



Lesson 8.2: Economic Evolution

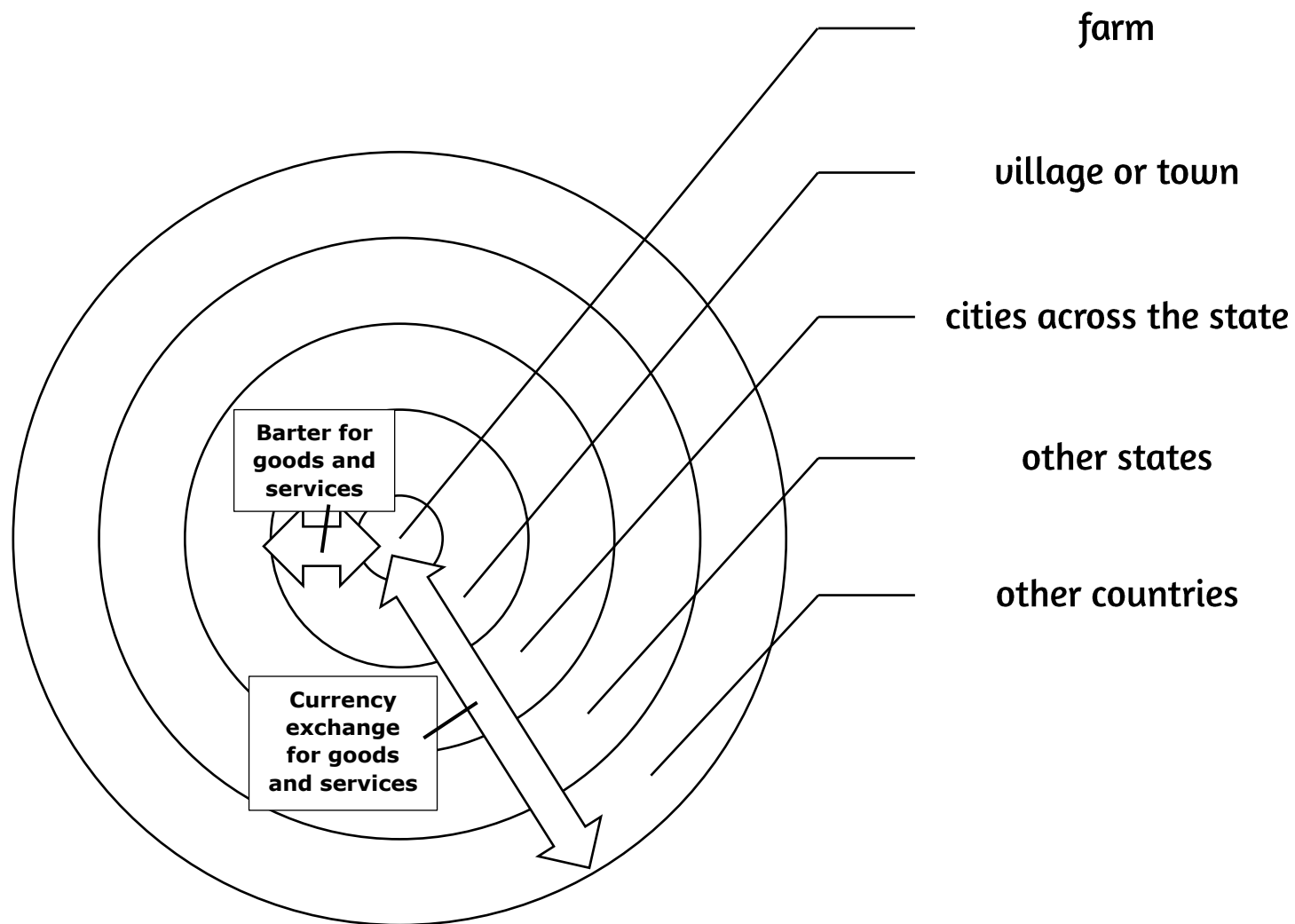
What is Worth the Most?

Carefully consider the four different objects. Use the guiding questions on the right to help you decide each object's value. Remember value can mean more than just the monetary value! Rank each object from 1 to 4. (1 is the most valuable, and 4 is the least valuable.)

