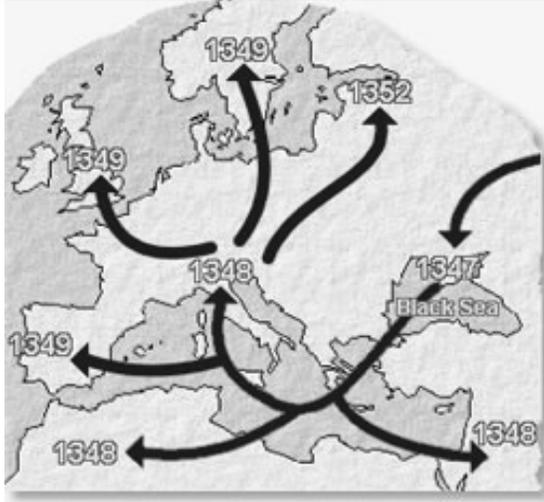


# The Black Plague - An Epidemic Simulation

Name \_\_\_\_\_

The "Black Plague", also known as the bubonic plague, reached Italy, from the east, in the spring of 1348 and spread through Europe over the next three years, killing between 25 and 50% of the population. Its victims died within 3-7 days after the appearance of tumors the size of an egg or apple on the skin.



The Plague's Progress

Giovanni Goccaccio lived through the plague as it ravaged his hometown of Florence, Italy in 1348. He wrote the following description of the effects of the epidemic:

"The violence of this disease was such that the sick communicated it to the healthy who came near them, just as a fire catches anything dry or oily near it. To speak to or go near the sick brought infection and a common death to the living; and moreover, to touch the clothes or anything else the sick had touched or worn gave the disease to the person touching.

"One citizen avoided another, hardly any neighbor troubled about others . . . such terror was struck into the hearts of men and women by this calamity, that brother abandoned brother . . . and very often the wife her husband. What is even worse and nearly incredible is that fathers and mothers refused to see and tend their children, as if they had not been theirs.

"In this suffering and misery of our city, the authority of human and divine laws almost disappeared, for like other men, the ministers and the executors of the laws were all dead or sick or shut up with their families, so that no duties were carried out. Every man was therefore able to do as he pleased.

"Dead bodies filled every corner. Most of them were treated in the same manner by the survivors, who were more concerned to get rid of their rotting bodies than moved by charity towards the dead."

"The Black Death, 1348," EyeWitness to History, [www.eyewitnesstohistory.com](http://www.eyewitnesstohistory.com) (2001).



What are you thinking?

Imagine that YOU are traveling to a variety of towns and villages on a pilgrimage (by land) or a trading voyage (by sea) during the month of June in 1349 A.D.. The plague was spread by these trading and pilgrim routes, as travelers went from town to town. Follow these directions, in order, as you travel:

1. Select one of the journeys below. Circle or highlight your chosen trip.

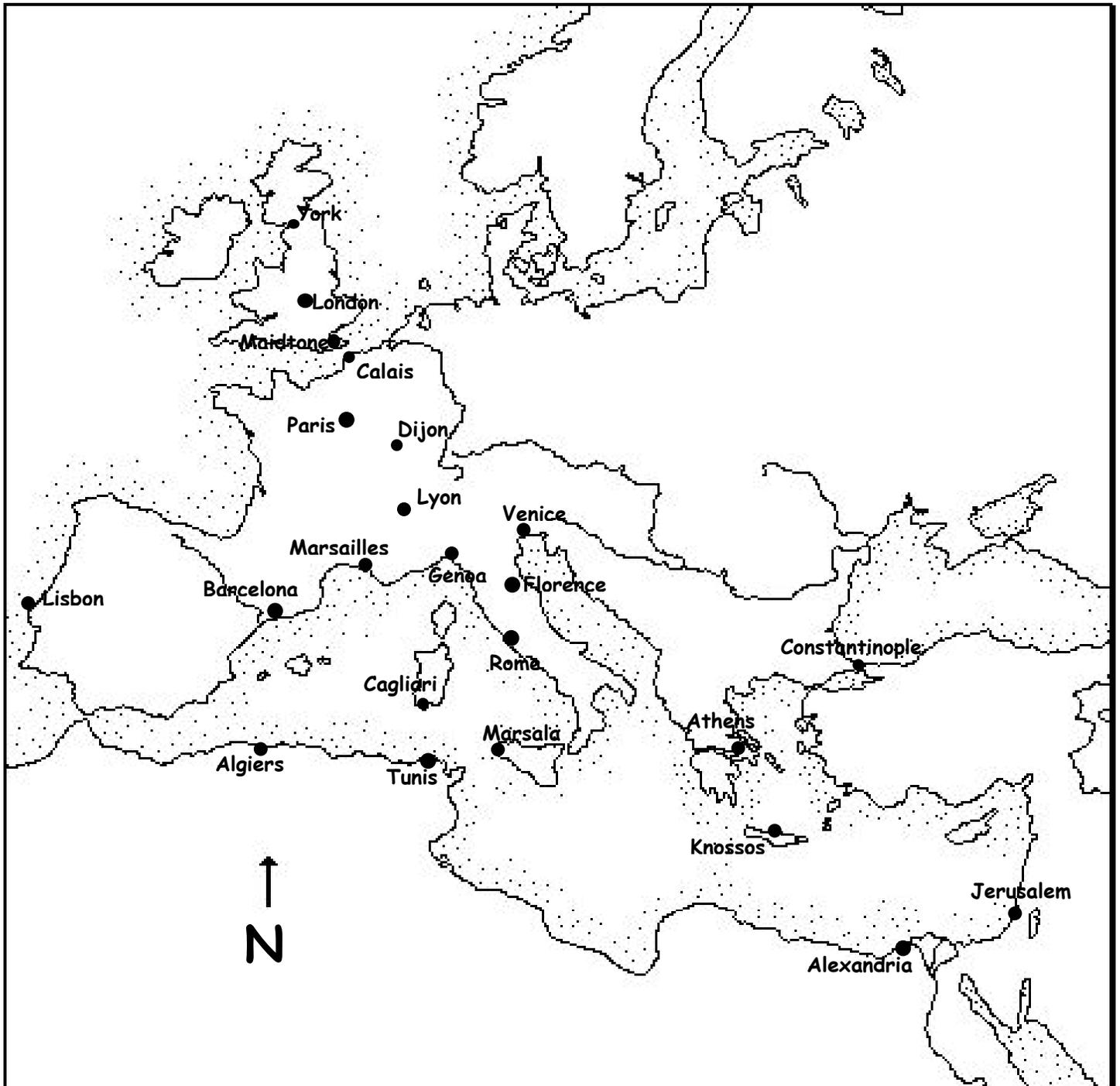
<p style="text-align: center;"><b>Trade Voyage #1</b></p> <p>Venice to London via boat through the Straits of Gibraltar</p> <ol style="list-style-type: none"> <li>1. Florence, Italy</li> <li>2. Marsala (on Sicily)</li> <li>3. Rome</li> <li>4. Marseille, France</li> <li>5. Barcelona, Spain</li> <li>6. Lisbon, Portugal</li> <li>7. Calais, France</li> <li>8. London, England</li> </ol>	<p style="text-align: center;"><b>Trade Voyage #2</b></p> <p>Paris to Constantinople by boat through the Straits of Gibraltar and overland</p> <ol style="list-style-type: none"> <li>1. Calais, France</li> <li>2. Lisbon</li> <li>3. Algiers</li> <li>4. Tunis</li> <li>5. Marsala (on Sicily)</li> <li>6. Knossos (on Crete)</li> <li>7. Athens</li> <li>8. Constantinople</li> </ol>	<p style="text-align: center;"><b>Trade Voyage #3</b></p> <p>Rome to London and back by boat through the Straits of Gibraltar</p> <ol style="list-style-type: none"> <li>1. Marseille</li> <li>2. Barcelona</li> <li>3. Lisbon</li> <li>4. London</li> <li>5. Lisbon</li> <li>6. Barcelona</li> <li>7. Marseille</li> <li>8. Rome</li> </ol>				
<p style="text-align: center;"><b>Pilgrimage #1</b></p> <p>York to Rome across the English Channel and overland</p> <table style="width: 100%; border: none;"> <tbody> <tr> <td style="width: 50%; border: none;"> <ol style="list-style-type: none"> <li>1. London</li> <li>2. Maidstone</li> <li>3. Calais</li> <li>4. Paris</li> </ol> </td> <td style="width: 50%; border: none;"> <ol style="list-style-type: none"> <li>5. Dijon, France</li> <li>6. Lyon, France</li> <li>7. Genoa, Italy</li> <li>8. Rome, Italy</li> </ol> </td> </tr> </tbody> </table>		<ol style="list-style-type: none"> <li>1. London</li> <li>2. Maidstone</li> <li>3. Calais</li> <li>4. Paris</li> </ol>	<ol style="list-style-type: none"> <li>5. Dijon, France</li> <li>6. Lyon, France</li> <li>7. Genoa, Italy</li> <li>8. Rome, Italy</li> </ol>	<p style="text-align: center;"><b>Pilgrimage #2</b></p> <p>Dijon to Jerusalem overland to Florence, then by boat through the Adriatic Sea</p> <table style="width: 100%; border: none;"> <tbody> <tr> <td style="width: 50%; border: none;"> <ol style="list-style-type: none"> <li>1. Lyon</li> <li>2. Genoa</li> <li>3. Rome</li> <li>4. Florence</li> </ol> </td> <td style="width: 50%; border: none;"> <ol style="list-style-type: none"> <li>5. Athens, Greece</li> <li>6. Knossos, Crete</li> <li>7. Alexandria, Egypt</li> <li>8. Jerusalem</li> </ol> </td> </tr> </tbody> </table>	<ol style="list-style-type: none"> <li>1. Lyon</li> <li>2. Genoa</li> <li>3. Rome</li> <li>4. Florence</li> </ol>	<ol style="list-style-type: none"> <li>5. Athens, Greece</li> <li>6. Knossos, Crete</li> <li>7. Alexandria, Egypt</li> <li>8. Jerusalem</li> </ol>
<ol style="list-style-type: none"> <li>1. London</li> <li>2. Maidstone</li> <li>3. Calais</li> <li>4. Paris</li> </ol>	<ol style="list-style-type: none"> <li>5. Dijon, France</li> <li>6. Lyon, France</li> <li>7. Genoa, Italy</li> <li>8. Rome, Italy</li> </ol>					
<ol style="list-style-type: none"> <li>1. Lyon</li> <li>2. Genoa</li> <li>3. Rome</li> <li>4. Florence</li> </ol>	<ol style="list-style-type: none"> <li>5. Athens, Greece</li> <li>6. Knossos, Crete</li> <li>7. Alexandria, Egypt</li> <li>8. Jerusalem</li> </ol>					

2. You are either a lesser noble or a church man or woman, so you have been gifted with an education. Using your rare skill at writing, you will keep a log, or diary, in which you record the details of your travels. Before embarking on your voyage, copy your itinerary, or a list of places you will visit, into your log.
3. When you visit a town or village, you will roll ONE DIE to see how many nights you will spend in that particular place. Several of the villages will have just begun to show evidence of the plague. Draw out of the bag (representing your lodging and meals) **as many beans as the number of nights you are staying**. If you get a bean that is **red**, you have contracted the plague bacterium. If you get a bean which is not a solid color but is **mottled**, you have contracted cholera from the water. Only a few towns are having outbreaks of cholera, mostly those which are by rivers, but it is also very deadly. If you draw a **white** bean, you will remain healthy. Replace the beans you have drawn into the container for the next traveler.
4. Make an entry in your log telling where you are, how long you plan to stay, and anything else you wish to record. Then, you may continue on your journey to the next town on your itinerary. Assume that it takes 2 days to travel to your next stop. **Mark your journey on the map below with a blue line**. Repeat #3 and #4 until you contract a disease or reach your destination.
5. **If you DO contract either the plague or cholera**, before you continue, you need to:
  - a. get a skull to tape on yourself,
  - b. mark on your map where you got the plague (red dot) or cholera (green dot),
  - c. put all of your beans back into the bag, and
  - d. go to the next two towns. **DON'T** draw any beans in these towns.

- e. In the first town, roll the die. If you roll a 1, 2, or 3, get ONE plague or cholera bean from your teacher and put it in that town's bag. If you roll 4, 5, or 6, get TWO beans and put them into that town's bag.
- f. Go on to the second town. Get a skull to put onto the bag of the second town, if there isn't already one on that bag. This shows that you likely died in this town.
- g. Put a black X on your map on the second town to indicate your death.

6. Return to your seat. Record the total number of days your journey took in your log.

## Map of My Journey



Log Book of my Journey to \_\_\_\_\_  
by \_\_\_\_\_

Date: June 1, 1349	Town:
<p style="text-align: right;">Length of Stay: ____ Days</p>	

Date:	Town:
<p style="text-align: right;">Length of Stay: ____ Days</p>	

Date:	Town:
Length of Stay: ____ Days	
Date:	Town:
Length of Stay: ____ Days	
Date:	Town:
Length of Stay: ____ Days	

<b>Date:</b>	<b>Town:</b>
<p style="text-align: right;">Length of Stay: ____ Days</p>	
<b>Date:</b>	<b>Town:</b>
<p style="text-align: right;">Length of Stay: ____ Days</p>	
<b>Date:</b>	<b>Town:</b>
<p style="text-align: right;">Length of Stay: ____ Days</p>	
<b>Total Length of Journey (in # of days):</b>	

