



Mississippi National River and Recreation Area

www.nps.gov/miss
www.livetheriver.org
651-293-0200

Name _____ Age _____

Keep Going!

Complete all the other Junior Ranger workbooks!

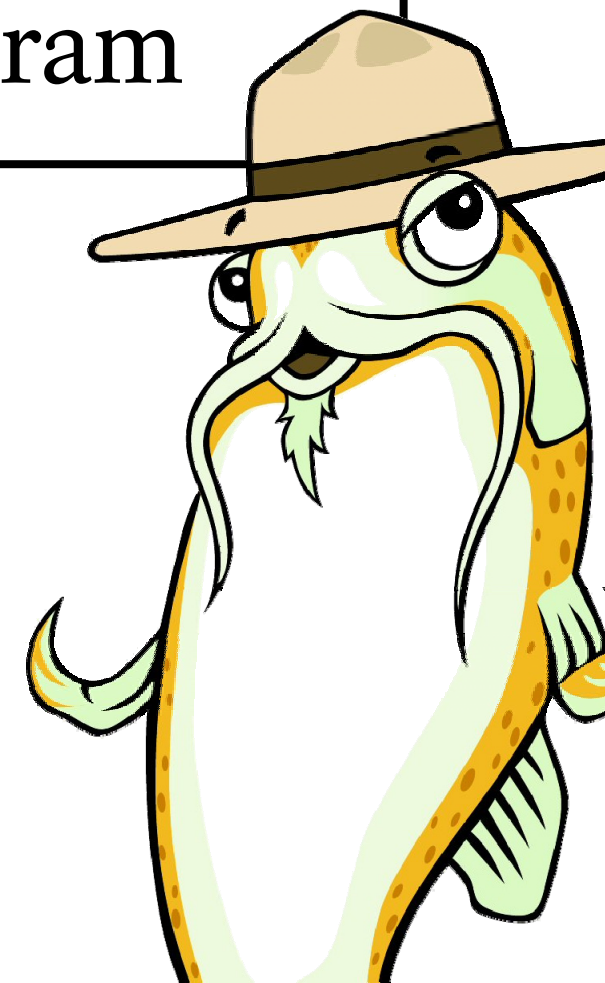
- ★ Mill Ruins Park
- ★ The Mississippi River Visitor Center (in the Science Museum of Minnesota)
- ★ North Mississippi Regional Park



Junior Ranger Program



Minnesota Historical Society



National Parks!

