



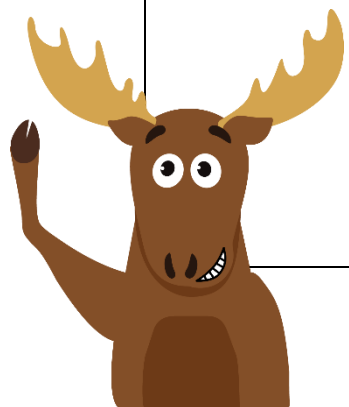
Lesson 11.2: Bells and Conveyor Belts

Name _____

Products in *Ox-cart Man*

As you read *Ox-cart Man*, take notes on two of the items he sells at the Portsmouth marketplace. Then, figure out what those objects are made out of and list the steps needed to make the finished product.

Product Name	Raw Materials	Steps to Finish
Shawl		
Birch Brooms		





Products in *Ox-cart Man*

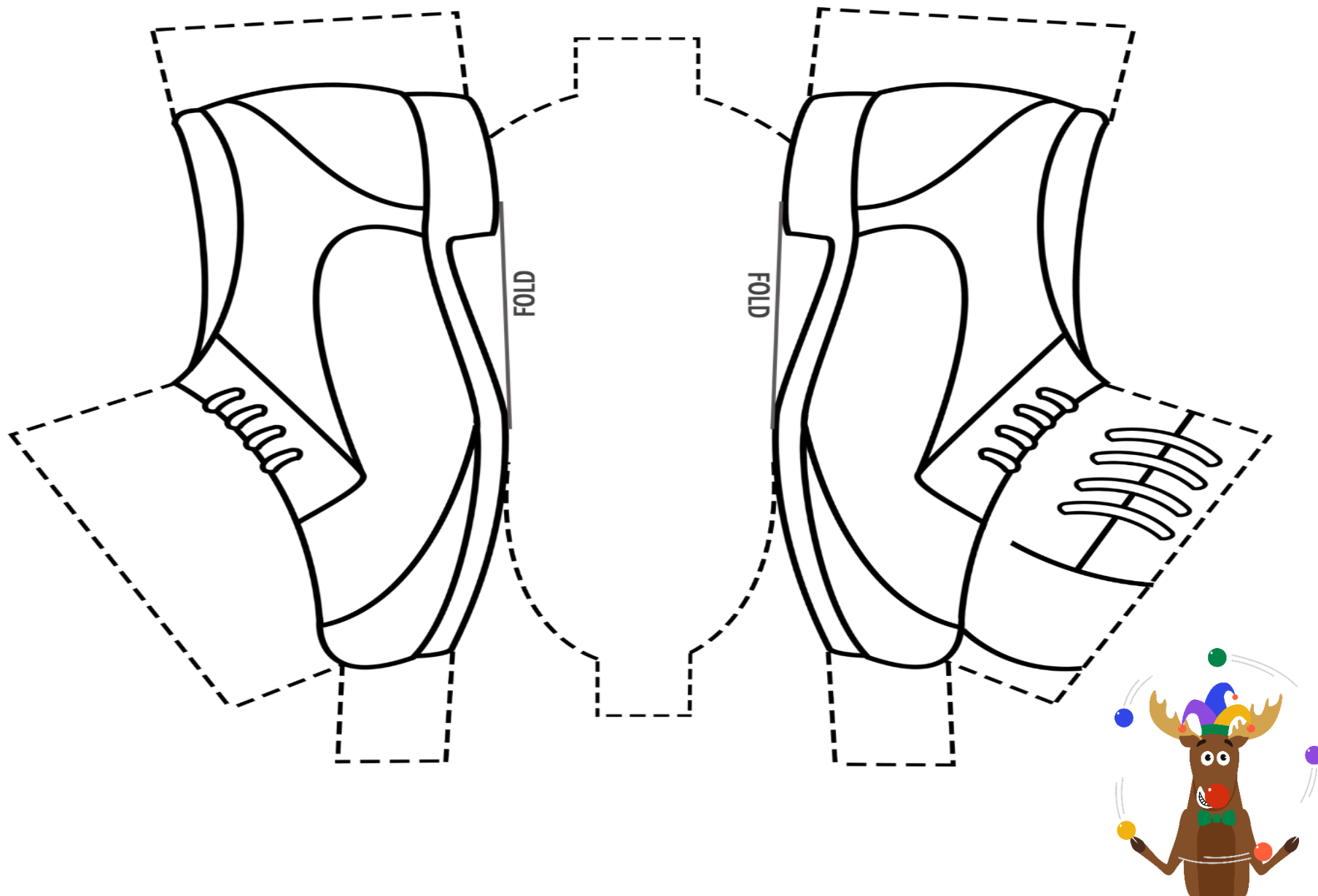
As you read *Ox-cart Man*, take notes on two of the items he sells at the Portsmouth Market. Then, figure out what those objects are made out of and list the steps needed to make the finished product.