Object Description and Rank	Guiding Questions
	Who can use this object? Is the object easy to use?
	How long will it last? Will it need to be replaced? Can this object be replaced easily, or is it hard to replace?
	How common is the object?
	When is the object useful? Frequently or rarely?



An Expanding Economy





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An Expanding Economy

Questions for Educator Reference

1. The center circle represents everything a single farm can produce. Why are there more circles beyond the farm? What do they represent?
The circles represent the places that the goods from the farm could possibly be sold. The circles get bigger because each new place is a bigger area than the farm.
2. Look at the arrow that runs back and forth between the farm circle and the village/town circle. What does that arrow represent?
The arrow represents the goods and services that can be bartered between the farm and those who live in the nearby village or town. The farm has goods and services it can barter for goods and services it needs from those who live in the village.
3. Why does that arrow only go between farm and village/town?
Bartering primarily happens in a local community, between people who live near one another and know each other. Bartering depended on people agreeing on the value of different goods and services. This required trust.
4. Look at the arrow that runs back and forth between the farm circle and the other countries circle. What does that arrow represent?
The arrow represents how much farther goods and services can be sold to and from the farm in a currency system.
5. Why is that arrow able to go beyond the village/town circle?
The currency has the same value, no matter who was using it. Currency makes a wider variety of goods and services available to buyer and seller.
6. If people want or need goods and services that are only available far from where they live, what do they need in order to obtain those goods?
They need a system of transportation that makes it possible to access the goods and services.



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7. How would you draw an arrow to represent that on the graphic?

This would be a line similar to the currency line. Transportation would make it possible for goods to travel all the way from a single farm to another country and for goods from one country to ultimately reach those living on a farm in another country.

8. What would a farm need to do to have the currency to buy the goods and services instead of bartering?

A farm would need to produce much more than the people living on it needed. The extra products would be sold and the cash could be used to buy things they no longer made for themselves.

9. How does a farm change when people start using more currency than barter?

The farm moves away from being self-sufficient to focusing on a certain type or set of products.



Go Barter!

Preparation for play: Copy the card set on heavy-weight paper and cut out the deck of cards. Repeat for number of decks needed. Copy player board as needed for players. Two to four players can play with one deck.

Instructions for play: Shuffle the deck and deal seven cards to each player. If players can use any of their cards to fill spaces on their board they may do so. Play moves around the group with turns happening as follows:

- First player asks any other player for an item that is needed.
- If the second player has the item, the first player proposes a barter. Example: "I will give you one horse for your building wood."
- The second player can either accept the barter and make the trade or request a different item in exchange.
- If the first player does not have the new item, the second player can agree to the first trade or say "pass."
- If the second player says "pass" or does not have the item requested, the first player draws a card from the center pile.
- As a player acquires items they need, they add them to their game board.
- Skill Cards can be bartered and used to fill spaces on the board as marked.
- The first player to fill their board wins the game.

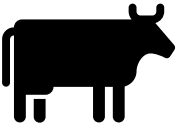
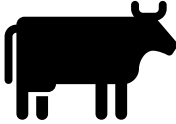

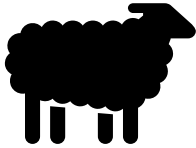
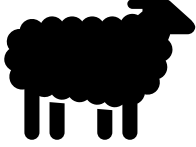
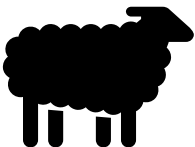
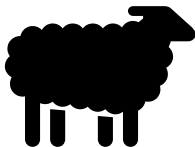
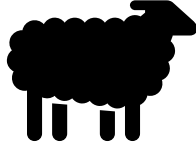


Go Barter! Player Board

horse	seeds	wood (building)	wood (fuel)	wood (household)
dairy	tools	wool	grain	skill











Go Barter! Card Deck

<p>dairy Milk, butter, and cheese</p> 	<p>dairy Milk, butter, and cheese</p> 	<p>dairy Milk, butter, and cheese</p> 	<p>wool For making clothing and other textiles</p> 
<p>wool For making clothing and other textiles</p> 	<p>wool For making clothing and other textiles</p> 	<p>wool For making clothing and other textiles</p> 	<p>wool For making clothing and other textiles</p> 

