

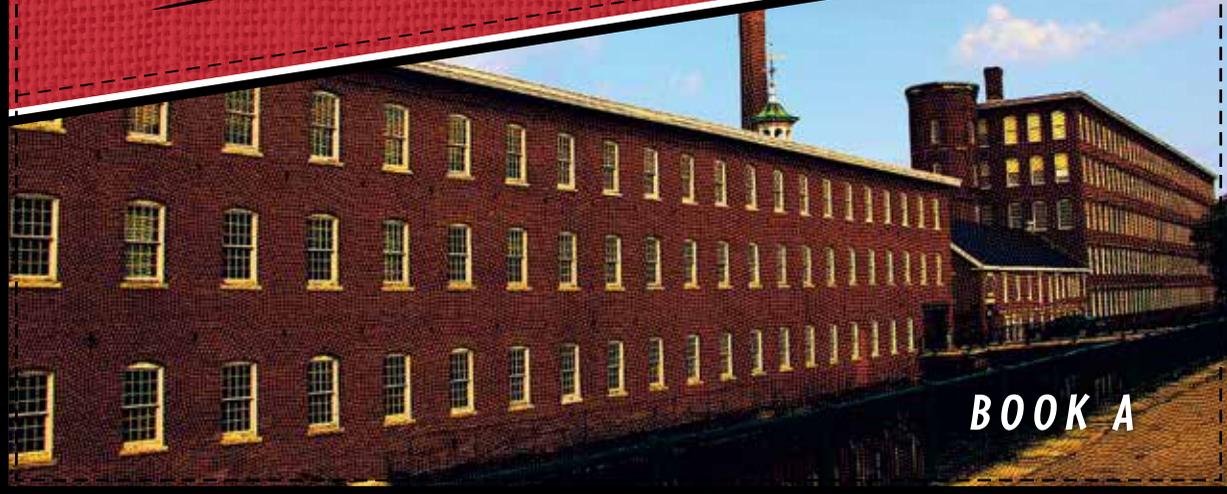
Lowell

National Park Service
U.S. Department of the Interior
Lowell National Historical Park

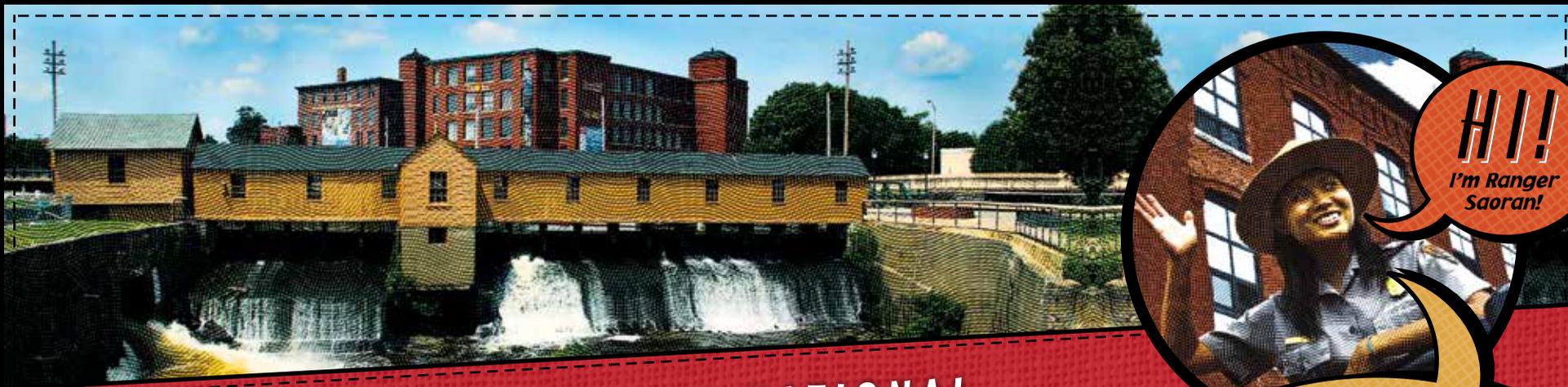


JUNIOR RANGER

ACTIVITY BOOK



BOOK A



WELCOME TO LOWELL NATIONAL HISTORICAL PARK!

