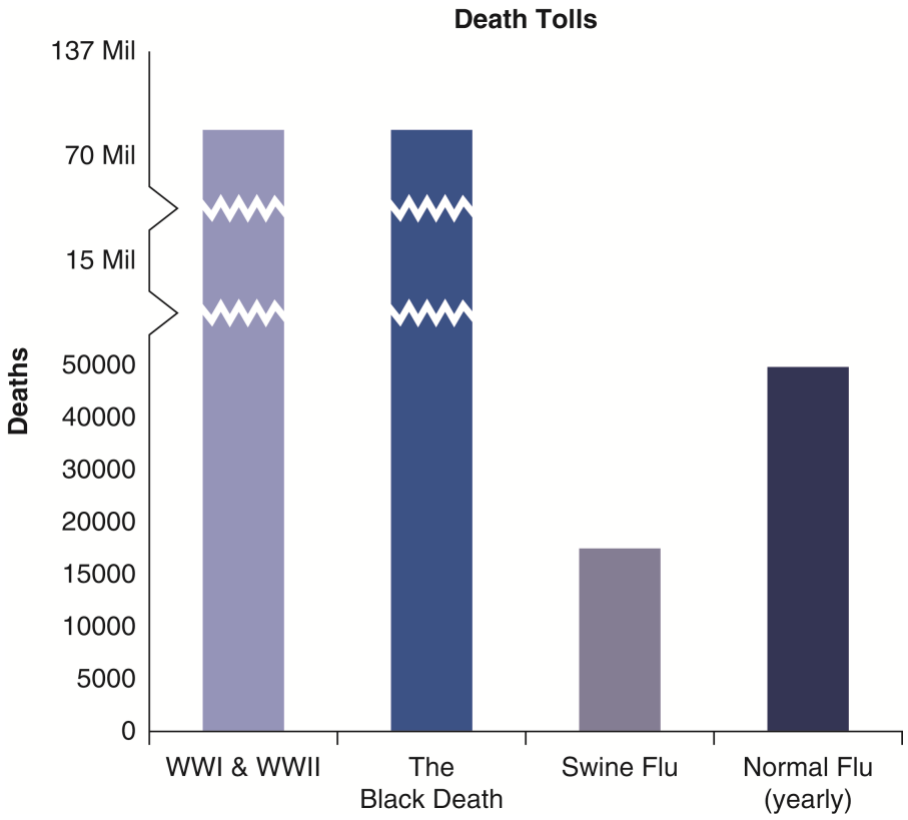
Graphic 1: William L. Langer chart depicting the population of Europe before, during, and after the Black Death, "The Black Death," *Scientific American,* February 1, 1964.

William L. Langer "The Black Death" *Scientific American*, February 1, 1964. Reproduced with permission. Copyright (C) 1964 Scientific American, Inc. All rights reserved.



Graphic 2: Chart depicting the population of selected European countries before, during, and after the Black Death, 2015.

Created for the New York K-12 Social Studies Toolkit based on http://thebubonicplague.wikispaces.com/Bubonic+Plague.



Graphic 3: Chart depicting deaths caused by the Black Death compared to other catastrophic events, 2015.

Created for the New York Social Studies Toolkit based on (http://www.history.com/topics/black-death), (Mougel, Nadege. Reperes, World War I Casualties. 2011: http://www.nationalww2museum.org/learn/education/for-students/ww2-history/ww2-by-the-numbers/world-wide-deaths.html), (http://www.who.int/csr/don/2010_08_06/en/), and (http://www.cdc.gov/flu/about/qa/disease.htm).

Supporting Question 4	
Featured Source	**Source B:** Hartmann Schedel, illustration of the persecution of Jews during the Black Death, *The Nuremberg Chronicle,* 1493

NOTE: In the Middle Ages, people had no knowledge of germs, and most rarely washed their hands or bathed. In cities they were often cramped in close quarters. However, Jews were often forced to live on the outskirts of town. Their religion required exceptional cleanliness. This requirement meant that they got sick far less frequently than their non-Jewish peers. Many townsfolk then assumed that Jews were poisoning their wells. They began to destroy Jewish communities and murder thousands of Jewish people during plague outbreaks.

Detail from Hartmann Schedel, *Liber cronicarum cum figuris et ymaginibus ab inicio mundi* [the *Nuremberg Chronicle*] (Nuremberg, 1493), fo. 230^{v}, Sp. Coll. Euing BD9-a2. By permission of the Librarian, Department of Special Collections, Glasgow University Library.

Used by permission of University of Glasgow Library, Special Collections.

Supporting Question 4	
Featured Source	**Source C:** Leonard W. Courie, description of the effects of the plague, *Social and Economic Effects of the Plague*, 1972

NOTE: This text is modified from the original.

The plague had many effects. People abandoned their friends and family. They even fled cities and shut themselves off from the world. Some people stopped working. So many people died, they even stopped having funerals. Some fought the plague with prayer and by living a more religious life. However, many priests died and prayers went unanswered. Overall, people's faith in religion decreased during the Black Death.

The economy was affected as well. Inflation rose and productivity declined. It was difficult (and dangerous) to engage in trade and to produce goods. That caused the price of goods to rise. There were not enough replacement workers to take over from workers who died. Serfs were no longer tied to one master. A serf who left the land would be instantly hired by another lord. The lords had to make changes in order to keep their estates. Because of the lack of workers, wages (what people earned) actually went up. In general, wages outpaced prices and the standard of living was increased.

As the feudal system began to crumble, new distinctions among people emerged. The fashions of the nobility became more extravagant in order to emphasize their social standing. The peasants were more empowered. They even began to revolt when the nobles attempted to resist the changes brought about by the Black Death. In 1358, the peasantry of northern France rioted. From 1378 to 1381, a series of rebellions challenged the feudal system. The social and economic structure of Europe was drastically changed as a result of the Black Death.

From Decameron Web, Department of Italian Studies, Brown University, Virtual Humanities Lab. Used with permission.
http://www.brown.edu/Departments/Italian_Studies/dweb/plague/effects/social.php