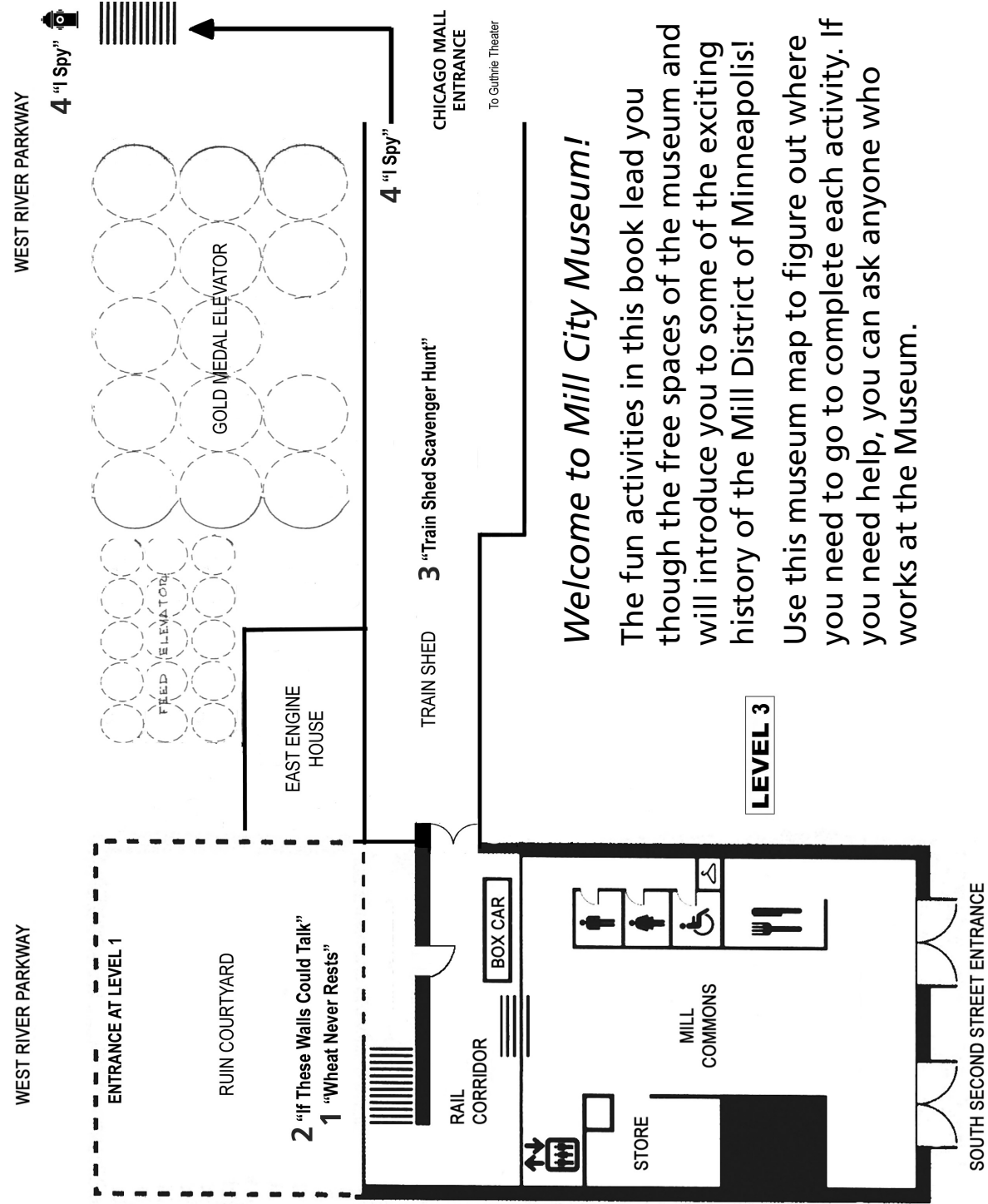
Mill City Museum is part of a National Park called the *Mississippi National River and Recreation Area*.

Over 390 National Parks all over the United States protect areas that are important to the entire country. They keep historic buildings and fields preserved, natural areas healthy for animals and plants, and preserve and tell stories that otherwise might be forgotten.



What about Mill City Museum is important to the entire country?

What about the Mississippi River is important to the entire country?



Welcome to Mill City Museum!

The fun activities in this book lead you through the free spaces of the museum and will introduce you to some of the exciting history of the Mill District of Minneapolis!

Use this museum map to figure out where you need to go to complete each activity. If you need help, you can ask anyone who works at the Museum.

Logging!

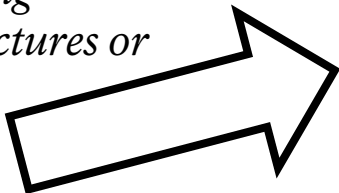
The Mississippi River's power was used for logging in addition to milling.



"Hello! I'm Helen Godfrey. I'm 8 years old and my family just moved here to Minnesota. It's the year 1849, and St. Anthony (Minneapolis) is a lumber town. Lumberjacks cut down white pine trees in the northern forests then float the logs down the Mississippi River to the sawmills at St. Anthony Falls, like the one my father built for Franklin Steele."

"I take piano lessons from a teacher who lives on Nicollet Island. Unfortunately there isn't a bridge yet, so I cross the river by stepping from log to log like the lumberjacks!"

Design your own log mark using letters, pictures or symbols.



Q: How do the lumberjacks tell which logs go to which mills?

A: Loggers used a heavy hammer to mark each of their logs with a special design.