HI!
I'm Ranger Saoran!

I grew up in Lowell and became a ranger because I love the national parks. I help take care of them so that kids can enjoy visiting as much as I do!

The National Parks are special natural and historical places that belong to all of us. Lowell National Historical Park is here to protect and share the places that you'll explore today.

This book will guide you on your journey to becoming a Junior Ranger — a journey through 200 years of Lowell's history. National Park Service Junior Rangers explore, learn about, and protect our National Parks!

But wait...what's a National Park doing here?

Over the last 200 years, what happened in Lowell has changed the way we work, live, relate to the natural world, and make items we use every day. As you complete this book, you'll explore all the special things that make Lowell a National Park.

KEY WORDS

Below are some vocabulary words that may help you understand the history of the park and its workers.

MILL

A water powered factory. In Lowell, mill companies paid workers to run the machines that turned cotton into cloth. The companies made money by selling millions of yards of cloth.

CANAL

A manmade waterway. In Lowell, the canals delivered water from the Merrimack River to the mills.

IMMIGRATION

Moving permanently to one country from another

REFUGEE

One who flees, especially to another country, seeking refuge from war, political oppression, religious persecution, or a natural disaster.

JOIN US!

To become a Lowell National Historical Park Junior Ranger:

Learn something important about Lowell by doing ONE of these things:

- Watch the 15-minute Visitor Center film, *Lowell: The Continuing Revolution*
- Visit www.nps.gov/lowell
- Talk to a park ranger!

What did you learn?

Complete at least THREE activities in this book. Check them off as you finish them:

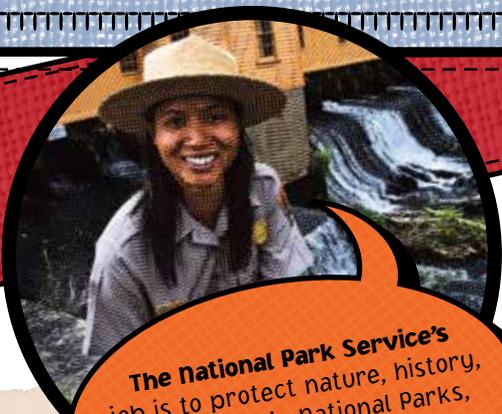
- Old Building, New Use (*Visitor Center*)
- Neighborhood (*The Acre*)
- Power Canals (*Canalway walking trail*)
- Mill Work (*Boott Cotton Mills Museum*)
- Boardinghouse Life (*Mill Girls Exhibit*)
- Immigration (*Immigrants Exhibit*)

Complete at least ONE Spotlight page. Check it off as you finish:

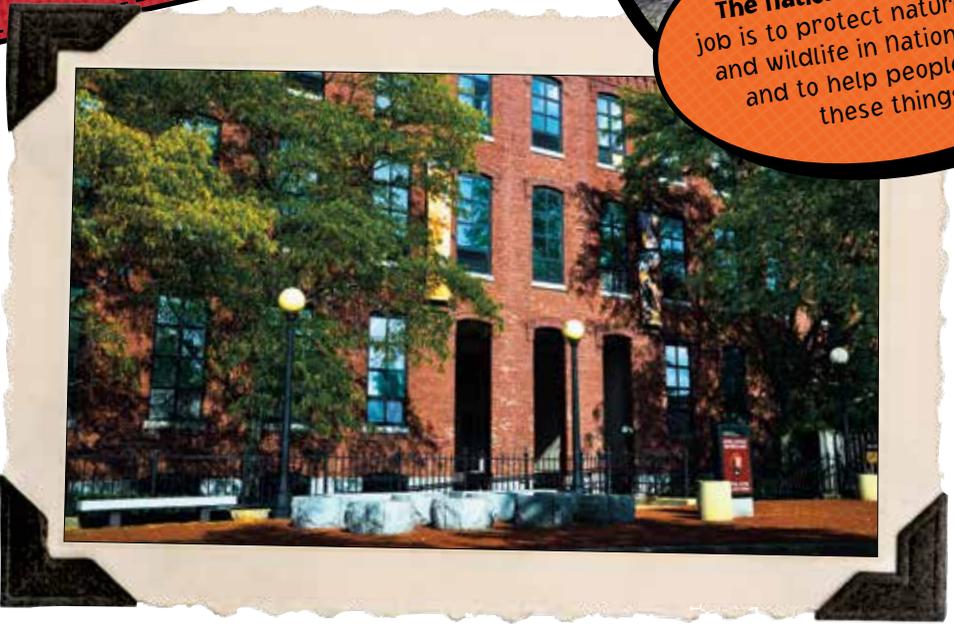
- Technology at work
- Tradition of change

When you've completed this checklist, head to the Visitor Center or Boott Cotton Mills Museum. Find a park ranger to share what you've explored and recite the Junior Ranger Pledge together to earn your official badge!

ACTIVITY #1



The National Park Service's job is to protect nature, history, and wildlife in National Parks, and to help people enjoy these things.



One way Lowell National Historical Park helps take care of old buildings is to find new uses for them. Use the space below to draw something fun you did inside this building! Why do you think this would be a good use for this building?