Product Name	Raw Materials	Steps to Finish
Shawl	<ul style="list-style-type: none">• Wool	<ol style="list-style-type: none">1. Buy a few lambs from a neighbor.2. Raise lambs until they are grown.3. Shear sheep in the springtime when wool coats are longest.4. Collect after sheep are sheared.5. Clean wool.6. Spin wool into yarn on a spinning wheel.7. Knit yarn into a shawl.
Birch Brooms	<ul style="list-style-type: none">• Wood• Hay	<ol style="list-style-type: none">1. Plant a birch tree.2. Cut down a birch tree.3. Cut branches off of birch tree to create a smooth broom handle.4. Plant some hay.5. Harvest hay in the fall.6. Bundle hay into small groups.7. Attach hay bundles to one end of the broom stick with a piece of string.



3-D Shoe Model

Cut out the shoe stencil and decorate it to make it unique. Then, put the shoe together by folding along the dotted lines. Use glue or tape to hold the shoe together.





Lesson 11.2: Bells and Conveyor Belts

TIME TABLE	
— OF THE —	
AMOSKEAG NEW MILLS,	
Arranged to make the Working Time throughout the year average 11 HOURS PER DAY.	
COMMENCE WORK, - - - - -	at 6.30 A. M.
LEAVE OFF WORK, - - - - -	at 6.45 P. M.
Except on Saturday Evenings, at 4 o'clock.	
BREAKFAST, - - - - -	at 6.00 A. M.
DINNER, - - - - -	at 12.00 M.
COMMENCE WORK, after Dinner, - - -	at 12.45.
BELLS.	
Morning Bells.	
FIRST BELL, - - - - -	4.30 A. M.
SECOND, - - - - -	5.30 A. M.
THIRD, - - - - -	6.20 A. M.
Dinner Bells.	
RING OUT, - - - - -	12.00 M.
RING IN, - - - - -	12.35.
Evening Bells.	
RING OUT, - - - - -	6.45 P. M.
Except on Saturday.	
Saturday Evening Bell.	
RING OUT, - - - - -	4.00 P. M.



Lesson 11.2: Bells and Conveyor Belts

Name _____

Positives and Negatives of Factory Work

Watch "Mason Explains: Factory Work" and fill in the chart below. How was it better or worse than work in the cottage industry? Then answer the reflection questions.

Positives of Factory Work	Negatives of Factory Work

Reflect

Why was it better for businesses if workers only did one specialized job?



Positives and Negatives of Factory Work

Watch "Mason Explains: Factory Work" and fill in the chart below. How was it better or worse than work in the cottage industry? Then answer the reflection questions.

Positives of Factory Work	Negatives of Factory Work
Jobs and opportunities beyond family work Didn't need to know as much as on a farm in order to do job well Could get very good at your one task or job and do it quickly Worked together with other workers to make a product Didn't depend upon nature for your work Made money for yourself and family	Long hours Dangerous conditions Few breaks Likely boring Probably only had one job or one task Had to follow a schedule

Reflect

Why was it better for businesses if workers only did one specialized job?

It was better for businesses because if workers only had one job, they could get very good at it and do it quickly. This meant that more products were made more quickly and businesses could make more money.

Lesson 11.2: Bells and Conveyor Belts

Factory Work Simulation Directions

Set up the classroom with desks in lines. There are six (6) students per group, so make the appropriate number of assembly lines for your classroom. Push chairs out of the way so students stand. Assign to each student one of four jobs for the process of shoe making. The teacher will act as the factory manager.

Students 1 & 2: Cuts out shoe squares from "Shoe Making" worksheet. Please remind the Shoe Cutter students to be safe!

Student 3: Leather binder left (colors in the shoe outline on side 1)

Student 4: Leather binder right (colors in the shoe outline on side 2)

Student 5: Shoe selector (organizes a left and a right shoe pair out of a pile)

Student 6: Shoe gluer (glues the two shoe halves together)

Simulation Instructions:

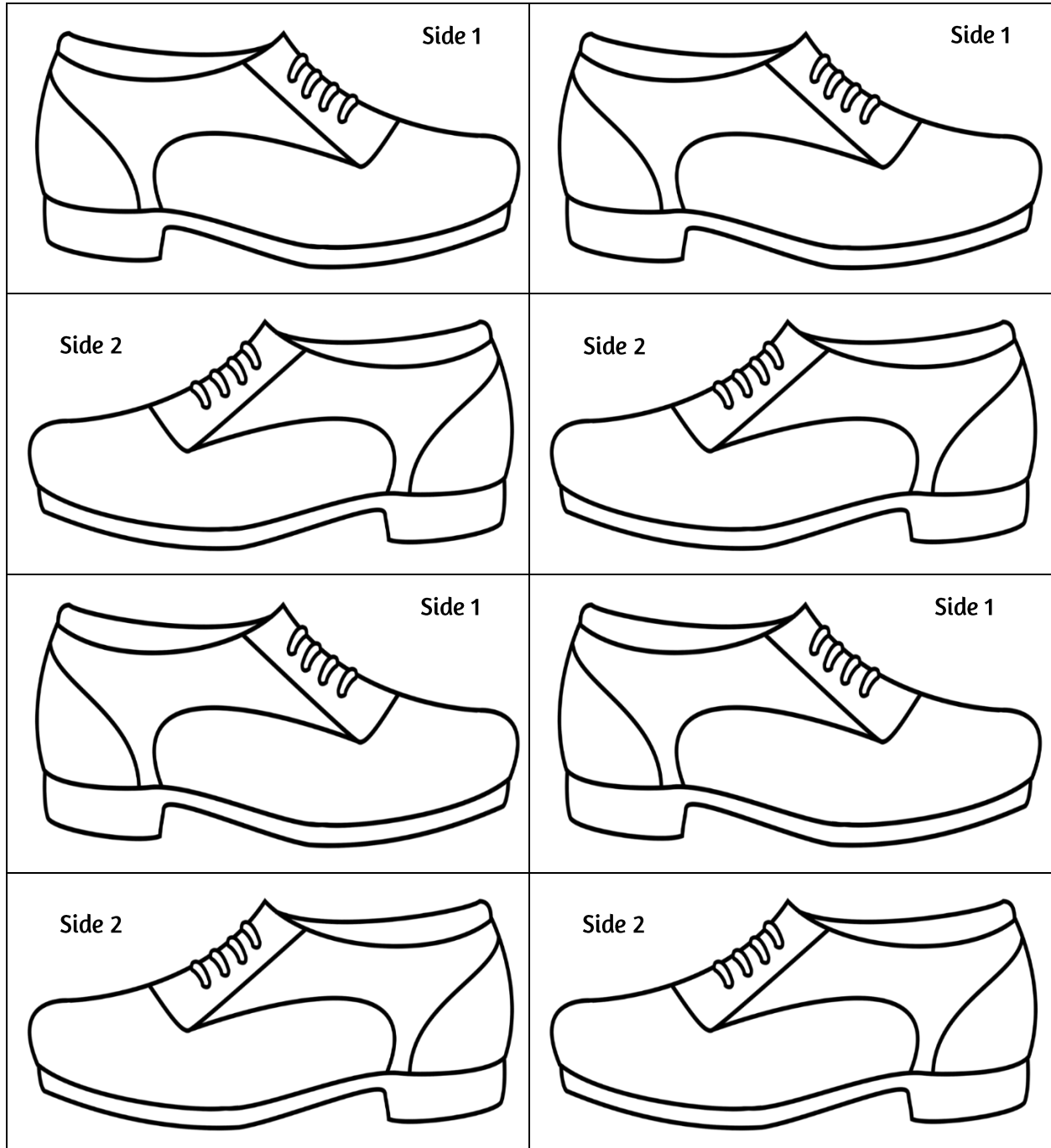
1. Imagine together what a typical day in a factory would be like and tell students that they will each be taking the part of a factory worker. Have students imagine that they were woken up this morning at 4:30 a.m. and must be at the factory for work by 6:30 a.m. Project "Recording Clock" and have them check-in using the recording clock, so that the boss knows they have arrived at work on time.
2. After checking in, have students take their places to conduct the simulation for 5 minutes. As students work, criticize imperfect work and hurry them along to produce more. Increase pressure as time goes on.
3. Do two rounds of the activity, keeping students in the same jobs. Give students a 30-second break in between rounds to walk around the room or stretch but instruct them to be back at their stations in time to begin again or else they lose their jobs.
4. After three rounds of the activity, inform students that lay-offs need to happen in order to save money for the factory. However, it is essential that shoes are made as quickly as before in order to save the remaining jobs. Lay off two students per group and rearrange the jobs as best for your class. Students who are laid off should stand to the side to observe.
5. Be sure to increase pressure to create quality shoes and criticize frequently. Consider hiring a foreperson or two to keep an eye on production and ensure quality. Initiate more layoffs or even close the factory if the product is not meeting standards.



