

THE SCENT OF HISTORY: HOW THE SPICE TRADE CONNECTED THE WORLD



ceder

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With thanks to Michelle Krell Kydd for feedback and inspiration.
Learn more about her work around Smell and Tell Programming:
<https://glasspetalsmoke.blogspot.com/>

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DRIVING QUESTIONS:

- How did spices and the spice trade contribute to the interactions of people across Eurasia and the emergence of the Silk Roads?
- How did people's desire for fragrant goods like spices and incense help connect people in different parts of the world?

SUPPORTING QUESTIONS:

- What were the Silk Roads?
- What was exchanged along the Silk Roads?
- What was the spice trade and why did it matter?
- How did the Silk Roads contribute to cultural diffusion?

ENDURING UNDERSTANDINGS

- The Silk Roads were a series of trade routes connecting various parts of Eurasia.
- The spice trade was integral in driving the trade between societies along the Silk Roads.
- Spices were highly valued across Eurasia for their religious, medicinal, culinary and scent-based properties and uses.
- Long-distance trade was dangerous, slow, and challenging, but also profitable.
- The Silk Roads facilitated the exchange of not only goods, but also ideas, religions, traditions, people and cultures.
- The desire for new scents and tastes help drive the expansion of global trade.

OVERVIEW:

- Students will use spices as a lens to learn about the Silk Road and cultural diffusion during the period from ~100 BCE to 500 CE in Afroeurasia.
- Students engage in a hands-on entry event to think about scent and spices. They read and discuss an overview article, engage with a map activity, analyze primary documents, and then write a diary entry from the perspective of a Silk Road trader.
- This lesson will likely take 3-4 standard class periods (56 minutes) to complete, or 2-3 block class periods (90 minutes). These are very rough estimates though!

LEARNING OBJECTIVES:

- SWBAT describe the Silk Roads and explain their role in cultural diffusion.
- SWBAT to describe the influence of the spice trade in driving long-distance trade.
SWBAT identify goods and ideas that were exchanged on the Silk Roads.
- SWBAT identify the historical origins of spices.
- SWBAT describe the historical uses of spices (religious, medicinal, culinary and scent-based).
- SWBAT analyze primary source documents and synthesize information across sources.
- SWBAT to use historical evidence from multiple sources to create a fictional historical account.

CONTENT EXPECTATIONS / STANDARDS

- 7 – W3.1.6 Use historic and modern maps to locate and describe trade networks linking empires in the classical era.
- 7 – W3.1.7 Use a case study to describe how trade integrated cultures and influenced the economy within empires.
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KEY CONCEPTS

- Silk Roads
- Spice trade
- Trade networks
- Long-distance trade
- Cultural exchange
- Cultural diffusion

TEACHER PREPARATION AND INSTRUCTIONAL RESOURCES

- This lesson is developed with middle school World History in mind and should be used after students have already learned about agrarian civilizations and the later formation of large empires like Rome and Han China. The emphasis here is on networks and connections between these empires and societies of Afroeurasia.
 - This lesson will likely take 3-4 standard class periods (56 minutes) to complete, or 2-3 block class periods (90 minutes). These are very rough estimates though! Some of the reading can be assigned as homework to save class time if that seems appropriate.
 - Printed and/or electronic versions of handouts
 - One box of cinnamon graham crackers
 - One box of regular graham crackers
 - Card Match Activity Cards - if virtual, use Jamboard
 - If in person - print the collection of scent cards on cardstock or construction paper. Cut each set into 20 separate cards and mix up each set, placing the cards in an envelope. Create enough sets so that each small group has one.
 - If virtual/online - create an online card sort using Padlet.com, Google Jamboard, or another online whiteboard tool. This will be a bit labor intensive, but is worth it! Use a snipping tool or screenshot tool to create 20 digital cards from the card set provided with this lesson. Upload these images with no clear order or pattern to your chosen platform, and then use a duplicate or copy process to create a version for each group. Then direct students to find the name of each spice and create a cluster of cards that match each name.
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Additional resources:

- Online Silk Road Map - can be projected or screen-shared to show students the multiple routes making up the Silk Roads:
http://www.chinatourguide.com/china_photos/Silk_Road/Maps/silk_road_entire_map.jpg
- Online Resources for Extension Projects
 - Interactive Silk Road Map, could be used as starting point for extension projects <https://en.unesco.org/silkroad/silkroad-interactive-map>
 - Indian Ocean Trade Interactive Map
<https://www.indianoceanhistory.org/LessonPlan/ClassicalEra.aspx>
 - National Geographic Silk Road on Foot Article - interactive, lots of pictures
<https://www.nationalgeographic.org/interactive/foot-path-silk-road/>
- Additional Reading on using the sense of smell in teaching and learning: [Hacking Senses to Boost Learning](#)
- Scent Kit: Follow the instructions below to develop a classroom set of Scent Kits including the following spices
 - Cinnamon
 - Nutmeg
 - Black Pepper
 - Anise
 - Cloves

Scent Kit:

Michelle Krell Kydd, creator of Smell and Tell programming for educators , provided feedback to this activity and advice (below) on how to develop scent kits. Visit her blog for more ideas about scent and smell: <https://glasspetalsmoke.blogspot.com/>

When developing a scent kit for classroom use for the spices above, use glass spice jars and refresh the contents at least every three to six months if you are going to continue using them. Spices lose their aroma over time, and glass jars help to preserve them. Different spices hold their aromas longer than others, but most spices should be fine in glass jars for at least 3 months. Freshly ground spices have a stronger aroma, and will lose this aroma faster.

Culinary stores that sell spices, as well as many hardware stores, sell glass spice jars. You can also use BPA-free plastic bottles, but glass is best as plastic can absorb odors. Y

If possible, purchase your spices in bulk, getting just enough to halfway fill each of your spice jars. One decision you will have to make is whether to just create one classroom scent kit, or to create multiple kits for groups to use. You can make the activity work with one kit, but it will of course take longer.