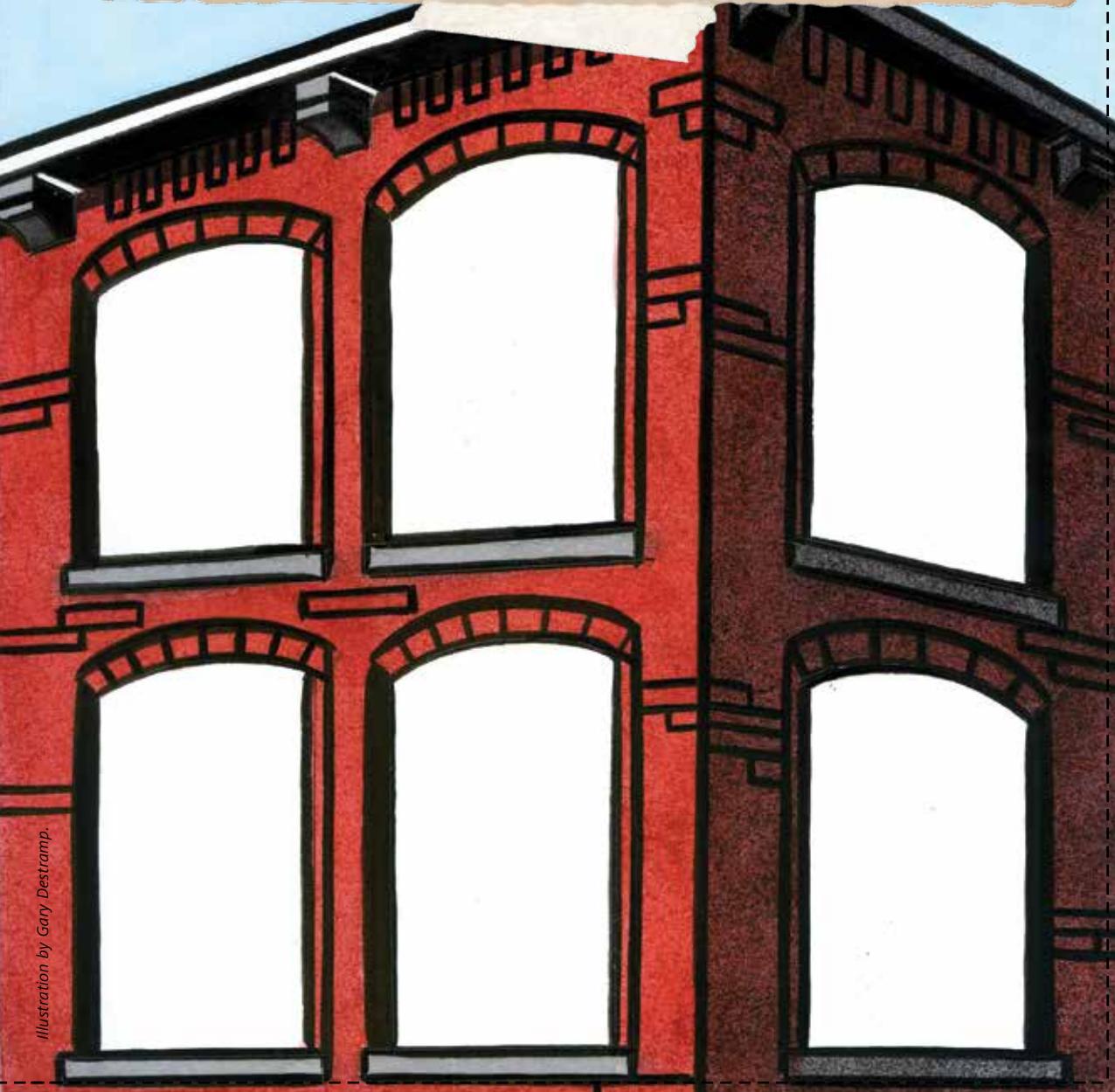


Illustration by Gary Destramp.

VISITOR CENTER

OLD BUILDING, NEW USE

The National Park Service's job is to protect nature, history, and wildlife in National Parks, and to help people enjoy these things. The building you're standing in is one of the pieces of history the National Park Service helps protect. But what is this old brick building?

- Look around and figure out:
(Ask a park ranger if you need help figuring it out!)
- What do the windows look like?
- How tall is it? A.) 4-6 stories tall B.) 3 stories tall
- What's outside? What's inside?
- What was this building was originally used for?

ACTIVITY # 2



In 1911, many houses in the Acre looked a lot like this. Do the houses you see today look similar or different? Draw below!

THE ACRE

THE NEIGHBORHOOD

Over the last 200 years, families have immigrated to Lowell from around the world. Many have settled in a neighborhood called the Acre.

I'm 15-year-old Cornelius Hurley. In 1911, I lived on Adams Street with my family. Let me show you around my neighborhood!



Library of Congress, Prints & Photographs Division, National Child Labor Committee Collection

Let me show you around! On your walk, see if you can find a place where...

- People live
- Kids can play
- People might go fishing
- People go to church
- Kids go to school
- People get something to eat

In 1911, this neighborhood was noisy! The sounds of factories, horses, and people yelling to their neighbors went on day and night. What sounds do you hear today? _____



ACTIVITY # 3

CANALWAY TRAIL

POWER CANALS

This picture was taken of canal workers over 100 years ago in Lowell! Their job was to help repair the 5.6 miles of canals that powered the city's mills.



Look closely at the photo with a friend or grownup. *What's going on in this picture?* Talk about it!

Pick one person in the photo and pose like them. *How do you feel in that pose?*

NATURE + PEOPLE = CANALS.

In the 1800s, men dug canals to deliver water from the Merrimack River to the mills. Today, the system still connects nature to buildings and people in this city.

In this activity, you'll use your senses to explore this connection! Use the map to explore one section of the canal system. For example, you might walk between the Visitor Center and the Boott Mills by following the Merrimack Canal. As you walk along the canals, use your senses to investigate and decide whether the smell, sound, texture, and sight is made by nature, people, or both. Then, record what you smell, hear, touch, or see in the boxes below.

What do you smell?

What do you hear?

What do you touch?