This mill had many floors of machinery. The third floor (where you picked up this book) was the

3

where workers put flour into barrels and sacks.

A _____ is parked on the railroad tracks,

2

where it could be loaded with flour barrels and sacks.

The top job at the mill was held by the person in charge of the whole milling process called the

6

The Washburn Crosby A Mill complex could produce 40,000 barrels of flour a day, enough for 12 million loaves of _____.

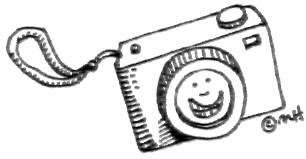
8

The Washburn A Mill

1 2 3 4 5 6 7 8

in 1878, four years after it opened as the largest flour mill in the world.





I Spy!

The photograph below was taken in 1890. Go stand in the same spot as the 1890 photographer:

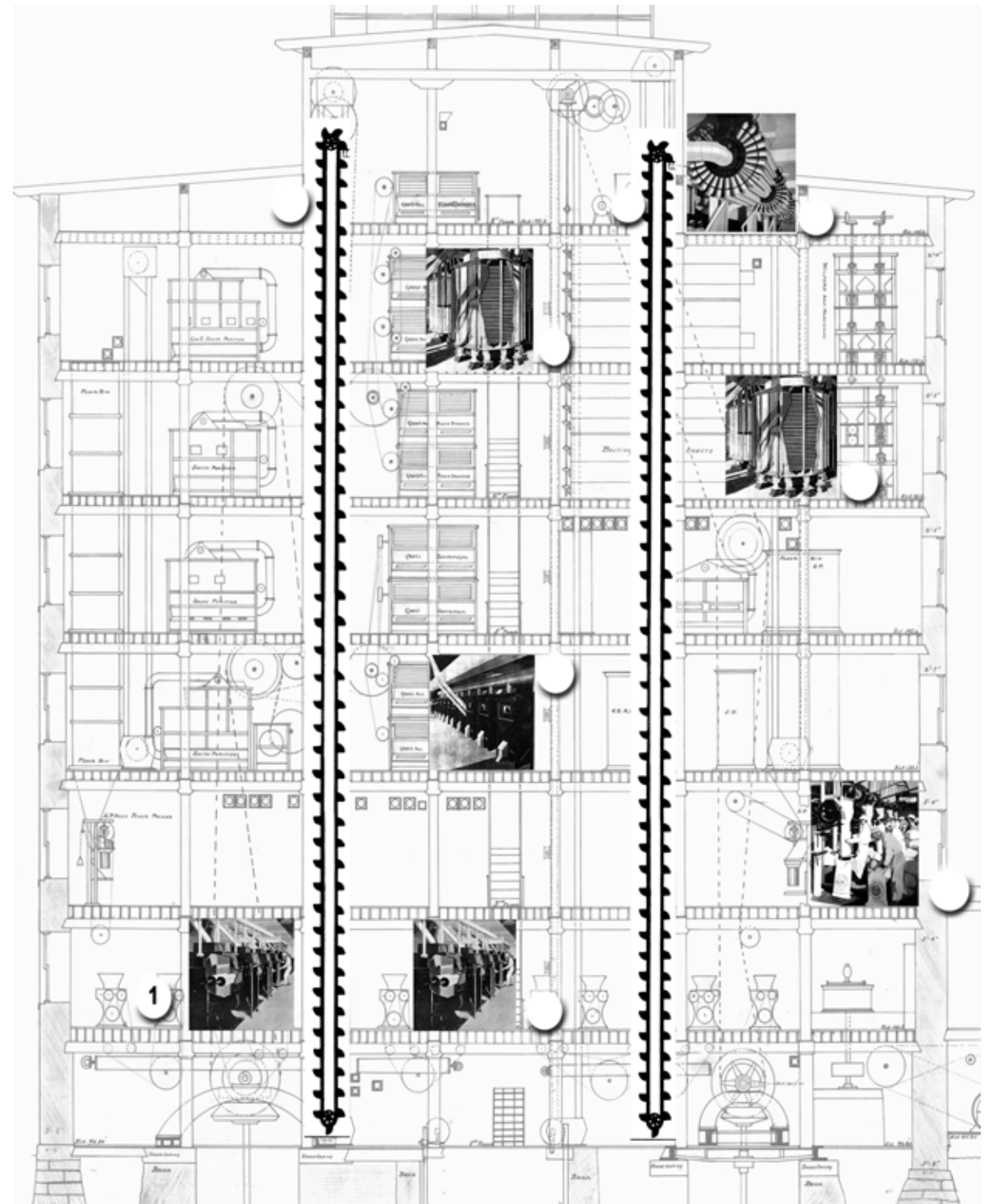
Bring an adult with you and be very careful near the road!