As stated, only fill jars halfway with the spice. The extra air in the jar allows for odors to disperse and creates a better sensory experience. Extra air circulation also helps to account for natural variations in smelling abilities that will be present in any class.

- Cinnamon: ground cassia cinnamon (*Cinnamomum cassia*) is good for six (6) months prior to refreshing; ground true Cinnamon (*Cinnamomum verum*) is good for three (3) months prior to refreshing.
- Nutmeg (*Myristica fragrans*): ground nutmeg retains odor strength for three (3) months prior to refreshing. Note that whole nutmeg doesn't smell strongly of nutmeg.
- Black Pepper (*Piper nigrum*): can be used ground or whole, whole is good for six months prior to refreshing while ground loses its aroma after three months. Caveat: store bought ground pepper is generally weak so teachers should consider grinding whole peppers themselves.
- Anise Seed (*Pimpinella anisum*): ground is better than whole for smelling as most of the essential oils are inside the seed casing and released upon grinding. Replenish after three months.
- Clove (*Eugenia carophyllata*): whole cloves are highly aromatic and are technically dried flower buds, which is nice for students to see in a jar. They are good for six months prior to refreshing.

Spice bottles can be displayed creatively and even arranged in a classroom Spice Route. However, store them away from heat and light when not actively being used.

Schools may consider a designated Spice Route month across grades to explore history, geography, religion, culture, science (biology, botany, chemistry, ecology), culinary arts, perfume and incense arts. Interdisciplinary opportunities abound.

Penzeys (<https://www.penzeys.com/>) sells fresh spices and glass spice jars. Charitable efforts by Penzeys focus on feeding the hungry. Their ground pepper is donated to food pantries and people who organize events to feed the hungry (<https://penzeyswestus.azureedge.net/media/7901/donations-letter.pdf?v=1034>).

For the activity in this lesson, spice bottles should NOT be labeled, but should be numbered 1-5.

LESSON HANDOUTS/MATERIALS

- Card Match Activity
 - Handout 1: Guided Reading
 - Handout 2: Spice Mapping Activity
 - Handout 3: Primary Source Analysis
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ASSESSMENT / FINAL PRODUCT:






- Students will complete a diary entry imagining they are a merchant travelling across the Silk Roads. This diary will include details about the geography, dangers, people, goods, scents, and effects of the Silk Road trade. See student handout later in the resources for details.
- Extension/Alternative Option: Students will find a spice or scent in their home that they like or that is important to them/their family. This could be a spice, incense, perfume, candle, etc. Students will then conduct research on the origins, historical uses and importance of the spice/scent they chose. They will also research its modern locations, means of production, and how it is transported. Students will write/present a short report on their chosen spice/scent and share the scent in some way if possible with their classmates.

LESSON SEQUENCE

OPENING:

- Begin by providing each student with one quarter of a cinnamon graham cracker and one quarter of a plain graham cracker. Invite those who want to taste each one, and then ask several students to describe the taste of each. Take a quick vote by hand-raising to see which one more people prefer. Explain to the students that this lesson will focus in part on spices like cinnamon, then ask them to Turn and Talk with a partner about how different food would taste without spices/seasonings. Have a few pairs share their ideas. (Note: Be sure to consider potential food allergies among students when providing the graham crackers).
- Ask students as a whole group to discuss the following questions: *What role do spices and scents play in your family? What spices do you use most?* Have several students share their ideas. (This is a good opportunity to surface and incorporate existing student funds of knowledge.) Then introduce the driving question to students: *How did spices and the spice trade contribute to the interactions of people across Eurasia and the emergence of the Silk Roads?* Explain that they will be working to answer this question in this lesson and will be using their sense of smell in the process.
- Now tell the students they will put their noses to work. Organize students into small groups of 3-4 students and provide each group with a different scent sample from the scent kit. Have students each smell the scent they are provided and then pass it to the next group, and write down their guess for what each scent is on a piece of paper numbered 1-5.
- Next, provide each student group with a set of cards for the card matching activity. For each scent, there is a card with the name and picture of the spice, a picture card with the source plant, a card describing uses and history, and a card with the name of the geographic origin of the spice. Tell students that they have to try their best to match each spice with the scent, origin, plant, and historical uses. Place your scent samples in a central location and allow groups to send members up to smell each sample again as needed.

o Answer key (cards for copying found later in lesson)

Name	Geographic origin	Plant (image)	Uses
Cinnamon	Indonesia		It was historically used as a seasoning and in religious ceremonies. Today it is commonly added as an ingredient in baking or cooking to add a sweet flavor.
Nutmeg	The Moluccas (a.k.a. the Maluku islands of Indonesia)		Traditionally used to make perfumes and as an antiseptic. Today it is commonly used for seasoning in cooking or baking.
Black Pepper	India		Used as a seasoning throughout history and also medicinally as an expectorant (a medicine used to treat coughs and congestion). Today, it is one of the most common spices that is added to foods all over the world.
Anise	Egypt and the eastern Mediterranean region		Smells similar to black licorice. Was used to help with indigestion, gas, and stomach pain throughout history.
Cloves	The Moluccas (a.k.a. the Maluku islands of Indonesia)		Historically it was often used as a perfume. It has a slightly minty smell and flavor, and in China it was chewed to freshen the breath.