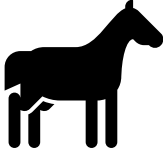
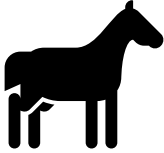
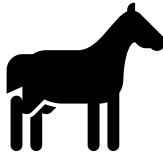







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<p>grain For feeding animals and baking bread</p> 	<p>grain For feeding animals and baking bread</p> 	<p>grain For feeding animals and baking bread</p> 	<p>grain For feeding animals and baking bread</p> 
<p>grain For feeding animals and baking bread</p> 	<p>tools For building, farming, and household chores</p> 	<p>tools For building, farming, and household chores</p> 	<p>tools For building, farming, and household chores</p> 











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<p>horse Used for work and transportation</p> 	<p>horse Used for work and transportation</p> 	<p>horse Used for work and transportation</p> 	<p>seed For planting crops</p> 
<p>seed For planting crops</p> 	<p>seed For planting crops</p> 	<p>seed For planting crops</p> 	<p>wood fuel for cooking and heating</p> 








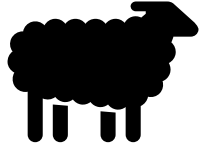


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<p>wood Fuel for cooking and heating</p> 	<p>wood Fuel for cooking and heating</p> 	<p>wood Fuel for cooking and heating</p> 	<p>wood For making household items</p> 
<p>wood For making household items</p> 	<p>wood For making household items</p> 	<p>wood For making household items</p> 	<p>wood For making household items</p> 



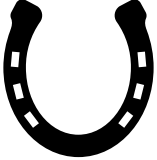







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<p>wood For building</p> 	<p>wood For building</p> 	<p>wood For building</p> 	<p>tools For building, farming, and household chores</p> 
<p>tools For building, farming, and household chores</p> 	<p>wood Fuel for cooking and heating</p> 	<p>seed For planting crops</p> 	<p>wool For making clothing and other textiles</p> 



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<p>Skill Card</p> <p>doctor</p> 	<p>Skill Card</p> <p>weaver</p> 	<p>Skill Card</p> <p>blacksmith</p> 	<p>Skill Card</p> <p>carpenter</p> 
<p>Skill Card</p> <p>tailor</p> 	<p>Skill Card</p> <p>cordwainer</p> 	<p>Skill Card</p> <p>cooper</p> 	<p>Skill Card</p> <p>mason</p> 



The Great Sheep Boom

Read the article to learn more about the “sheep mania” that spread throughout New England in the early 19th century. Use the information from the article to answer the questions about how the “boom” of raising sheep impacted New Hampshire.

Fleecy Flocks Fill Former Forests

Have you ever taken a walk through the woods and encountered a stone wall? Well, the odds are that two hundred years ago that forest was once a field and that section of wall was part of thousands of miles of stone walls that kept New Hampshire’s most valuable product safe. The product? Sheep.

Sheep had been raised in very small numbers on New Hampshire farms, mostly for meat and wool for family textiles. But in 1810, a diplomat based in Portugal sent some of the local sheep (a breed called merino) back to his home farm in Vermont. Word spread that the fine wool of merino sheep made excellent yarn. Neighboring farmers across the Connecticut River in New Hampshire agreed that sheep would be much easier to raise on the rocky terrain than growing grains and vegetables. So, flocks were brought across state lines, and “The Great Sheep Boom” began.

Sheep thrived in New Hampshire. Forests were cleared and fields were tilled to provide them with plenty of meadows for grazing. Stone walls, originally three or four feet high, kept sheep from wandering away. The growing textile industry created a huge demand for local wool. Prices for raw fleece increased. Sheep farms dotted the state. Networks of roads and bridges were built and railroad lines were extended to help farmers ship their fleeces to market. There were 617,000 sheep living in New Hampshire by 1840. That’s twice as many sheep as people!