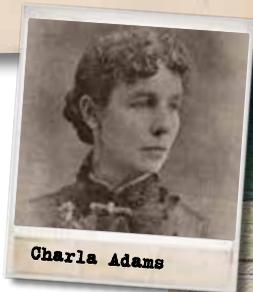
What can you see?

SPOTLIGHT TECHNOLOGY & CHANGE

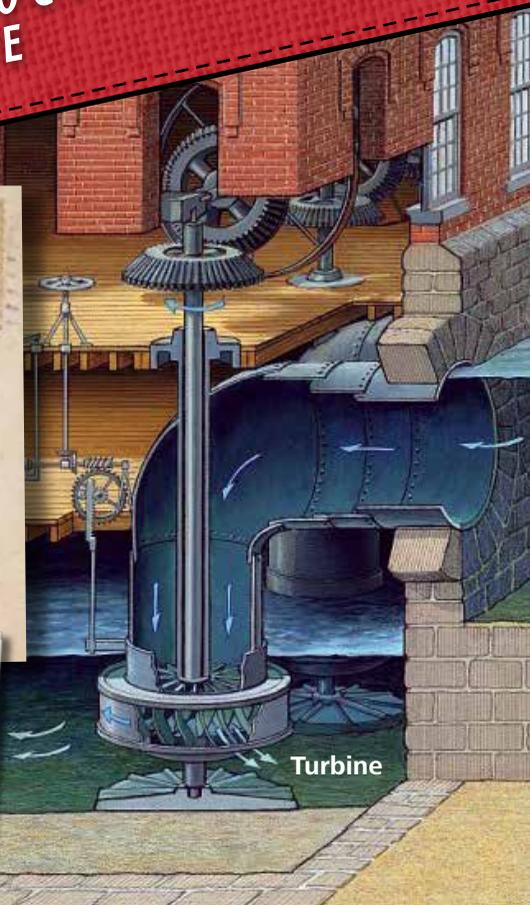
Dear Visitor,

In 1865, when I was 13 years old, I came to Lowell to work in the mills. As an adult, I became a mathematician and helped research waterpower. Now I work with engineers to test how well turbines work. Turbines are an important invention. They use the energy of falling water to make power for the mills' machines.

THIS SIDE IS FOR THE ADDRESS

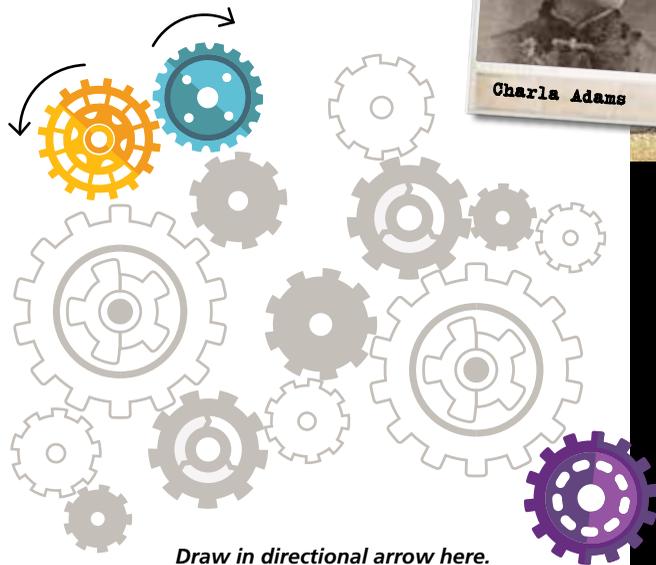


Charla Adams



Turbine

TECHNOLOGY AT WORK



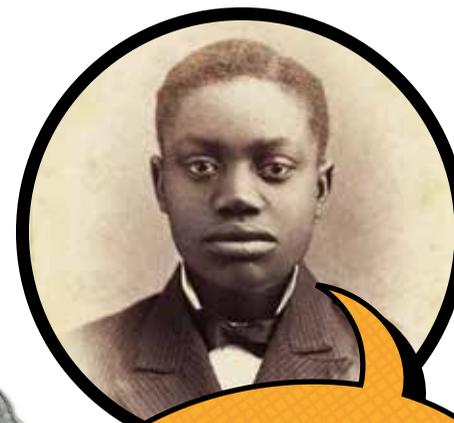
Draw in directional arrow here.