- After students have matched the cards to their best ability in groups, give students five minutes with the internet (devices or phones) to try and correctly match each spice from the spice kit with the correct information from the card matching activity, based on the scent and the cards. Students will then share with the class to compare answers. Correct any mistakes or misunderstandings.
- Pose the open question to the class: **So how did these products and smells, and others like them, help shape history?**

1) GUIDED AND INDEPENDENT INQUIRY:

- Now provide a brief explanation of the historical context this lesson covers - explain that students will be learning about the history of international trade and that spices were an important part of this trade. Highlight the involvement of civilizations students may already be familiar with (e.g. Rome, Han China)
 - Tell the students they are going to build some background knowledge of the trade networks called the Silk Roads with a reading exercise in which they underline key ideas. Model how to engage with the background reading for students by reading the first paragraph out loud and showing them how you would check the glossary for unfamiliar words, and then make decisions about which key terms, ideas and concepts to underline. Ask students to help you decide what is important as you project this passage on your screen.
 - Review the instructions at the top of the handout and have students begin reading **Handout 1: Guided Reading**. Depending on the ability/reading speed of the class, you can assign students to work independently or in small groups. Circulate to support students, answer questions and correct misunderstandings. Assign check-in points to periodically do whole class checks for understanding with the Stop and Jot questions (e.g. students have 8 minutes to answer up to questions 1-3, another 8 to answer up to question 4, etc.). Have students complete the grid at the end of the reading in small groups.
 - Once students have completed the **Handout 1** reading, have them **independently complete the summary** at the end of the background reading. Depending on the length of the class period, this may serve as the end of the lesson for the day.
 - Have students complete **Handout 2: Spice Mapping Activity**. Decide whether or not you want students to continue working in groups for Activities 2 and 3, or if you want this to be individual work, and provide clear instructions. As they read and work, circulate to help students correctly match the spices to their origins and correct any misunderstandings. Ask a few students to share their responses to all 3 activities.
 - Introduce **Handout 3: primary source analysis** by explaining to students that the purpose of this section is to investigate the risks involved in long-distance trade and think about these journeys from the perspectives of those who actually took them. Review what primary sources are, and model how to analyze the primary source documents with the first Sogdian Letter. Read the first section of Sogdian Letter #2 out loud, modelling how to underline key information that could be used to answer the guiding questions for students. The short script below could serve as an example of how to do this.
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- o “I’m going to underline the section that reads, ‘the last emperor [of China], so they say, fled from Luoyang because of the famine, and fire was set to his palace and to the city, and the palace was burnt and the city destroyed’, because it shows that during this time in China, the emperor had to run away due to a famine, and that the capital city of Luoyang was destroyed. This shows that merchants could be exposed to dangers and be trapped far away from home...”
 - Then, divide up the remaining primary source documents for students to complete in a **jigsaw** group format. There will be two rounds of groups, **expert groups** and **teaching groups**. Assign 3-4 students per group. Expert groups each get assigned a specific document (either A, B or C). Students will read the documents and answer the Stop and Jot questions together to become ‘experts’ in a document.
 - Then, arrange students into new, mixed groups that include one “expert” in document A, one “expert” in document B, and one “expert” in document C (you may need to double up experts for some groups). Students will take turns sharing the information they learned in their expert group with their peers, and will then work to complete the three synthesis questions to compare what they learned across the three documents. Circulate to support students and correct any misunderstandings. Depending on time and the ability of the class, you can also have all students complete analysis of all the documents in groups or independently.




4) ASSESSMENT:

- Ask students to complete a **diary entry** that imagines the student is a merchant travelling across the Silk Roads. This will include information about the geography, goods, cultural impact and dangers faced on the Silk Roads. Depending upon the time you want students to spend on this activity, you can make decisions about length, depth of description they provide, and quantity of examples they provide that connect back to the primary sources. See the student handout for more detail.

EXTENSION OPTIONS AND SUPPLEMENTARY RESOURCES:

- **Extension Option 1:** Students will find a spice or scent in their home that they like or that is important to them/their family. This could be a spice, incense, perfume, candle, etc. Students will then conduct research on the origins, historical uses and importance of the spice/scent they chose. They will also research its modern locations, means of production, and how it is transported. Students will write or present a short report on their chosen spice/scent. You might also have students create multimedia presentations or work in groups to develop their own scent-based activities (like a blind smell identification activity).
 - **Extension Option 2:** Have students develop a multimedia travel blog in groups about a portion of the Silk Road. This blog should focus on two or three locations or cities that were centers of trade on the Silk Roads. Students should include: a brief history of the location, its importance on the Silk Roads, the people who inhabited it, and a potential scent that might have been present in that location. See the **Teacher Resources** section for an interactive Silk Road map as a potential starting point for students. Invite them to be creative in this option!
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Card Match Activity

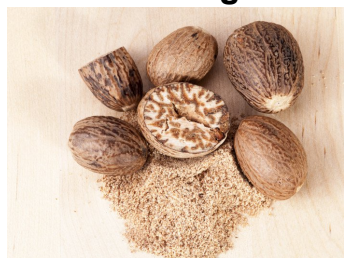
<p>Indonesia</p>	 <p>1</p>
<p>The Moluccas</p>	 <p>2</p>
<p>India</p>	 <p>3</p>
<p>Middle East</p>	 <p>4</p>
<p>The Moluccas</p>	 <p>5</p>

Cinnamon



It was historically used as a seasoning and in religious ceremonies. Today it is commonly added as an ingredient in baking or cooking to add a sweet flavor.

Nutmeg



Traditionally used to make perfumes and as an antiseptic. Today it is commonly used for seasoning in cooking or baking.

Black Pepper



Used as a seasoning throughout history and also medicinally as an expectorant (a medicine used to treat coughs and congestion). Today, it is one of the most common spices that is added to foods all over the world.

Anise



Smells similar to black licorice. Was used to help with indigestion, gas, and stomach pain throughout history.

Cloves



Historically it was often used as a perfume. It has a slightly minty smell and flavor, and in China it was chewed to freshen the breath.

Handout 1: Guided Reading

Directions: Read the following information about the Silk Roads and the spice trade. Your goal is to understand how the sense of smell and people's desire for pleasant scents helped change the world! As you read, practice underlining important ideas, information, and words that help you understand the spice trade and its impact on the world. If you come across a bolded word you are unfamiliar with, check for it in the glossary. When you reach the **Stop and Jot** questions, answer them in complete sentences.

