

## THE EQUIPMENT



Who built this model? William H. Pugsley ①

A flour mill is designed for mass production with similar machines grouped together.

QUESTION: This model is similar to the mill you are in now. Match what happened on the bottom three floors with what is on those floors now.

<u>Grinding Floor</u>	<u>Museum Exhibits</u>
<u>Packing Floor</u>	<u>Education Lobby</u>
<u>Power Floor</u>	<u>Entrance &amp; store</u>

## THE PLAYERS



What crew were these men on? Threshing ⑤  
How many men were in this crew? 15

Bonanza farms were large farms of 1,500 acres to 100,000 acres that specialized in only one crop. Over 1,000 seasonal field hands worked on the largest farm.

QUESTION: Why wasn't card playing allowed on the bonanza farms? (Hint: Read the backs of the chairs.)  
ANSWER: It caused men to lose strength by keeping them up at night.

## THE PRODUCTS AND THEIR PROMOTION



With new milling techniques in the 1880s, companies made better products and began advertising brand names. They used commercials, ads, and slogans to do so. ⑧

QUESTION: Look at the printed ads on the inside wall. Name three words or images that people used to sell flour. Answers will vary but could include Good food, tested, guaranteed, etc.  
Name two items that appear in two or more ads. Answers will vary (wheat, flour bags, etc).

What is this machine, and what did it replace? ②  
Roller Mill      Millstones



The first Washburn A Mill had 41 run of millstones. In 1880, the rebuilt mill had 15 run of millstones and 86 roller mills. (A run is a pair of stones).

QUESTION: Why are roller mills more efficient than millstones?  
ANSWER: They make it easy to separate out bran, rather than crushing it.

Who is this man? Cadwallader C. Washburn ⑥  
When did he build his first flour mill here? 1866



In 1880, this man built the mill you are standing in. Before entering the flour milling business, he worked as a surveyor, a schoolmaster, a lawyer, a banker, a congressman, and the governor of Wisconsin. Even though he became one of the most important men in the history of our state, he never lived here.

What rights did he buy that enabled him to run flour mills in Minneapolis? Waterpower



Who is this? William Hood Dunwoody ⑨  
Why was he in London in 1877?  
To convince bakers to buy Minneapolis flour

Washburn Crosby was already supplying a worldwide market by the time it became General Mills in 1928. Its slogan "Eventually, Why Not Now?" was translated into 15 languages!

QUESTION: Name three countries Washburn Crosby/General Mills supplied with goods. ANSWER: Answers will vary (Argentina, Bahrain, Belgium, Brazil, China, Dutch Guiana, Egypt, England, Guatemala, Haiti, Russia, etc)

How far did St. Anthony Falls drop? 50 feet ③



Water must flow or fall to create power. Flowing, it turns water wheels; Falling, it turns turbines. Turbines powered the Minneapolis mills. Look at the turbine to the left of this picture. You can make it spin.

QUESTION: What happens when you turn the turbine?  
ANSWER: The bucket elevator moves.

Draw a line to match the worker to his/her job(s) at the mill. ⑦



<u>Loader:</u> Loads boxcars with packaged flour	<u>Packer:</u> Packs flour into sacks for sale	<u>Smutter:</u> Operates machinery to clean wheat	<u>Miller:</u> Operates milling machinery
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What is this woman's name? Betty Crocker ⑩  
Is she a real person? No, she is fictional.



Consumers were introduced to this person after General Mills received many baking questions along with thousands of entries for a puzzle contest.

QUESTION: Think of two other fictional characters you know of created to promote products, and name the companies they promote.  
ANSWER: Answers will vary (Aunt Jemima, Golly Green Giant, Lucky the Leprechaun, Pillsbury Doughboy, Tony the Tiger, Toucan Sam, etc).

175 boxcars were filled with flour in the Washburn A Mill each day during its years of peak production. That is enough flour to make 12 million loaves of bread! ④



QUESTION: This boxcar has 2 weight limit numbers – "capacity" (capy.) is the total maximum weight of the item & cargo. "Limited Weight" (Lt. Wt.) is the maximum weight for cargo only. How much does this boxcar weigh?  
ANSWER:  $\frac{40,000}{(\text{Capy.})} - \frac{26,800}{(\text{Lt. Wt.})} = \frac{13,200}{(\text{Answer})}$

The mill had positions that it needed to fill to continue operating – smutters, millwrights, millers, sweepers, grinders, packers, loaders, etc. These positions were in a certain order with the head miller at the top. Read the biographies in the Flour Tower lobby (*Voices of the Flour Tower*) to see what you can find out about this order and to answer the questions below.

QUESTIONS: Name a starting position in the mill. Bag cleaner, loader, packer, sweeper  
Was there opportunity within the mill for men to move up to a better job? Yes  
How do you know? Harold, Fred, Sheridan, and Merlyn worked their way up.  
Women mill workers worked next door. What was their primary job? Packer  
Could women move up to a better job? Yes (to supervise packers)



This slogan was a response to what other slogan? ⑪  
Eventually, Why not now? (Washburn Crosby)

The two largest flour mills in the world, Pillsbury and Washburn Crosby, competed for the market with ads and slogans.

QUESTION: Why did Pillsbury stop using its slogan during the war?  
ANSWER: The government required mills to produce a lesser grade flour – "war flour" – that was darker than Pillsbury's "Best" flour.