How does the turbine make machines move? Wheels and gears connect to the turbine and make things go! When one spinning gear connects to another, it makes that gear spin too — in the opposite direction. For example, the aqua gear spins clockwise, and makes the orange gear spin counterclockwise. Follow the gears to figure out which direction the purple gear is moving in.

TRADITION OF CHANGE

Lowell has a long history of people standing up for what they believe in.

Enoch Lovejoy Lewis was born in 1826 and grew up in Lowell. His family was active in the abolition movement — a movement that helped to end slavery in the United States.



My family helps organize abolition meetings. I also run a used clothing store, and my father owns a barber shop. We both use our businesses to help people escaping slavery change their appearances.

Can you help Enoch pick a location for Lowell's next public abolition rally? As you walk around downtown, find a place that:

- Can hold a big crowd**
Frederick Douglass, a famous abolitionist, is coming to speak, so lots of people will be there.
- Is open to the public** — like a park, a city-owned building, or a church
- Is very visible** — find somewhere close enough to businesses that people walking by might stop and support your rally.

My location is: _____

Where do you think abolition meetings could have happened in downtown Lowell in the 1830s? What places did you find for Frederick Douglass to speak?

ACTIVITY #4



 BOOTT MILLS

JOBS

What kind of jobs were people doing in the mills? Look around the exhibit to find the model of a Lowell mill in 1840. On each floor, you'll see people doing different jobs. Each job is a different step in the process of turning cotton into cloth.

See if you can find people working on:

- Carding machines
- Spinning frames
- Drawing-in frames
- Looms

MILL WORK

Lowell's mill companies made lots of rules for their workers. Having to follow strict rules and a strict schedule was a new experience for lots of them.

When people came to work at the Boott Mills in the 1830s, they signed a contract agreeing to follow the rules below. **Would you sign?** Put a \checkmark next to rules you would follow, and an X next to rules you don't like.

REGULATIONS
TO BE OBSERVED BY PERSONS EMPLOYED IN THE
BOOTT COTTON MILLS.

DO YOU AGREE...

- to work here for at least one year?
- to not take home any of the yarn or cloth you make?
- to not have any friends visit the boardinghouse after 10 PM?
- to pay one third of the money you earn to the boardinghouse?
- to keep your room in the boardinghouse clean and tidy?

WOULD YOU FIT IN?

4-5 X's:
Find another type of work...or organize with other mill workers to change the rules.

2-3 X's:
Sounds like mill life might not be for you — what kind of job might have fewer rules?

0-1 X:
You might be a good fit for working in the mill.



MILLS TODAY

Today, people make clothing in factories around the world. The cotton might be grown in Mississippi, woven into cloth and sewn into a t-shirt in Bangladesh, then shipped back to the United States and into a store near you.

Check your tags. Where were your clothes made? Put a star on the map where at least one piece of your clothing was made, then draw an arrow from the star to where you live.



ACTIVITY # 5

MILL GIRLS EXHIBIT

BOARDINGHOUSE LIFE

The mill companies in early Lowell (1820s-1840s) built different housing for each type of worker. Most of the early factory workers were young women, who lived together in large boardinghouses.



I'm Harriet Hanson!
I work in the Boott Mills and live in a boardinghouse owned by the mill company. Where do you live?



Boott Mill Boardinghouse

How many factory workers do you think lived here?



Boott Mill Family Tenement

How many factory mechanics and family members do you think lived here?