1. Exit the Mill City Museum train shed towards the Guthrie Theater.
2. Walk down the steps on the left toward the West River Parkway.
Beware of traffic!
3. Stand next to the red fire hydrant and look to your left.

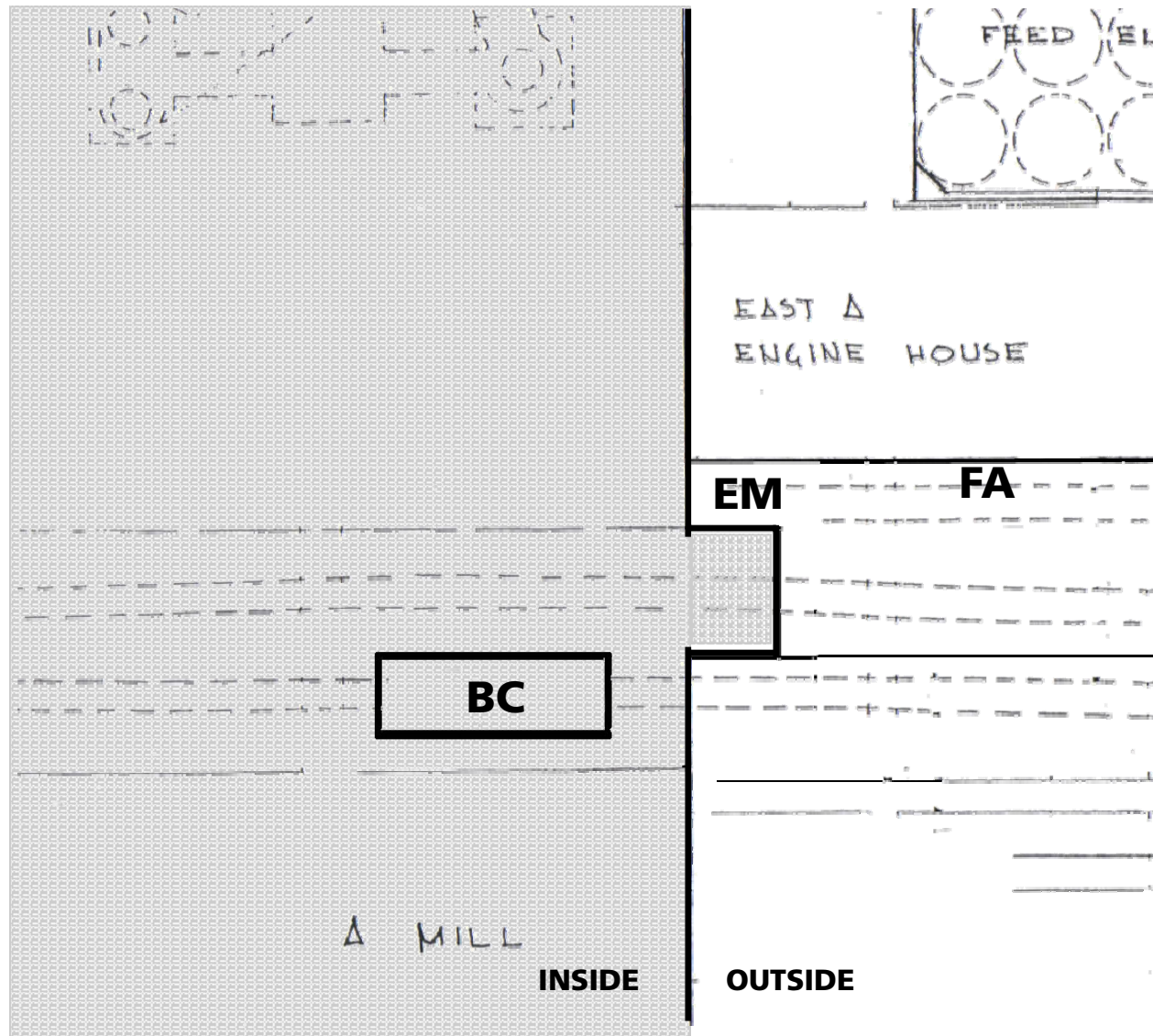
Activity #4 on the page 2 map.