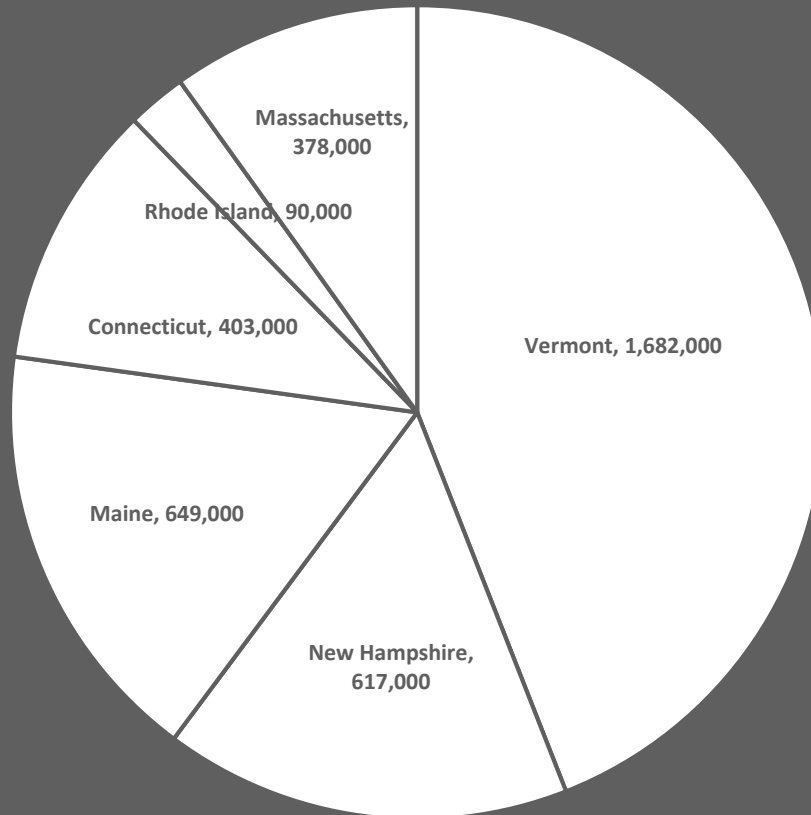
But by the middle of the 19th century, the demand for New Hampshire-grown wool decreased. Cotton from southern states and wool imported from Europe were less expensive for textile mills. It became too expensive to keep sheep in New Hampshire. The great sheep boom finally went bust, and the forests began to return.

- 1. What geographical features made New Hampshire ideal for raising sheep?**
- 2. What breed of sheep was at the center of the sheep boom? Why?**
- 3. What did farmers do to change the landscape to meet the needs of sheep?**
- 4. What industry created a demand for wool in New Hampshire?**
- 5. What other industries grew because of the sheep boom?**
- 6. How did the demand for wool change over the course of the sheep boom? Why?**



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SHEEP IN NEW ENGLAND – 1840



Use the pie chart to answer the questions.

7. Which New England state had the most sheep at the peak of the sheep boom in 1840?
8. How many sheep in all lived in New England in 1840?
9. If there were about two sheep for every person in New Hampshire in 1840, what was the approximate population of the state that year?

Extra challenge! Make an estimate. If the whole pie chart represents 100% of the sheep living in New Hampshire, what percentage does New Hampshire's slice represent?



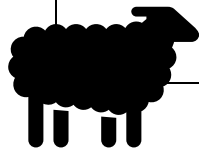
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10. In 1835, farmers in New Hampshire could expect to get \$0.57 per pound of raw fleece (wool) they sold at market. By 1840, that price dropped to \$0.25 per pound of fleece. Use that data to draw a bar graph that shows that change in price in the space below.

11. What did this change mean for a farmer? An average fleece weighed about 5 pounds. If a farmer had a flock of 800 sheep and all 800 fleeces were sold at market in 1835, how much money would the farmer make? If all 800 fleeces were sold in 1840, how much money would the farmer make?

Total profit in 1835:

Total profit in 1840:





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12. Make sense of why the value of raw fleece changed. Choose from the word bank to complete the paragraph.

Word bank:	decreased	supply	high	increase
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The value of raw fleece in 1835 was _____. This encouraged farmers to _____ the size of their flocks. The growth in the sheep population meant there was a greater _____ of fleece. If there is too much of a product, there is competition among the sellers and the price _____ to get customers to buy it. So, the value of raw fleece dropped when the population of sheep was at its peak.