Boott Mill Agent's House

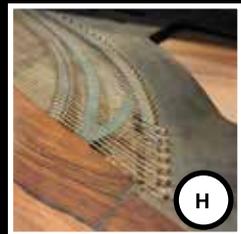
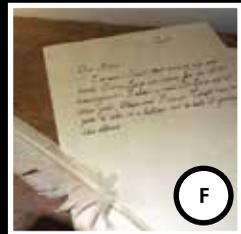
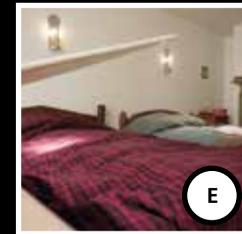
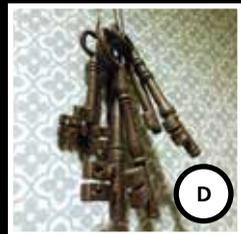
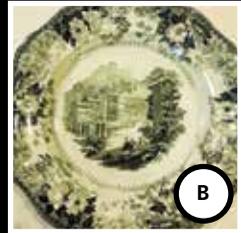
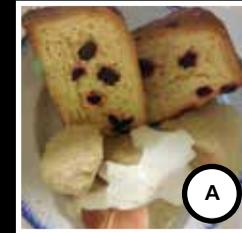
How many factory managers and family members do you think lived here?

BOARDINGHOUSE LIFE

Imagine leaving your home to live with strangers in a Lowell boardinghouse. How would you feel?

When people came from farms to the Lowell factories, a lot of things were unfamiliar. As you explore the Mill Girls Exhibit, get to know the boardinghouse by finding the things pictured at right. Can you figure out what all eight things are? Circle anything similar to something you have at home.

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____
- H. _____



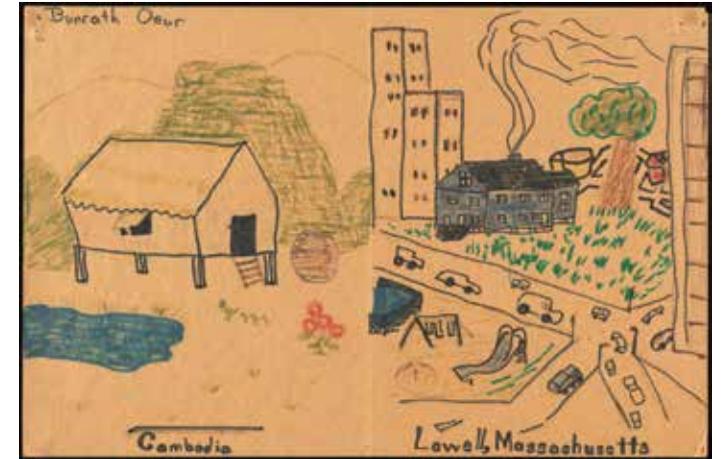
ACTIVITY # 6



HOME

In the 1980s, families fleeing war in Cambodia came to Lowell as refugees. Today, Lowell is home to a large Cambodian-American community, and many other families from all over the world.

This picture was drawn by a student who had recently come to Lowell, comparing his old home to his new home.



Now draw a picture of your home. What is one word that describes your home?



IMMIGRATION EXHIBIT

IMMIGRATION

Since the city was first built, families have come to Lowell from all over the world. Some came to escape war or other dangers, while others came for jobs or to join family.

For most people, leaving their home country and making a new home in Lowell meant big changes.

Look around the exhibit and find four countries people have come to Lowell from:

1. _____
2. _____
3. _____
4. _____

KNOW YOUR PARK!

Here are a few important questions to think about during your Junior Ranger journey:

- Lowell was one of the first factory cities in the United States.
What did the mills here make? Who worked in them?

- Lowell's mills were powered by water.
How did the water get to the mills?

- People came from all over to work here — and still do!
Who were Lowell's first mill workers?

What was it like to live and work here 200 years ago?

100 years ago?

- Lowell led the way and many other cities followed.
What was new about Lowell's mills?

Where is cloth made today?

This book belongs to:

