

**Engagement**

**Inquiry  
and  
Investigation**

**Definition**

**Resolution**

**Debriefing**

PROBLEM STUDIES FOR ONE

# Plague!

Parent Manual

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# Problem Narrative: The Storyline for *Plague!*

*Ideally, the direction of a problem study unit is decided through the questions a child asks. To some extent, this is made manageable by the structure of the opening scenario presented during Problem Engagement. The opening scenario is carefully designed to point the child in the direction of some predictable questions. For example, it would be hard to avoid asking questions about how the plague spreads or how people could avoid becoming infected. The narrative that follows and the lesson plans in this unit respond to these more predictable questions and address other desirable learning outcomes. They also provide a helpful guide for parents new to inquiry-based learning. Parents who are familiar with inquiry-based learning are encouraged to use this unit as a framework, selecting lessons that fit the child's questions (and, as above, many should fit).*

## **Problem Engagement**

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The unit begins with an introduction to the medieval era. Your child analyzes a picture that details many different aspects of medieval village life. He or she is then provided with brief descriptions of life at home, at church, and at the market and creates a picture (or a collage or model) of one of these.

### ***Content Your Child Should Encounter***

- Medieval towns were crowded, wet, and unsanitary.
- Understanding of disease was crude compared to today; methods of healing depended on herbs and other natural remedies.
- Cities and towns were structured in a strict hierarchy. Manor lords and priests were at the top of the hierarchy, followed by freemen, who made up the merchant class. Peasants and serfs were at the bottom of the hierarchy. Most serfs were indentured servants, growing food and grain for the manor.
- The Church was a dominant influence on daily activities and wielded influence on beliefs about how and why people became ill.
- Towns had many communal resources, typically paid for by the manor lord, like a central bakery for baking bread.
- The conditions in medieval towns left their inhabitants vulnerable to numerous threats.

In the midst of his or her work, your child learns that he or she is a weaver and also, more importantly, a member of the town's Council of Elders, the governing body that develops laws and policies that are then voted on by the larger Council of the People. This is your child's primary stakeholder role for the problem.

The problem begins in earnest when your child learns that a devastating disease is approaching the town. A meeting of the Council of Elders is called to discuss possible actions to take to protect the people of the town. At the meeting, a graphic description of the disease is provided by a traveling merchant, who has seen people infected with the pestilence. The merchant describes the gruesome symptoms and the horrible, painful death brought about by the disease. Beyond that, the merchant describes how massive numbers of deaths change the survivors, who must contend with towns that have been stripped of meaning or substance.

The head of the Council then charges the Elders to come up with a plan that will help the town avoid the dire effects of the disease. This leads your child to complete the Learning Issues Board. When the list

of questions in the Learning Issues column seems complete, help your child select the three questions that need to be answered first; these become the basis for the first wave of research.

### ***Content Your Child Should Encounter***

- The plague is coming up the boot of Italy; it probably came to Italy from Africa.
- The disease seems to be moving from town to town via trade routes.
- People who get the plague suffer from gruesome, painful symptoms.
- The disease is highly contagious.
- Virtually everyone infected dies within five days.
- Thousands in large cities have died, including half the population of Florence, a prominent nearby city. Cities cease to function as people in all sorts of crucial roles die.
- People who do not fall victim to the disease are filled with fear, often turning on each other in an attempt to stay healthy.

## **Inquiry and Investigation**

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During Inquiry and Investigation, your child seeks the answers to the questions on the Learning Issues Board. The Resource Book for *Plague!* contains primary resource materials for research; books and websites are included in Appendix A. Structured activities included in this section help your child gather, organize, and analyze the necessary information.

- Your child will use a risk map to assess the level of risk the town faces, a combination of the likelihood of the disease coming to the town and its impact on the town if it does arrive.
- Using a map of medieval Italy, your child charts the path of the plague and estimates when the disease might arrive in Lucca.
- Your child participates in a simulation of how disease spreads and considers the consequences of having a town lose members vital to government, business, education, religion, and family.
- The Comparing the Doctor and the Priest Venn diagram helps your child compare information from two different sources and identify where these two important perspectives agree and where they differ.

### ***Content Your Child Should Encounter***

- The plague travels primarily via three prominent trade routes.
- Travel time along the three trade routes varies according to mode of travel (sea or land), as well as distance.
- Religion and medicine have differing perspectives on the cause and cure of the disease.
- Some people take extreme measures to repent for their sins in an attempt to avoid infection.
- Medieval medicine emphasizes the use of herbs and other natural remedies.
- Medical interpretation incorporates some of the religious point of view. The Church limits some forms of medical research.
- The direct impact of the disease is physical illness; however, because the disease is highly contagious and frequently fatal, it also has indirect impacts on social structures.