Minneapolis Mill District, 1890



Map for the Train Shed Scavenger Hunt



① How did the mill workers get to the door up there?

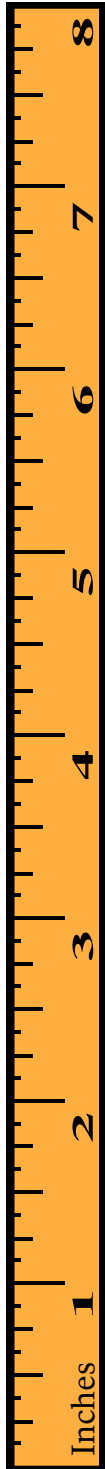
② What was stored in these metal tubes?
(Hint: What did the mill make?)

③ What twisted these metal beams?

④ These metal beams were placed here after the 1991 fire. What do you think they do?

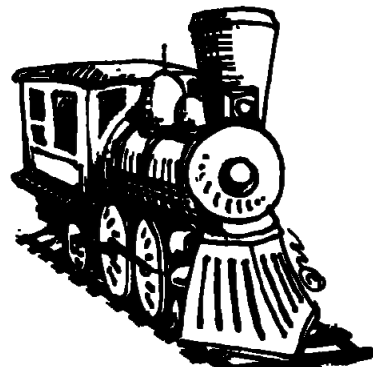
⑤ This opening was larger than a window. What did workers move through it? (Hint: The 3rd floor was where flour was packed into containers.)

⑥ Outside the courtyard, above the arched doorway is a plaque. Whom does the plaque honor? (***Beware of traffic in the road!***)



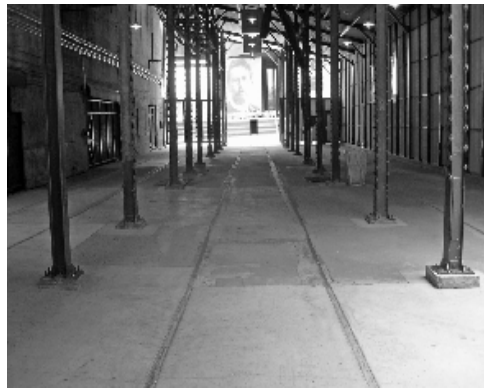
Train Shed Scavenger Hunt

Activity #3
on the page
2 map.



Go outside through the glass doors near the boxcar into the covered train shed.

Use the map, on the next page (pages 11 and 12) and pictures to find these five locations and the answers to the questions!



Railroad Tracks (RR)

Trains brought grain in from the farm fields for cleaning and storage at the mill.

How many sets of tracks are in the train shed?



Fire Alarm Signal (FA)

Fire is a big danger in flour mills. Flour dust is explosive. Each part of the mill had its own alarm signal.

What was the alarm signal for this part of the mill?

Electric Motor (EM)

This motor ran the mill when there wasn't enough water power.