Glossary

- **Long-distance trade** - trade that took place across vast distances of hundreds or thousands of miles
- **Eurasia** - the body of land containing both Europe and Asia
- **Merchant** - a person whose job it is to buy, sell and trade goods
- **Caravan** - a group of merchants travelling together for safety
- **Luxury good** - a very valuable good or product
- **Monopoly** - complete control over a good or service
- **Cultural diffusion** - the spread of ideas, religions, beliefs, cultures, traditions, people and languages
- **Maritime trade** - trade that took place over the sea or ocean
- **Textiles** - fabrics or cloth

What was the Silk Road?

Today, people and goods can travel around the world in a matter of days or hours on ships, planes and trains. But over two thousand years ago, one of the main ways that trade took place was by people walking or riding animals across vast distances, or sailing wooden ships that relied on the wind for speed. These journeys could take months or even years. While humans have been trading with each other since our early history as hunter-gatherers, by the year 100 BCE, powerful civilizations had come into existence, and people in these societies began to increasingly



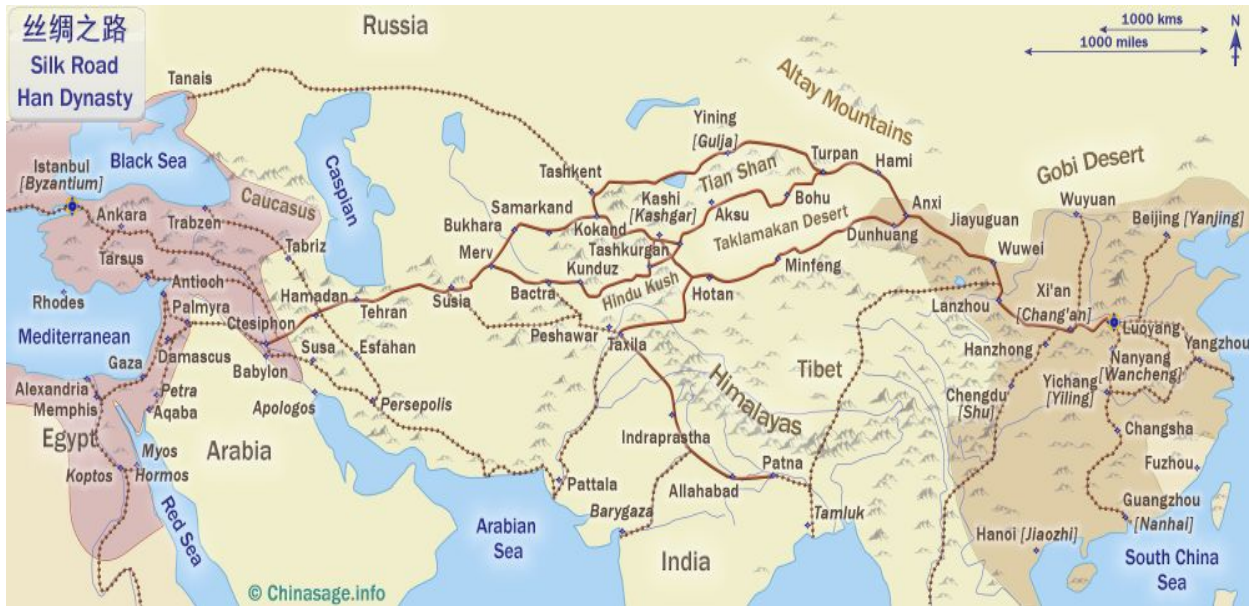
engage in **long-distance trade** with each other. As a result, more people were trading and interacting across **Eurasia** than ever before in history. By the end of the first century BCE, there was a great expansion of international trade involving five major connected civilizations: the Roman Empire, the Parthian Empire, the Kushan Empire, the nomadic society of the Xiongnu (sometimes called the Huns), and the Han Empire (see map on previous page). Trade between these societies grew over time and lasted for hundreds of years, with the peak of the trade taking place between roughly 100 BCE and 300 CE.

Over time, the many trade routes between these civilizations came to be known by a single name: the **Silk Roads**. They were called this because one of the most valuable and popular goods that was traded along this network was **silk**, a fabric that was produced only in China at the time. People all across Eurasia valued silk because it was light, warm, could be dyed many different colors, and was seen as a symbol of wealth.

Long-distance trade and travel across the Silk Roads was dangerous. People did not know much about places far away, and much of the Silk Roads passed through mountains and vast deserts. Hunger, thirst, sandstorms, blizzards, sunstroke and robbery were just a few of the dangers travellers faced on the trail.

Because of the danger and great distances involved, travellers rarely journeyed across all of Asia. Instead, a **merchant** might make the journey from one town to the next, then trade or transfer goods to others who were traveling a different stretch of the Silk Roads. Depending on the time of year and the destination, a **caravan** might cross snowy mountains or blazing hot deserts. **Merchants** would frequently walk or ride pack animals, notably the sturdy **Bactrian camel**, from place to place in order to buy and sell their goods.

Trade was also done by sea travel in the Indian Ocean, but this had its own dangers - storms, pirates, and even a lack of wind could doom a ship and everyone on board. But on land, a vast network of strategically located cities and trading posts enabled the exchange, distribution, and storage of goods. The map below shows some of the sections of the Silk Roads and the geography that travellers had to pass, which stretched from China to Egypt and Europe, a distance of thousands of miles.



Stop and Jot:

1. What were the Silk Roads?
2. How were goods transported across the Silk Roads?
3. Looking at the map above, what geographical challenges would travellers have faced on the Silk Road?

The Silk Road Led To Cultural Exchange

Long-distance trade along the Silk Road played a major role in the cultural, religious, and artistic exchanges that took place between the major centers of civilization in Europe and Asia during ancient times. The trade routes served mainly to transfer **luxury goods** and raw materials between Asia and Europe. Some areas had a **monopoly** on certain materials or goods. China, for example, supplied the Middle East and Europe with **silk**, while **spices** were obtained mainly from South Asia (India).

Another important trade route, known as the **Incense Route**, was controlled by merchants from the Arabian Peninsula, who brought **frankincense** and **myrrh** by **camel caravan** from the southern part of the Arabian peninsula. Because Arabia was right in the middle of Europe and Asia (why do you think it's called the *Middle East*?), many cities and merchants along these trade routes grew rich providing services to merchants who rested in oasis towns (similar in function to a roadside inn, known as a "caravanserai").