## Problem Definition

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At this point, your child has a sense of the rate the plague is spreading across the continent and within towns. He or she realizes that medieval doctors do not know how the disease is contracted or how to cure it. However, your child has not yet had a chance to put the information together and create a concrete problem definition.

Your child uses a circle map to think about both direct and indirect ramifications of the widespread death rate associated with the plague. At the end of the lesson, he or she is ready to identify the core issue at the heart of the problem and the constraints, either self-imposed or imposed from the outside, that will limit the range of solutions under consideration. When issues and constraints are combined, the problem definition takes the format:

*How can we (issue) in a way that (constraints)?*

After your child creates a definition of the problem, a messenger arrives with the *Ordinances of Sanitation in a Time of Mortality*, a set of regulations adopted by the Council of People in Pistoia to ward off the plague. Your child is assigned a few ordinances to interpret; he or she must work through the medieval phrasing to understand the meaning of each ordinance. Your child then assesses the value of that ordinance for Lucca.

### **Content Your Child Should Encounter**

- The plague could change every facet of life in a medieval town.
- Widespread death caused by the plague affects the economic, political, and social health of a town.
- Extreme situations, like plague, test the strength of personal values.
- Problems are solved in specific contexts; the context is created by time, place, and values.
- Problems are comprised of both issues and constraints.

## Problem Resolution

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Your child weighs the merits of each part of the *Ordinances of Sanitation in a Time of Mortality* against the priorities he or she created for the problem definition, considering which of the ordinances should be accepted, rejected, or amended. The result of this deliberation is a core set of recommendations for Lucca. To this core your child adds original ideas, based on what he or she knows about the problem and the common wisdom of the era. Finally, your child presents his or her recommendations to the Council of the People, the governmental body that can transform the recommendations into law.

### **Content Your Child Should Encounters**

- Even in medieval times, towns came up with rules and plans to deal with epidemic situations.
- In the absence of a cure, solutions must focus on reducing vulnerability.
- Closing the doors of the town will be nearly impossible because of the need for communication, goods, and services.

Having done his or her work as a member of the Council of Elders, your child is asked what plan to implement in order to protect his or her own family.

## Problem Debriefing

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During Problem Debriefing, your child has a chance to review his or her work and compare what happened in the unit to the historical record describing what actually transpired. To aid in this comparison, you can provide a quick mini-lesson about the plague or show a video such as *Scourge of the Black Death*, produced by the History Channel, to see the devastation caused by the plague throughout Europe and the solutions attempted by people in many different towns and cities. If your child's interest has been piqued by the unit, you can help him or her continue to investigate the plague or the Middle Ages in many different ways:

- **Social Studies.** A natural follow-up to this unit is to continue chronologically, discussing how the dramatic reduction in population was actually a catalyst to numerous developments in education, technology, and government. There is also a long history of epidemics that could be introduced as parallels to the Black Death, including recurring plague outbreaks in Europe, the Yellow Fever epidemics in the U.S., or the recent outbreak of cholera in Haiti.
- **Language Arts.** Numerous novelists have written about the plague era. A list of some of these novels are included in the Resources section of this manual (see Appendix A).
- **Science.** Your child should be informed about the true cause and cure of the plague. He or she may find it interesting to know that prairie dogs and black-footed ferrets are vulnerable to the plague and that several contemporary outbreaks have devastated populations of these animals in the Great Plains of the U.S.
- **Mathematics.** Exploration into probability that begins in the What Could Happen? lesson can be continued after the unit. Data gathered during the activity can be used for additional analysis, or your child can use the Pandemic Applet provided by the National Council of Teachers of Mathematics at [http://nctm.org/uploadedFiles/Lessons\\_and\\_Resources/Math\\_Here\\_and\\_Now/Pandemics/6\\_6v8.swf](http://nctm.org/uploadedFiles/Lessons_and_Resources/Math_Here_and_Now/Pandemics/6_6v8.swf).




# Problem Engagement

*Welcome to the Middle Ages*

## Goals:

- Become familiar with aspects of daily life in the Middle Ages.
- Describe elements of culture in the context of medieval Italy.
- Engage imagination.

**Generalization:** Vulnerability increases the potential impact of risk. Features of the environment affect the likelihood of risk.