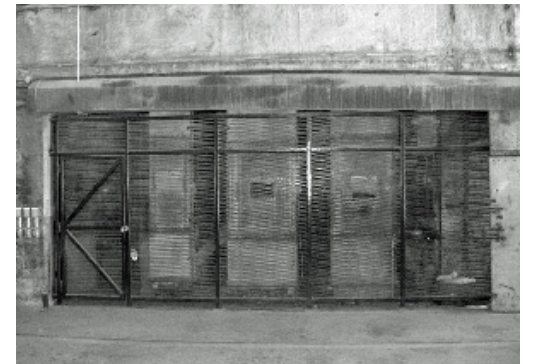
How many inches wide is the metal wheel?



Bucket Elevator Shafts (BE)

Inside the three large boxes on the left are elevators to lift wheat into the storage bins. To the right is an elevator with a platform and handle.

What do you think the elevator on the right lifted?



Boxcar (BC)

Leave the train shed and go back inside the museum, find the boxcar.

What is the capacity (copy) of this boxcar?





Activity #2 on the page 2 map.

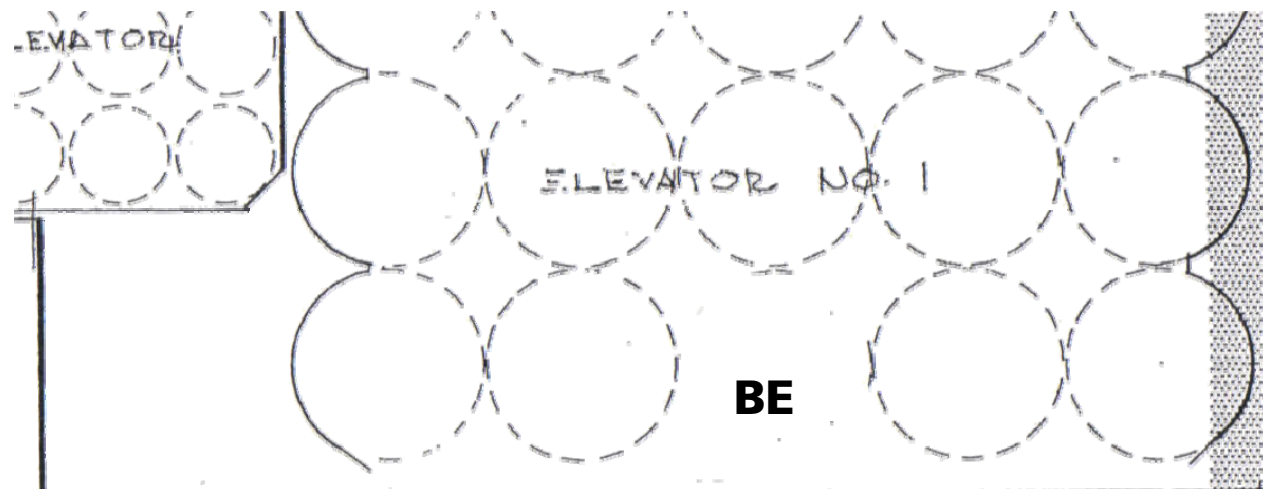
If These Walls Could Talk...

A big fire in 1991 destroyed the Washburn A Mill (now Mill City Museum). Instead of tearing down its crumbling walls, it was decided to save them. These walls hold important clues to the past, if you know how to read them.

Examine the ruin walls. The number in the picture below will show you where to look. Use all the new information you've discovered today to make-up your best answer to the questions on the next page.



*This map is looking down on the Museum from above.
Ask any museum staff if you need help.*



These two- letter abbreviations match up with the items on the previous page. Use this map to help find the answers to the scavenger hunt!



Wheat Never Rests

Activity #1 on the page 2 map.

Read the story of how wheat becomes flour. Place the number for each step next to the machine on the drawing on the right. Then trace a line from machine to machine in their up- and-down order.

1. The **roller mill** breaks wheat into small pieces.
2. A **bucket elevator** lifts wheat pieces to the top of the mill.
3. Wheat pieces are sorted by size as they move down through **sifters**.
4. Gravity pulls the wheat pieces down to **purifiers** that use air to remove bran.
5. **Roller mills** below grind wheat pieces into even smaller pieces.
6. A **bucket elevator** lifts the re-ground wheat to the top of the mill.
7. **Dust collectors** at the top of the mill keep flour dust out of the air.
8. Gravity pulls the wheat through fine mesh **sifters**.
9. Finished flour flows down to **packing machines**, where it is placed in barrels or bags

LOOK UP!