The cities along the Silk Road were not only marketplaces where goods were exchanged. People of different ethnicities, religions, cultures and backgrounds mixed and intermingled in these towns, leading to a huge amount of **cultural diffusion**. Cities such as Palmyra and Petra (go back and find them on the map on the previous page), on the fringes of the Syrian Desert, flourished mainly as centers of trade supplying merchant caravans and policing the trade routes. They also became cultural and artistic centers, where peoples of different ethnic and cultural backgrounds could meet and share their knowledge and ideas.

These trade routes were the communications highways of the ancient world. People from across Eurasia interacted with one another, exchanging knowledge of new inventions, artistic styles, religious faiths, cultures, languages, and social customs, as well as goods. For example, Buddhist monks journeyed from India along the Silk Roads, enabling the spread of Buddhism to China, where it is still incredibly influential even today. Hundreds of years after the initial development of Christianity, Christian missionaries journeyed as far as China, where they founded many churches. The Silk Roads also led to the spread of scientific knowledge, with inventions like gunpowder and the compass spreading from China to India, the Middle East and eventually Europe.

Stop and Jot:

4. Apart from goods, what else was exchanged between people travelling on the Silk Road? Why did this other kind of exchange matter?

The Spice Trade

Apart from silk, spices were one of the most important and valuable types of products traded on the Silk Roads. Spices are products made from aromatic plants (plants with strong smells) used to provide flavor for foods. Some spices were also used to create natural medicines, and others to create incense. In the past, spices grew in three main regions: India, China, and islands in Southeast Asia. From as early as 2000 BCE, spices such as **cinnamon** from Sri Lanka (a large island off the coast of India) and **cassia** from China were exported along the Silk Roads as far west as the Arabian Peninsula and the Iranian Plateau. The land and sea routes that transported spice from Asia to the rest of the world were known as the **spice routes**. As was often the case with the many other goods traded along the Silk Roads, the ports where spice traders stopped along their journeys acted as melting pots for the exchange of ideas and information. With every ship that set sail with a cargo of valuables on board, knowledge was carried over the seas to be exchanged at the next port of call.

The word “spice” comes from the Latin word *species*, or ‘special goods’, and refers to an item of special value, as opposed to ordinary articles of trade. Spices

were highly valued for a few key reasons. They were used in cooking to help preserve food and make it taste better, but different spices also had important ritual uses in many religions, as well as many medical uses. Moreover, they were of high value because they could only be grown in a few specific areas. Spices could only be grown in the tropical East, in the South of China, **Indonesia** as well as in southern **India** and **Sri Lanka**. In particular, they grew in the **Moluccas** - a chain of mountainous islands in the Pacific Ocean (see map to the right) that are part of modern Indonesia. Some spices, such as **cloves** and **nutmeg**, grew nowhere else in the world.



Stop and Jot:

5. What places did spices grow? Why do you think they only grew in these places?

Why Were Spices So Valuable?

People across all of Eurasia highly valued spices, and as a result they were incredibly expensive. This was because, in addition to being rare and often growing only in very specific places, they had a number of important uses for religious and medicinal purposes. They were also valuable for more practical reasons. Because spices were so expensive, the rich and powerful of a society would buy them, not just to add flavor to food, but also to use as a symbol of wealth and importance, in the same way that expensive cars and luxury clothing are a status symbol today.

Some spices, along with specific herbs not used as a spice, were used to make incense. Incense is biotic material (from living things like plants) that gives off a fragrant smell when burned. Incense was used in religious ceremonies, for aromatherapy, in meditation, and even as bug repellent. Incense was also useful because, in addition to being used to make perfume, it could also cover up the nasty smells of the cities at the time. These ancient societies did not have running water, and city streets were often filled with dung (from both animals and humans!). Bathing, while not uncommon, was usually not the daily occurrence that it is for us today, and as a result, ancient cities and people sometimes had odors that needed to be covered up. Incense would be burned in the homes of the wealthy in order to keep the nasty smells away.

Bad smells, like those that come from sewage waste, were associated with sickness and poor health. It was thought that the bad smells themselves - referred to as “miasma” - could cause sickness. So things that smelled good were believed to counteract illness and cure sickness. During times of epidemics, things that smelled good like rose petals, camphor, and different spices were thought to provide some protection from disease.

If you have ever burned incense, you might also notice the smoke and scent drifting up into the air. In some religious traditions, this is seen as a way to purify a space and to connect the person burning the incense with higher powers. In some traditions, the rising smoke of incense is also seen as a symbol of prayers being sent into the heavens. All major world religions have used incense in some way to help people connect with their beliefs and faith.

Stop and Jot:

6. What made spices and incense so valuable

Goods Exchanged on the Silk Roads

Silk and spices were not the only goods exchanged on the Silk Roads, however. There were a huge variety of products that travelled all across Eurasia during the centuries the Silk Road was in existence. **Textiles**, jewels, books, perfume, gold, silver and other precious metals were all traded across the vast distances of the Silk Road. Read more about some of these valuable, luxury products below.

- **Myrrh:** Myrrh has been traditionally used by many cultures as a perfume, incense, medication, or embalming ointment. In addition to its pleasant scent, it also has antimicrobial properties.
- **Silk:** Silk, a cloth originating in China, gave its very name to the route that took it to every royal court in Asia and Europe. Silk is an incredibly strong fabric, able to be dyed to a spectacular array of colors. Eventually, silkworms, used for creating raw silk, were smuggled out of China to Europe along with the knowledge of making silk cloth.
- **Frankincense:** Frankincense was a sweet-smelling resin made from a certain species of tree. It was used to create perfume and incense, but was also used as an anti-inflammatory and pain reliever.
- **Porcelain:** Porcelain is an incredibly delicate and beautiful type of ceramic ware used commonly for table settings, like plates, bowls and cups. The technique for making porcelain was first developed in China, and porcelain products were exported from there to the West. Later, the knowledge of porcelain-making also traveled West. You might have heard of porcelain called ‘china’ due to it originating there.
- **Perfume:** Perfume was readily exported all along the Silk Road. While it wasn’t necessarily found in the liquid form we see it in today, many spices and incense were used as early types of perfume. These newer perfumes spread even further along the Silk Road for the purposes of disguising various unpleasant odors
- **Glass:** Glass products, first manufactured in the Middle East, traveled both East and West along the Silk Road. Later, the knowledge of how to make glass spread along the trade routes as well.