13. Imagine you are a sheep farmer in New Hampshire in 1840. The cost of raising sheep at that time was about \$2.00 per animal. How much did it cost to raise your flock of 800 sheep? How does that compare to the profit you made from their fleeces at market in question 14?

14. You hear the news that tariffs (taxes) on raw fleece from Europe are being lifted, so it will be cheaper to get wool from abroad. That means that your local wool is more expensive and textile mills might not buy it. What will you do? Will you keep raising sheep for a few more years? Or will you sell your flock and focus your farm on a different product? Why?



The Great Sheep Boom

Read the article to learn more about the “sheep mania” that spread throughout New England in the early 19th century. Use the information from the article to answer the questions about how the “boom” of raising sheep impacted New Hampshire.

Fleecy Flocks Fill Former Forests

Have you ever taken a walk through the woods and encountered a stone wall? Well, the odds are that two hundred years ago that forest was once a field and that section of wall was part of thousands of miles of stone walls that kept New Hampshire’s most valuable product safe. The product? Sheep.

Sheep had been raised in very small numbers on New Hampshire farms, mostly for meat and wool for family textiles. But in 1810, a diplomat based in Portugal sent some of the local sheep (a breed called merino) back to his home farm in Vermont. Word spread that the fine wool of merino sheep made excellent yarn. Neighboring farmers across the Connecticut River in New Hampshire agreed that sheep would be much easier to raise on the rocky terrain than grow grains and vegetables. So, flocks were brought across state lines and “The Great Sheep Boom” began.

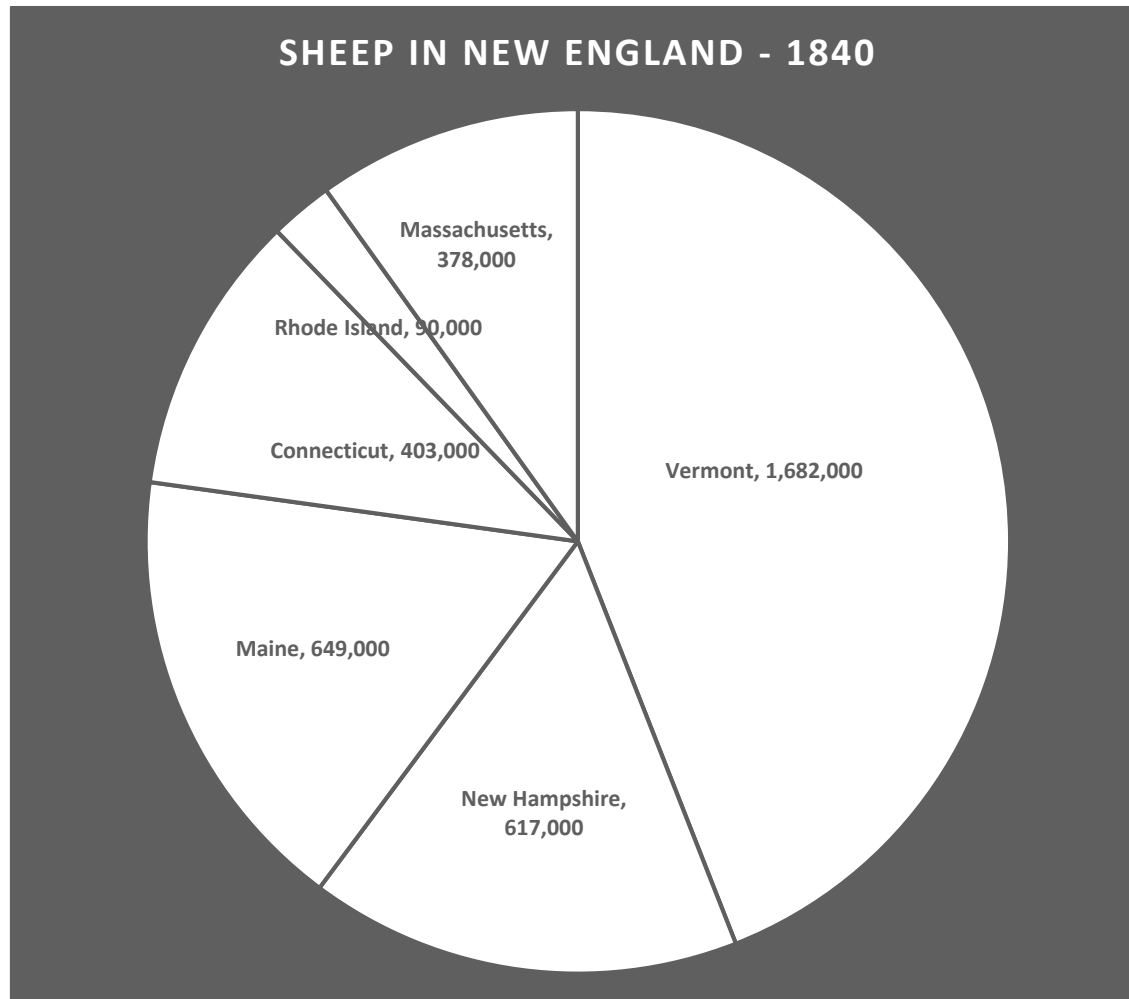
Sheep thrived in New Hampshire. Forests were cleared and fields were tilled to provide them with plenty meadows for grazing. Stone walls, originally three or four feet high, kept sheep from wandering away. The growing textile industry created a huge demand for local wool. Prices for raw fleece increased. Sheep farms dotted the state. Networks of roads and bridges were built and railroad lines were extended to help farmers ship their fleeces to market. There were 617,000 sheep living in New Hampshire by 1840. That’s twice as many sheep as people!