 <b>Materials</b>	 <b>Problem Log</b>	 <b>Parent Reference</b>
<p style="text-align: center;"><b>Included in Unit</b></p> <ul style="list-style-type: none"> <li>• A Picture of Town</li> <li>• Life in Town</li> <li>• Welcome to the Middle Ages</li> <li>• Sketch Instructions</li> <li>• Sketch Page</li> <li>• How Are We Vulnerable?</li> </ul> <p style="text-align: center;"><b>Additional Materials</b></p> <ul style="list-style-type: none"> <li>• Supplementary resources (Appendix A)</li> <li>• Resource Book</li> <li>• Video about medieval times focusing on village lifestyle</li> <li>• Materials to make a sketch of one aspect of a medieval town: crayons, colored pencils, markers, etc. (or materials to make a collage or model instead)</li> <li>• Medieval art and music</li> </ul>	<ul style="list-style-type: none"> <li>• A Picture of Town</li> <li>• Life in Town</li> <li>• Welcome to the Middle Ages</li> <li>• Sketch Instructions</li> <li>• Sketch Page</li> <li>• How Are We Vulnerable?</li> </ul>	

## Summary:

Your child begins the process of “transforming” into a villager in the year 1348. She analyzes a detailed picture of a medieval village and creates a sketch (or collage or model) depicting one aspect of medieval life.

## Things to Do Before Instruction:

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1. Gather the materials your child will need to create her sketch (or collage or model).
2. Add to the medieval feel of the learning environment by hanging reprints of medieval art around the room (several good examples are provided in the Resource Book and are available to download) and by playing medieval music (which can be found through a simple internet search).
3. Gather together some of the resources from the Resource Book and Appendix A in a folder or on a webquest for your child to use for research about the town.
4. Find and prepare a video that depicts life in the Middle Ages (one good resource is available at the Annenberg Learner website, *The Western Experience*, episode 21, “Common Life in the Middle Ages,” [www.learner.org/resources/series58.html](http://www.learner.org/resources/series58.html)).

## Things to Do During Instruction:

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1. If possible, show a brief segment of a video that depicts life in the Middle Ages. Have your child take notes relevant to life in a medieval town.
2. Explain to your child that for the next few days, she will be entering the world of a medieval town. Have her turn to the picture of a medieval town in her Problem Log, and ask her to complete the exercise that accompanies it, identifying as many people and roles as possible (builder, miller, butcher, priest, sheepherder, peasant, traveling merchant, lord of the manor, etc.). Ask questions to help reveal some of the complications of living in such a rustic setting (see Key Questions). Discuss the importance of being able to understand the different dimensions of the town: how people lived, worked, worshipped, etc. (A color version of the picture of the town is available to download; it may be easier for your child to make out details of the image if it is printed in color and provided to her that way.)

### Key Questions:

- *Look at what is happening upstream and downstream in the river that runs through the middle of the town. What are some implications of what you see happening?*
- *What is being put into the water? What is being put into the streets?*
- *What are the implications of living in such close quarters?*
- *Which buildings are made of wood and mortar? Which are made of stone? What does that say about the importance of different institutions?*
- *How many different kinds of animals do you see? What do you suppose happens when animals and people live so closely together?*
- *The picture portrays a sunny day. What do you suppose happens in this town when it rains? Think of as many changes as possible.*

3. Let your child know that this town will be “home” for the next few weeks. Briefly explain that you will be looking to her to take more responsibility for determining the appropriate directions for her learning about what is going on in her town.
4. Have your child turn to the readings about life in her town in the Middle Ages. Give her time to read the different aspects of medieval life, and briefly discuss them with her. Allow her an opportunity to conduct further research into the structure of medieval towns, if desired. Enough information is included with this lesson for your child to create a sketch (or collage or model)

depicting one aspect of her medieval town; however, resources are included in Appendix A for parents who want their child to conduct additional research.

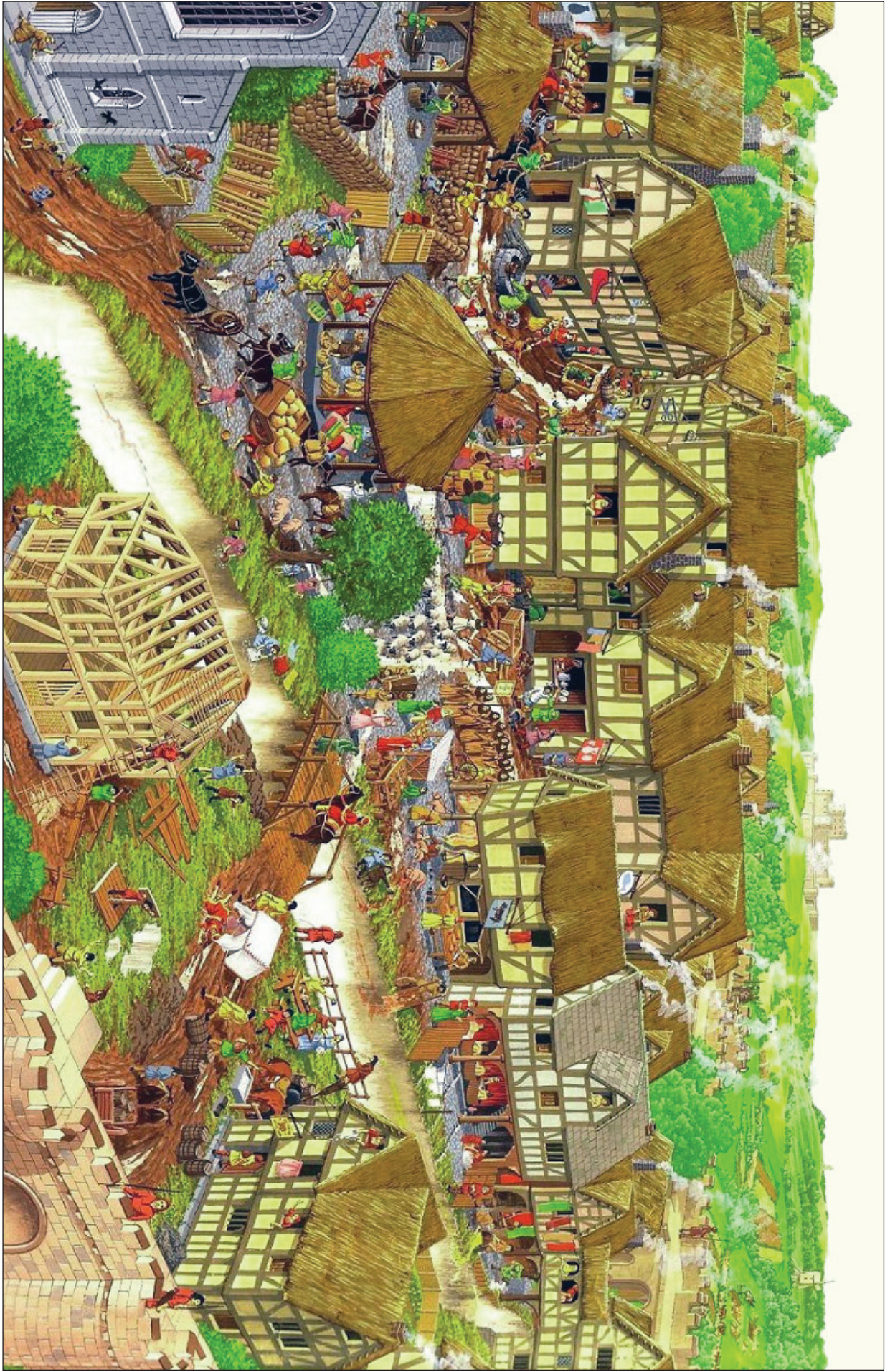
5. Ask your child to choose one aspect of medieval life described in the readings to depict in a sketch (or collage or model). Provide materials as needed. This could either be a brief activity or an ongoing part of the unit.
6. Direct your child to the How Are We Vulnerable? page in her Problem Log, and briefly discuss the concept of vulnerability. Then have her complete the exercise.

*Notes: It would be easy to alter this activity from having your child draw a two-dimensional town to having her build a three-dimensional town with cardboard, Legos, blocks, etc. Lego kits of medieval towns are available but expensive. Alternatives for a more extensive project are cardboard villages such as Make This Medieval Village, available at a reduced cost from Alibris ([www.alibris.com/booksearch?browse=0&title=make+this+medieval+village&mtype=B](http://www.alibris.com/booksearch?browse=0&title=make+this+medieval+village&mtype=B)) or three-dimensional dioramas as depicted in the YouTube video Build a Medieval Village ([www.youtube.com/watch?v=-kvWxHxI5qc](http://www.youtube.com/watch?v=-kvWxHxI5qc)).*

*Anno's Journey, a beautifully detailed story without words by Mitsumasa Anno, is a wonderful resource for a depiction of medieval life and the evolution of culture. Anno embeds an amazing amount of information, art, cultural references, and occasionally humor into his meticulously rendered drawings.*



# A Picture of Town



## Life in Town

Take a close look at the picture of the medieval town. List at least 10 people, and describe: (1) what they are doing and (2) how their activities might affect someone else in town.

1. \_\_\_\_\_  
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2. \_\_\_\_\_  
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3. \_\_\_\_\_  
\_\_\_\_\_
4. \_\_\_\_\_  
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5. \_\_\_\_\_  
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9. \_\_\_\_\_  
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10. \_\_\_\_\_  
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## Welcome to the Middle Ages

The year is 1348, and you are living in Lucca, a city near the city-state of Florence. A dedicated member of your village, you have just been appointed to the Council of Elders. You were selected from a larger group called the Council of the People. You take great pride in this. While the hundreds of members of the Council of People *pass* laws, the smaller and more prestigious Council of Elders *writes* laws and makes suggestions when issues arise that need action. Being selected as a part of the Council of Elders means the people of your town have confidence in your ability to solve problems and settle disputes.

It's time for you to get to know your town! Each of the short readings that follows describes something about life in 1348. Read the descriptions, and follow the instructions to complete the assignment.

### Your Place in Your Medieval Town

You feel lucky to be a freeman in this village. Your father was a serf; he farmed for the manor lord most days and grew food for his family on a small corner of the land when he could. Being a serf was little more than slavery. You remember spending hours gathering acres and acres of wheat as a child and riding in your father's cart as he took the harvest to the manor lord. It was a hard living.

Your father wanted you to have a better life, so when you were old enough, he made you an apprentice to a local weaver. Instead of gathering wheat, you carded endless skeins of thread. But in the end, it was worth it because now you are a member of the Guild of Weavers. You own your own shop and live in the city instead of the country. You look forward to the occasional trips you make to Pistoia and Florence to sell your fabric.

You, your spouse, and your three children now live in a two-room house. This is a step up in the world compared to the hovel in the country, but sometimes you miss the open space of the countryside. And as much as you disliked the smell of the farms, you've discovered that the smell of waste and unbathed people in close quarters is just as rank.

You always try to buy food from the free serfs, since you understand that their life is hard. You still pay taxes to the manor lord to make sure you have the protection of his warriors, but that is better than spending your life doing his bidding. You look up at the manor house, with its imposing stone walls and gated courtyard. Life in there must be much different! You've never been to the manor, but your neighbor got to go inside once to make a delivery of pheasants for the lord's dinner. Your neighbor came back filled with stories of goblets made of glass, gold plates, and fireplaces in every room. You wonder how the stories could be true.

## Life at Home in Your Medieval Town

Remember that the year is 1348; the place is Lucca. You have just finished dinner. Now you're scattering the remains of dinner on the rush mat on the floor. The dogs enjoy them, and you know that the rats that dig through the rushes will eat what the dogs don't. Soon it will be time to take the waste bucket out to the street—good to get that out of the house! Things get pretty smelly when five people live in two rooms. But you don't think it's unusual—most people you know live pretty much the same way.

Your youngest son is happily trying to chase a chicken outside, but your middle child has hurt his arm. He cut it playing outside. Your wife applied some herbs, but now there is pus coming out of the wound. Your son is lying on his bed, which is on a pallet in the same room where you, your spouse, and your two other children sleep. The doctor has just arrived. When you ask what the problem might be and what to do about it, he tells you that your son's blood is dirty. He recommends that you burn sage in the bedroom and that the child eat raw garlic. You hold your son steady as the doctor bleeds the wound to let the bad blood out. As he leaves, he suggests that the family pay an extra tithe, or tax, to the Church and say extra prayers so that no one else falls ill.

After the doctor leaves, you throw the child's bad blood out into the street with the rest of the waste. Then you light the grease lamp and call the children to evening prayers. When prayers are finished, your wife begins the porridge for the next day's breakfast, and you and your sons clean your tools so they are ready for another day of work.

## The Church in Your Medieval Town

You pay taxes to the manor lord so that you receive his protection from outside invasion. However, both you and the manor lord owe fealty, or loyalty, to the Church. From the city of Avignon, Pope Clement VI announces rules that *everyone*—serfs, peasants, freemen, and even noblemen—must follow. You know that the church is affluent and important because it is the only stone building in town—aside from the manor, that is. But unlike the manor, the church is in the center of town.

You participate in more than 40 holy days that the Church observes each year. You also fast—sometimes three days a week. Of course, fasting is easier when food is short—who knows the difference? No meat on Wednesday, Friday, or Saturday, and none at all at Advent and Lent. Only the fine people living in the manor house can afford fish.

The Church also has something to say about why you get sick and what you should do about it. If you broke your arm, the local barber could set it, but if you became really sick, you would have to get help from both a physician and a priest. The priest would likely suggest that you were sick because God was angry at you. He would probably ask that you make an offering to the Church to appease God so that you would get better.

No wonder the Church can afford a stone building! In addition to paying taxes to the lord of the manor, you must pay a large yearly tithe, or tax, to the local priest. Your father had to spend time plowing fields to grow food for the priests, too. Sometimes if you need a special favor from the Church, you give an extra gift, either money or goods, to the priest.

## The Market in Your Medieval Town

In the marketplace, you peruse the available food. Your youngest son is waiting in line to pick up the family loaves of bread—and to pay the manor lord for providing the oven. You walk past the barrels of salted fish, where a half-dozen cats are camped out. You go past the baskets of eggs. Because it is still early spring, you don't even look for vegetables and fruit; they won't appear until the growing season is well under way. As you turn the corner, you see the butcher's stall. The meat looks fairly fresh, unlike last week. There aren't as many flies hovering around; this is a good sign. But the line is long and the supply is short, and you hope that there will be enough for you to buy some. Last week there wasn't.

Yesterday was a fasting day, so today you are looking forward to a good meal with meat! This is one of the biggest changes from your childhood as a serf, when you ate mostly barley—barley mush, barley soup, barley bread. Your parents even drank ale made from barley. No matter how it's prepared, it's hard to hide the taste of barley. Or the taste of pottage, a stew made of oatmeal with beans, onions, and vegetables like turnips. Now that you are better off, you can have meat once a week or maybe meat and chicken in the same week. But recently, food has been scarcer than it used to be, and prices are going up. A meal with meat is more of a luxury. As you stand and wait in line, you distractedly watch a couple of mice gnawing their way through the bags of grain at the next stall.

You hear a rumble and glance up. Rain. Again. Sometimes it seems like it will never stop raining. Oh well; there's nothing to do but stand and hope that there is still some meat left when you get to the head of the line.

## Sketch Instructions

Select either your home, church, or market, and create a sketch depicting what that aspect of life looks like in a medieval village. Use the information provided and the questions below to inspire your drawing.

### *Life at Home*

What does it look like at home in your medieval town? Draw what your house looks like, inside and out. What is around the house? Include four important items from the reading that you think are necessary for your image to be accurate and realistic. Label each.

### *The Church*

How important is the Church in your medieval town? Where is it located? How do priests and bishops interact with townspeople? Create a sketch showing the role of the Church in your medieval town. Include four important items from the reading that you think are necessary for your image to be accurate and realistic. Label each.

### *The Market*

What does the market in your medieval town look like? Where is it located? What kinds of shops are there? How is food sold? Draw the market in your medieval town. Include four important items from the reading that you think are necessary for your image to be accurate and realistic. Label each.

# Sketch Page

## How Are We Vulnerable?

Vulnerability means being unusually exposed to a particular kind of emotional or physical injury. Put another way, being vulnerable increases the risk that something bad will happen.

**Example:** *Poor eyesight makes people vulnerable to bumping into doors because they can't see. However, poor eyesight does not make people vulnerable to hearing loss.*

Sometimes vulnerability is necessary—like when you cross the street (you are vulnerable to being run over) or when you ask a new child in the neighborhood to play (you are vulnerable to having your feelings hurt). Even in cases like these, it's a good idea to know how you're vulnerable and how to minimize possible harm.

*Directions: Think about the medieval town you read about today as you fill in the blanks in the sentences below. Use information from the readings to find aspects of medieval life that cause different types of vulnerability. Example: **Lack of food** makes us vulnerable to **starvation** because **people need food to live**.*

1. \_\_\_\_\_ makes us vulnerable to \_\_\_\_\_ because \_\_\_\_\_.

2. \_\_\_\_\_ makes us vulnerable to \_\_\_\_\_ because \_\_\_\_\_.

3. \_\_\_\_\_ makes us vulnerable to \_\_\_\_\_ because \_\_\_\_\_.

4. \_\_\_\_\_ makes us vulnerable to \_\_\_\_\_ because \_\_\_\_\_.

5. \_\_\_\_\_ makes us vulnerable to \_\_\_\_\_ because \_\_\_\_\_.