Stop and Jot:

7. What kinds of goods were exchanged on the Silk Road?

Directions: In the grid below, write in examples of the various exchanges that took place during the Silk Roads trade as well as examples of similar exchanges that are taking place in the modern day. A few examples have been provided to get you started.

Exchanges	Silk Road examples	Modern examples
New food/ingredients		
New fashions/clothing		
New technologies	Gunpowder	
New ideas/beliefs/religions	Buddhism	
New ways of communicating	Long-distance letter writing	
Methods of travel		

Handout 2: Spice Mapping Activity

The following spices are some of the ones that were commonly traded on the Silk Road. As you read about the spices, think about the following questions.

- Do you know what any of these taste like?
- Do you use any of these spices in your food? How?
- Which ones do you recognize, and which ones do you like?

Today, we are used to spices being easy to purchase in grocery stores and most people have a variety of spices readily available in their homes. But historically, spices were rare and very valuable. Even a seasoning as common as pepper would have only been affordable for the wealthiest members of a society. One of the reasons for the high cost of spices was that most spices historically grew only in South Asia (India), China and small islands in the Pacific Ocean. This meant that the spices had to be traded across thousands of miles to reach their final destination. In addition to making food taste better, spices have been very important throughout history for a variety of reasons. Some of these spices and their uses are listed below.

Spices:

1. **Cardamom** is native to **Southern India** and today is grown in Guatemala, which is the largest producer and exporter of this spice in the world. It has a strong aroma similar to cloves. Some say it tastes like a combination of ginger and cinnamon. Others say it has a more unique, minty taste with hints of lemon. This spice is used in Indian and Middle Eastern cuisine. It was historically used by the Greeks and Romans as an ingredient for perfume.
2. **Nutmeg** originated in the **Moluccas**, a series of small islands that today are part of **Indonesia** in the Pacific. It has a slightly sweet taste and is commonly used as seasoning in a wide variety of dishes, from baked goods to meat and vegetables. It was used historically as a perfume or incense due to its strong, sweet smell, but was also used for religious and medicinal purposes across the world.
3. **Cinnamon** is one of the world's most common and popular spices, with records of its use dating back to at least 2,000 BCE. But you might not know that there are two varieties of cinnamon - cassia and Ceylon cinnamon. Cassia, produced mainly in **Indonesia**, has a stronger smell and flavor and is what you would find in a

grocery store. Ceylon is grown in **Sri Lanka** and is often used in baking due to the milder flavor.

4. **Cloves** are believed to have originated in the **Moluccas**, and were used as a seasoning and perfume. During the Han Dynasty in China, the emperor demanded that all visitors chew cloves in order to freshen their breath in his presence. They were also used to preserve food in the Middle Ages in Europe.
5. **Black Pepper** is a spice that you are likely familiar with. It was native to a specific region of **India**, and as a result Indian merchants controlled the entire supply of the pepper, which made it very expensive in Europe.
6. **Anise** is believed to have originated in the **Middle East**, and was much more common in Europe as a result. It tastes and smells similarly to black licorice. Throughout history, it was believed to have medicinal properties that could help with indigestion. The Romans often used anise to make small cakes that were eaten at the end of feasts and weddings to prevent stomach pains and flatulence.
7. **Ginger** is native to **Southeast Asia (countries like Thailand, Vietnam and Cambodia)**, and has a strong, slightly biting taste. It has been used as a seasoning throughout history, as well as to cure indigestion and constipation. In Japan, sliced ginger is commonly eaten as a palate cleanser between dishes.
8. **Turmeric** originated in **India**, where it was used for seasoning foods as well as in religious ceremonies. It also has anti-inflammatory properties similar to ibuprofen that have made it popular in recent years as a natural medicine.

Directions: Complete all three activities below.

Activity 1

Using the information provided about the spices above, identify where each spice originally came from by writing the number associated with each spice on the previous page in the correct country or region on the map on the next page. For example, nutmeg is the number 2, so you would write the number 2 on the map where nutmeg originated from.