Lesson 11.2: Bells and Conveyor Belts

Factory Work Simulation: Shoes

Cut out the two shoe halves with their boxes. Be sure that the words "Side 1" and "Side 2" are still visible after cutting.





Lesson 11.2: Bells and Conveyor Belts



Recording Clock, 1900-1910
Source: New Hampshire
Historical Society



Name _____

What Will You Tell Them?

A new worker has just come to your boarding house from their family's farm in the country, and tomorrow is their first day in the factory you have worked in for 9 months. They are a little nervous because they have only ever worked at home and were hoping you could tell them how the factory is different from the farm. What should they expect?

Give them advice and helpful hints and tell them what the biggest differences are. Be kind, of course, but also be honest! What will you tell them?





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Possible outcomes to include in advice:

- **People worked in their homes in the cottage industry but in the factory system, they worked in factories, which were sometimes loud, dirty, crowded, and stressful.**
- **In the cottage industry, products were made more carefully but in the factory system, they were made more quickly.**
- **In the cottage system, a person made the whole product from start to finish but in the factory system, they just did one piece of the bigger product.**
- **People likely had more personal choices about their work in the cottage industry.**
- **Bells told people when to work in the factory system and the seasons and daytime told people when to work in the cottage industry.**
- **There were long hours in both types of work, but in the factory system people were indoors and in the cottage industry, they could be outdoors and move around more.**



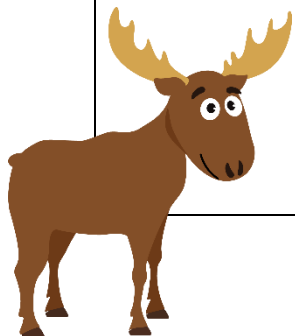
Lesson 11.2: Bells and Conveyor Belts

Name _____

Products in the Cottage Industry

Think about what it takes to create something from scratch. Using the chart below, list what is needed to create either a pair of mittens, a shawl, or a broom all by yourself. Think about everything that needs to happen in order to create those items and the tools and skills that you would need if you were making them from the very beginning.

Steps to create: _____	Tools & Skills Needed





Products in the Cottage Industry

Think about what it takes to create something from scratch. Using the chart below, list what is needed to create either a pair of mittens, a shawl, or a broom all by yourself. Think about everything that needs to happen in order to create those items and the tools and skills that you would need if you were making them from the very beginning.

Steps to create: _____ Mittens _____	Tools & Skills Needed
<ol style="list-style-type: none">1. Buy a few lambs.2. Raise lambs until they are grown.3. Shear sheep in the springtime when wool coats are longest.4. Collect after sheep are sheared.5. Clean wool.6. Spin wool into yarn.7. Knit yarn into mittens.	<ol style="list-style-type: none">1. Money or other goods to buy lambs.2. Skill: how to raise sheep.3. Food and shelter for sheep.4. Shearing scissors.5. Skill: how to shear sheep.6. Way to hold and clean wool.7. Spinning wheel to make wool into yarn.8. Skill: how to spin wool.9. Knitting needles to knit yarn into mittens.10. Skill: how to knit.



Lesson 11.2: Bells and Conveyor Belts



Workers in a Shoe Factory, 1905
Source: New Hampshire Historical Society



Lesson 11.2: Bells and Conveyor Belts

Name _____

The Bobbin Girl

Read *The Bobbin Girl* by Emily Arnold McCully and fill out the chart. What are the positives and negatives about working in the mills? Then answer the reflection question.

Positives of working in the mills	Negatives of working in the mills

Reflect: If you were in Rebecca's place, would you have participated in the turnout protest? Why? Answer on the back.



Lesson 11.2: Bells and Conveyor Belts

Name _____ Answer Key _____

The Bobbin Girl

Read *The Bobbin Girl* by Emily Arnold McCully and fill out the chart. What are the positives and negatives about working in the mills? Then answer the reflection question.

Positives of working in the mills	Negatives of working in the mills
Earning money to help your family or to save for future things, like education Community of young women Evening and weekend activities: education, lectures on self-reliance, socialization you can't get on the farm Learning about the power of standing up for what's right Building independence	Overly strict rules like no reading, short breaks Hard, unhealthy, unsafe working conditions: too loud, flying shuttles, wet-lint filled air Owners don't tell workers about accidents Owners cut wages without notice or fire people suddenly for small reasons

Reflect: If you were in Rebecca's place, would you have participated in the turnout protest? Why? Answer on the back.

Possible response: I am not sure. I would want to stop the bad working conditions and unfair bosses, but I would be afraid I would lose my job, especially since my family depended on my wages. I think if enough other people joined I would join too, but I wouldn't be one of the first to start it.