But by the middle 19th century, the demand for New Hampshire-grown wool decreased. Cotton from southern states and wool imported from Europe were less expensive for textile mills. It became too expensive to keep sheep in New Hampshire. The great sheep boom finally went bust and the forests began to return.

1. **What geographical features made New Hampshire ideal for raising sheep?** Rocky terrain and ample open fields and meadows made New Hampshire ideal for raising sheep.
2. **What breed of sheep was at the center of the sheep boom? Why?** The merino sheep had fine wool that made high quality textiles.
3. **What did farmers do to change the landscape to meet the needs of sheep?** Farmers cleared more forests and turned over growing fields to create more meadows for sheep grazing. Farmers also built thousands of miles of stone walls across the state to keep the animals from wandering away.
4. **What industry created a demand for wool in New Hampshire?** The textile industry needed the wool to make thread and cloth.
5. **What other industries grew because of the sheep boom?** The transportation industry grew because of the need for faster ways to ship the wool. Railroads and other carrier services moved the wool. Construction also grew with the need for more and better roads and bridges.
6. **How did the demand for wool change over the course of the sheep boom? Why?** At first, the demand for wool increased because the textile industry was growing. Then, the demand decreased because the price of local wool was higher than wool from Europe or cotton from the south.



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Use the pie chart to answer the questions.

7. Which New England state had the most sheep at the peak of the sheep boom in 1840?

Vermont had the most sheep.

8. How many sheep in all lived in New England in 1840?

1,682,000

649,000

617,000

403,000

378,000

+ 90,000

**3,819,000 sheep
lived in New England**

9. If there were about two sheep for every person in New Hampshire in 1840, what was the approximate population of the state that year?

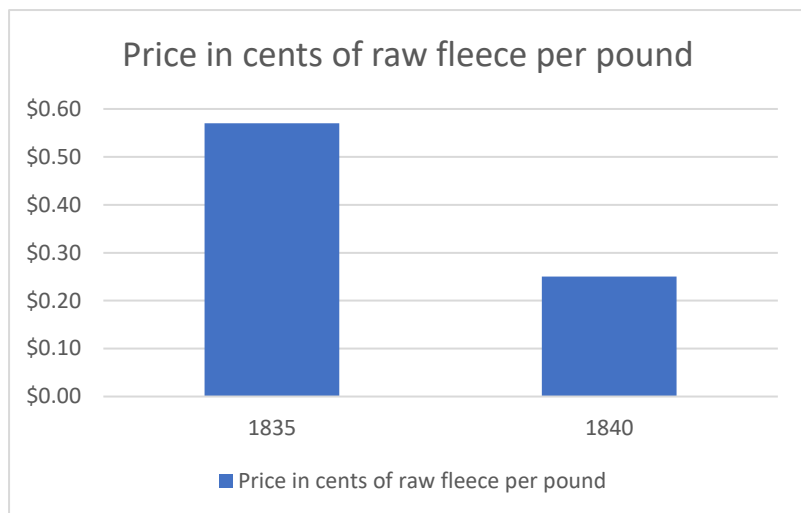
Divide 617,000 by 2. About 308,500 people lived in New Hampshire in 1840.