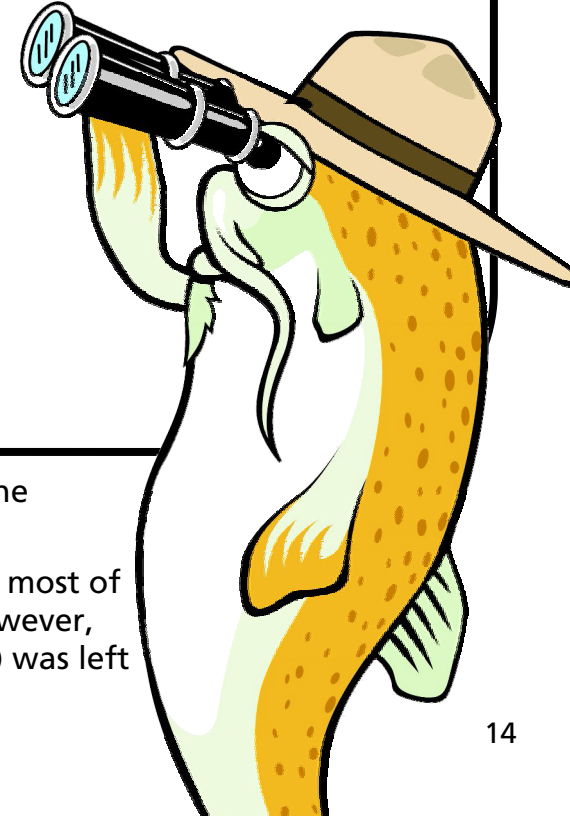
The glass wall next to the Ruin Courtyard has a picture etched into it. It is a cross section of the Washburn A Mill as it looked in 1898. That picture is also printed on the next page.

The picture shows exactly where each flour milling machine could be found. Try and find the machines listed above!



Compare the Minneapolis Riverfront today to the Riverfront in the 1890 photograph. What is different or the same?

How might the Riverfront be different 100 years from now?



In this photo the Mississippi River is behind the buildings on the right.

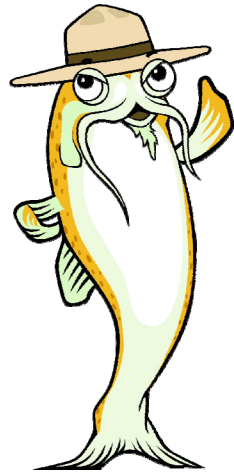
After the flour mills shut down in the 1930's, most of the buildings were torn or burned down. However, the Washburn A Mill (now Mill City Museum) was left standing and is on the left in the photo.

Want to earn a Junior Ranger Badge?

Complete as many of the activities in this booklet as you can and show it to someone who works at Mill City Museum to get your Junior Ranger Badge.

Junior Ranger Pledge:

As a Junior Ranger
of the Mississippi River
I promise to:
**Explore the River,
Learn about the River,
and Take Care of the River**



Freddie the
Flathead Catfish

When you earn a Mississippi River Junior Ranger Badge you become a member of a special group. Junior Rangers help National Park Rangers protect the Mississippi by exploring, learning about, and taking care of the river.

Park Rangers provide many special programs just to help Junior Rangers fulfill their pledge. *Sign up for the free program mailing list when you get your badge.*

Image Sources:

Courtesy of General Mills Archives : 6
Discovery School (<http://school.discovery.com/clipart/>): Pages 9, 13, 15
National Park Service: Cover, 1, 12, 14, 17, 18
Minnesota Historical Society: Pages 2 - 7, 9 - 13, 15, 16
MS&R Architecture: 7 (top image)



If you could create your own National Park what would it be? What you would be protecting?
Draw a picture of your park below.