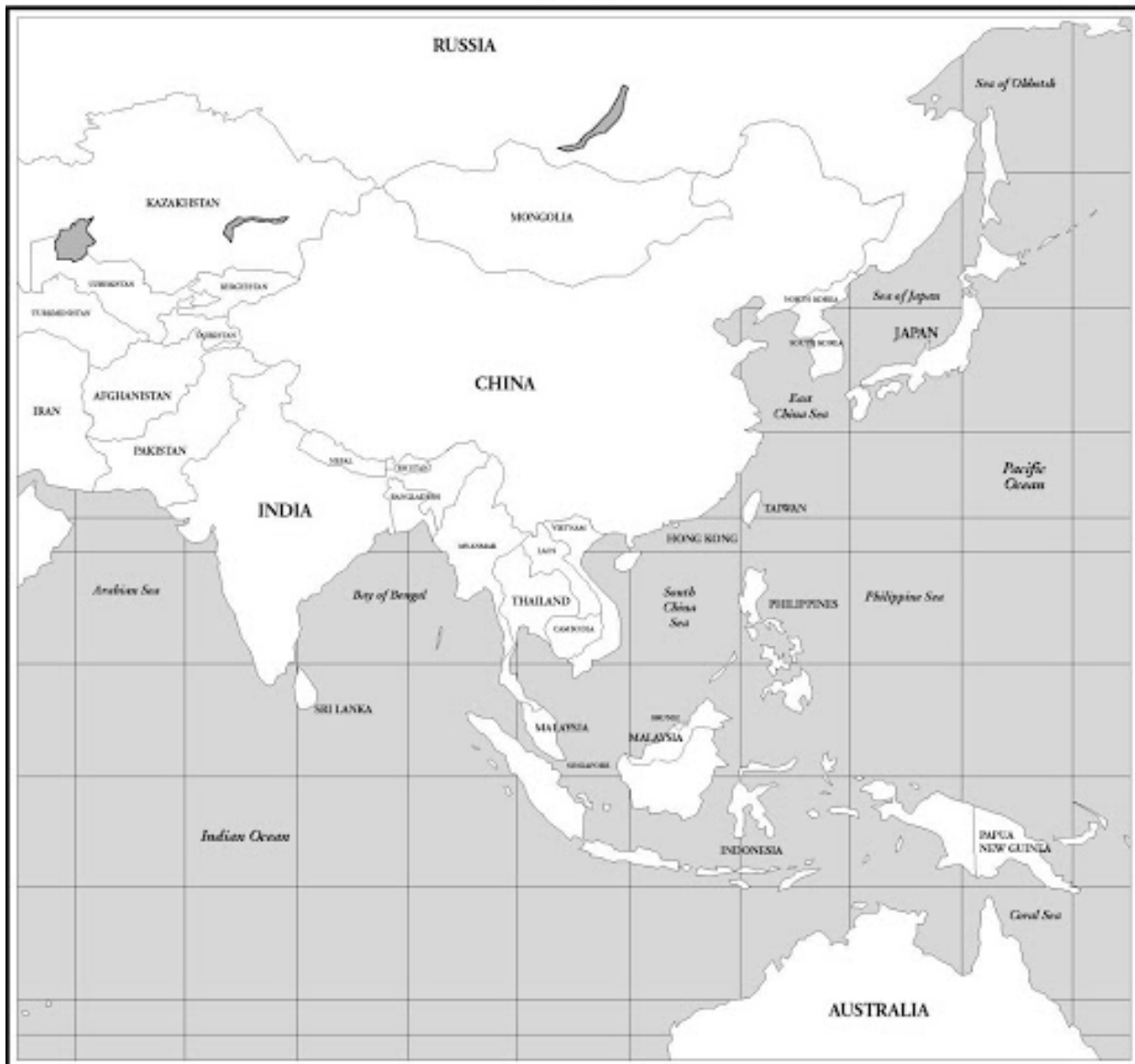
Activity 2

Imagine you are a merchant from **India** who wants to sell Black Pepper in **Europe**. How would you get it there? You can travel by sea, land or both. Which one do you choose and why? You can either describe the route you take in the space below, or draw the route on the map.

Activity 3

You now know that historically, spices were traded long distances along the Silk Roads. However, you probably get all of your spices in the grocery store! How do you think that spices today get from where they are grown to the shelves of the store you shop at? In what ways do you think this is similar to how spices were traded on the Silk Roads? In what ways do you think it is different? Answer the questions below in 2 to 3 sentences.

EAST ASIA



Produced by the Cartographic Research Lab
University of Alabama

Handout 3: Primary Source Investigation

Purpose: The goal of this activity is to investigate the dangers and risks that were involved in the long-distance Silk Road trade. As you read, be sure to highlight or underline any information that demonstrates the dangers of trading along the Silk Roads. As you read, be thinking about the following questions:

- What dangers were involved in long-distance trade?
- Why would merchants have taken the risks to engage in trade?
- What do these documents tell us about how people travelled along the Silk Roads?

Document A: The Sogdian Letters, #2 and #5

Background Information

The **Sogdian Letters** are a set of ancient documents that were discovered by archaeologists who were exploring in western China. The Sogdians were an ethnic group that inhabited Central Asia hundreds of years ago, and they were heavily involved in the Silk Road trade. Sogdian merchants would transport goods from China across Central Asia, facilitating the movement of goods, ideas, religions and people from China to the rest of the world.

The letters were likely written at the beginning of the 4th century (~300 CE). The author of **Letter 2** was likely a resident in Jincheng, a town in China's Gansu province. He was writing to the "home office" in Samarkand, an important Central Asian trading city. The first part of the letter is about Sogdian merchants fleeing China and contains information about the destruction by the Huns of two important Chinese cities, Yeh and the capital of China at the time, Luoyang.

The author of **Letter 5** was writing from Guzang, a town that is today called Wu-wei. The writer of the letter may have been a resident in Khotan, an important town along the southern silk route. This letter also refers to the chaos and difficult conditions in China; the author's position had apparently been made more difficult when his merchant partner, Ghawtus, abandoned him. Thus the author was forced to return from Dunhuang to Guzang.

Sogdian Letter #5

To the noble lord, the chief merchant Aspandhat. - Sent by your servant Fri-khwataw.

From inside China I have heard worse, not better, news day by day, and whatever I might write concerning Akhurmaztakk, how he himself went away and what he had... I have become isolated, and, behold, I stay here in Guzang and I do not go [anywhere], and there is no caravan departing from here. In Guzang there are 4 bundles of silk for dispatch, and 2,500 measures of pepper for dispatch, and... half a stater of silver. When Ghawtus (another merchant) went away from Guzang I went after him, and I came to Dunhuang, but I was prevented from [leaving] China.

Stop and Jot:

3. Why do you think the merchant didn't leave China on his own? What does this tell us about the risk involved in long-distance trade?

Document B: The Periplus of the Erythraean Sea: Travel and Trade in the Indian Ocean by a Merchant of the First Century

Background Information:

Created around 100 CE, the 'Periplus of the Erythraean Sea' is an account written by an Egyptian merchant who travelled from Egypt down the East African coast, then up to Arabia and eventually the western coast of India. The account includes descriptions of various trading ports and towns, including the people he encountered, the goods traded in each place, and the dangers involved in the journey.

7. After about four thousand stadia (an ancient unit of measurement - one stadia was about one-eighth of a mile), for those sailing eastward along the same coast, there are other Berber market-towns, known as the 'far-side' ports. The first is called Avalites; to this place the voyage from Arabia to the far-side coast is the shortest... There are imported into this place, flint glass, assorted; juice of sour grapes from Diospolis; dressed cloth, assorted, made for the Berbers; wheat, wine, and a little tin. There are exported from the same place, and sometimes by the Berbers themselves crossing on rafts to Ocelis and Muza on the opposite shore, spices, a little ivory, tortoise-shell, and a very little myrrh, but better than the rest.

8. After Avalites there is another market-town, better than this, called Malao. The anchorage is an open roadstead, sheltered by a spit running out from the east. There are imported into this place... many tunics, cloaks from Arsinoe, dressed and dyed; drinking-cups, sheets of soft copper in small quantity, iron, and gold and silver coin. There are exported from these places myrrh, a little frankincense, the harder cinnamon, duaca, Indian resin and macir (an aromatic bark), which are imported into Arabia; and slaves, but rarely.

Stop and Jot:

4. What sort of items were traded or exchanged in these towns?

[The author travels onwards towards India and describes the towns he finds there.]

45. Now the whole country of India has very many rivers, and very great ebb and flow of the tides; increasing at the new moon, and at the full moon for three days, and falling off during the intervening days of the moon. But about Barygaza it is much greater, so that the bottom is suddenly seen, and now parts of the dry land are sea, and now it is dry where ships were sailing just before; and the rivers, under the inrush of the flood tide, when the whole force of the sea is directed against them, are driven upwards more strongly against their natural current, for many stadia.

46. For this reason entrance and departure of vessels is very dangerous to those who are inexperienced or who come to this market-town for the first time. For the rush of waters at the incoming tide is irresistible, and the anchors cannot hold against it; so that large ships are caught up by the force of it, turned broadside on through the speed of the current, and so driven on the shoals and wrecked; and smaller boats are over-turned; and those that have been turned aside among the channels by the receding waters at the ebb, are left on their sides, and if not held on an even keel by props, the flood tide comes upon them suddenly and under the first head of the current they are filled with water. For there is so great force in the rush of the sea... that if you begin the entrance at the moment when the waters are still, on the instant there is borne to you at the mouth of the river, a noise like the cries of an army heard from afar; and very soon the sea itself comes rushing in over the shoals with a hoarse roar.

Stop and Jot:

5. What were some of the dangers that merchants could face when trading on the ocean?

Document C: the *Hou-Han-Shu*, chs. 86, 88 (written 5th Century C.E.), for 25 - 220 C.E.

Background Information

The Hou-Han-Shu was a history of the Han Dynasty of China, which lasted from ~200 BCE to 220 CE. It was written around the year 400 CE. Below is an excerpt from the Hou-Han-Shu about the journey of a Han diplomat to the Roman Empire in the year 97 CE.

In the 9th year of Yung-yüan of Ho-ti (97 C.E.) the *tu-hu* (governor) Pan Ch'ao sent Kan-ying as an ambassador to [Roman Syria], who arrived in [Babylonia], on the coast of the [Persian Gulf]. When about to take his passage across the sea, the sailors told Kan-ying: "The [Indian Ocean] is vast and great; with favorable winds it is possible to cross within three months---but if you meet slow winds, it may also take you two years. It is for this reason that those who go to sea take on board a supply of three years' provisions. There is something in the sea which is apt to make man home-sick, and several have thus lost their lives." When Kan-ying heard this, he stopped.

Stop and Jot:

6. What sort of danger was involved in trading on the Indian Ocean?

The country [of Rome] contains much gold, silver, and rare precious stones... corals, amber, glass, *chu-tan* [cinnabar], green jadestone, gold-embroidered rugs and thin silk-cloth of various colors. They make gold-colored cloth and asbestos cloth. They further have "fine cloth;" it is made from the cocoons of wild silk-worms. They collect all kinds of fragrant substances... All the rare gems of other foreign countries come from there. They make coins of gold and silver.

Stop and Jot:

7. What sort of goods were produced in Rome? How do you think this would have affected the Chinese desire to trade with Rome?

The Kingdom of Da Qin (the Roman Empire)... is found to the west of the sea, it is also called the Kingdom of Haixi (Egypt). Its territory extends for several thousands of *li* (an ancient Chinese unit of measurement - 3 *li* = ~1 mile). It has more than four hundred

walled towns. There are several tens of smaller dependent kingdoms. The walls of the towns are made of stone.

They have established postal relays at intervals, which are all plastered and whitewashed. There are pines and cypresses, as well as trees and plants of all kinds. The common people are farmers. They cultivate many grain crops and silkworm-mulberry trees. They shave their heads, and their clothes are embroidered. They have screened coaches (for the women) and small white-roofed one-horse carts. When carriages come and go, drums are beaten and flags and standards are raised.

The country is densely populated; every... thirty *li* [of road] by a [resting-place]. One is not alarmed by robbers, but the road becomes unsafe by fierce tigers and lions who will attack passengers, and unless these be travelling in caravans of a hundred men or more, or be protected by military equipment, they may be devoured by those beasts.

Stop and Jot:

8. What was a danger of travelling through this part of the Roman Empire? Why do you think there was no danger from robbers?

Synthesis Questions

1. What information or ideas are common across all the documents you have read? What information is different?
2. What information is not included in the documents that we as historians might still want to know?
3. All the documents describe some of the dangers involved in long-distance trade. Why do you think merchants would be willing to take on the risks involved in trading?

Final Assessment: Diary Writing

Imagine you are a merchant travelling along a section of the Silk Road. Using the information from the reading, in addition to the maps provided, write three diary entries that describe your journey. You must include the following information:

- Where you are travelling from and travelling to - this could be cities, regions or empires
- The goods you are taking with you
- A scent or smell you encounter on your journey - this could be a place or a product
- The method of transportation you are using to travel between these places
- Some of the difficulties or dangers you might encounter on your journey