Extra challenge! Make an estimate. If the whole pie chart represents 100 percent of the sheep living in New Hampshire, what percentage does New Hampshire's slice represent? **Start by looking at Vermont's slice. It's the largest but it is still less than half the pie, which means it's less than 50 percent. A good estimate would be about 45 percent. New Hampshire's total is less than half of Vermont's total. Half of 45 is 22.5. A good estimate is to say that New Hampshire's sheep accounted for about 20 percent of the total.**



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10. In 1835, farmers in New Hampshire could expect to get \$0.57 per pound of raw fleece (wool) they sold at market. By 1840, that price dropped to \$0.25 per pound of fleece. Use that data to draw a bar graph that shows that change in price in the space below.



11. What did this change mean for a farmer? An average fleece weighed about 5 pounds. If a farmer had a flock of 800 sheep and all 800 fleeces were sold at market in 1835, how much money would the farmer make? If all 800 fleeces were sold in 1840, how much would the farmer make?

$$800 \text{ fleeces} \times 5 \text{ pounds each} = 4,000 \text{ pounds}$$

$$4,000 \text{ pounds} \times .57 \text{ per pound} = \$2,280.00$$

When multiply by a decimal, multiply as if both factors are whole numbers. Then move the decimal place to the left the number of places in the original decimal:

$$4,000 \times 57 = 228,000$$

Move the decimal place to the left two places: 2,280.00

Estimating can help check your work. Notice that the answer is a little more than half the poundage. When you multiply something by .5 it is the same as dividing it by 2 (which would be 2,000). In this case we are multiplying by slightly more than .5, so the answer must be more than half of 4,000.

Total profit in 1835: \$2,280.00

$$800 \text{ fleeces} \times 5 \text{ pounds each} = 4,000 \text{ pounds}$$

$$4,000 \text{ pounds} \times .25 \text{ per pound} = 1,000$$

Notice that the answer is $\frac{1}{4}$ of the original poundage. Remember, .25 is the same as $\frac{1}{4}$. So, when you multiply by .25 you are doing the same thing as dividing by 4.

Total profit in 1840: \$1,000.00



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12. Make sense of why the value of raw fleece changed. Choose from the word bank to complete the paragraph.

Word bank:	decreased	supply	high	increase
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The value of raw fleece in 1835 was **high**. This encouraged farmers to **increase** the size of their flocks. The growth in the sheep population meant there was a greater **supply** of fleece. If there is a too much of a product, there is competition among the sellers and the price **decreased** to get customers to buy it. So, the value of raw fleece dropped when the population of sheep was at its peak.

13. Imagine you are a sheep farmer in New Hampshire in 1840. The cost of raising sheep at that time was about \$2.00 per animal. How much did it cost to raise your flock of 800 sheep? How does that compare to the profit you made from their fleeces at market in question 14?

800 sheep x \$2.00 per sheep = \$1,600.00

It cost \$1,600.00 to raise the sheep. Their fleeces only sold for a total of \$1,000.00. That is a loss of \$600.00

14. You hear the news that tariffs (taxes) on raw fleece from Europe are being lifted, so it will be cheaper to get wool from abroad. That means that your local wool is more expensive and textile mills might not buy it. What will you do? Will you keep raising sheep for a few more years? Or will you sell your flock and focus your farm on a different product? Why?

Most students should conclude that it's not a good business practice to focus so much on wool production for the textile industry. They could decide to sell the sheep for meat (mutton) or start making their own woolen products to sell. They may decide to sell the whole flock (as many farmers did) and change course entirely.



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Name _____

Draw Your Vocabulary



NAME:

DRAW YOUR OWN COMIC: ECONOMICS!

Draw a story based on the barter system or the concept of supply and demand. How can you SHOW what you know?





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