## THE IMPACT



Milling and its population boom brought changes to Minneapolis. Many had lasting impact. 12

QUESTIONS: What does Minneapolis mean? (Step 1) Waterfall City  
 What was the original function of the Stone Arch Bridge? (Step 2)  
It was a railroad bridge.  
 What transportation system opened the suburbs for settlement in 1886?  
 (Step 3) The streetcar system  
 In what year were the upper and lower locks built? (Step 4) 1963  
 Why were they built? To open the upper Mississippi to barge traffic  
 Name a mill building now used for housing. (Step 5) North Star Lofts



Flour milling flourished because of power provided by St. Anthony Falls. Two-dozen mills grew up along the river and people came from all over to work in the mills, setting the stage for Minneapolis to become a major metropolitan city. 13

QUESTION: In 1860, the population of Minneapolis was 5,809. What did it grow to in 1887?

ANSWER: 175,000



Do the falls look like this today? No  
 What year did the falls look like this? 1842 14

St. Anthony Falls is here today due in part to the millers. Read the text in the water lab to find out why.

QUESTION: (1) What was happening to the falls? (2) What was done about it? (3) What would have happened if they did not do this?

ANSWER: (1) It was moving and eroding.

(2) A concrete dike and apron were built to protect the edge of the falls.

(3) St. Anthony Falls would have disappeared and become rapids.



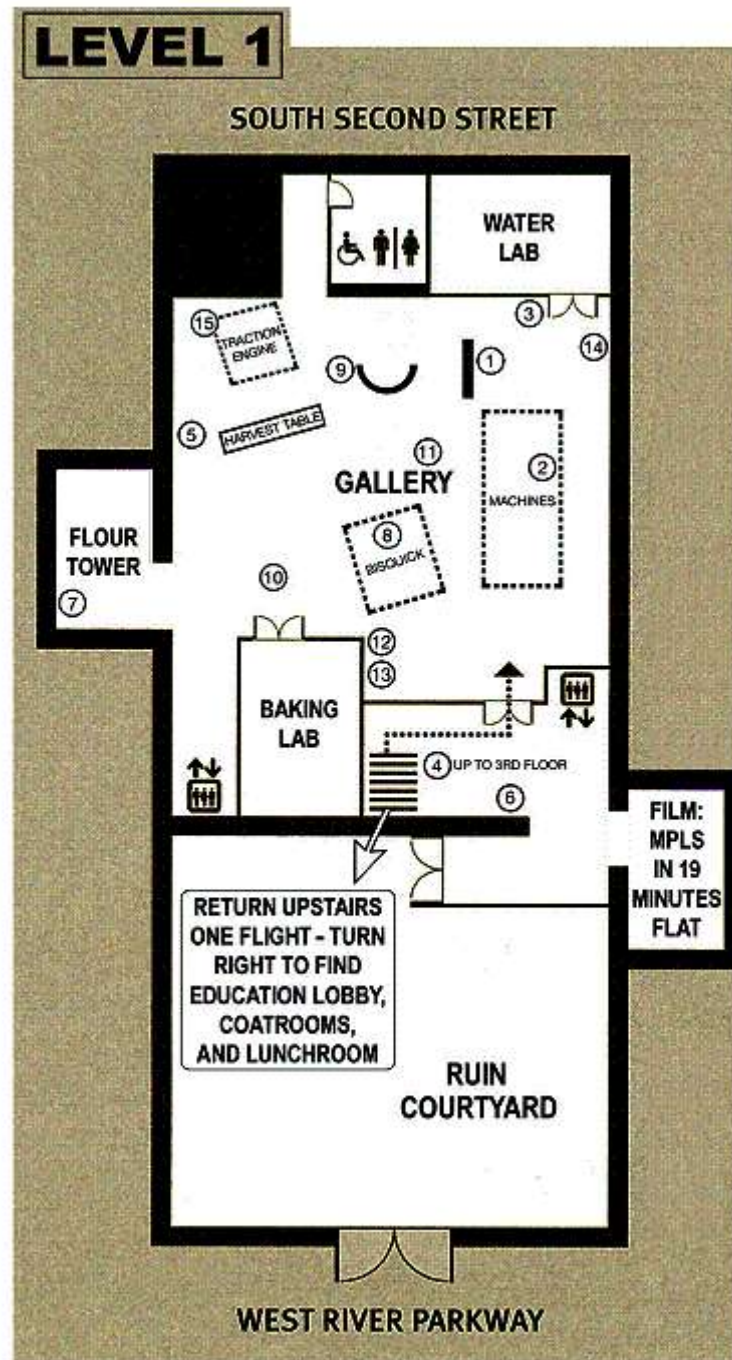
Bonanza farms -- high acreage, one-crop specialty farms -- supplied most of the wheat coming into Minneapolis mills. This type of "get rich quick" farming died out in the early 1900s. 15

Bonanza farms resemble modern farms in several ways: their large size, the hiring of seasonal laborers, and their heavy use of machinery.

QUESTIONS: In 1880, Minneapolis' first year as the "Milling Capital of the World," what percentage of Minnesota's farmland was planted in wheat? 70%

What percentage of Mid-western farms were bonanza farms? < 2%

## MILL CITY MUSEUM EXHIBIT MAP



Numbers show the location of the corresponding photo in the hunt.

Now that you have completed the hunt, you can answer this question:

One of the following statements is FALSE.

Which one is it? Circle your answer.

- A former governor of Wisconsin built this mill.
- We can see St. Anthony Falls today in part due to the milling industry.
- People in countries all over the world used Minneapolis flour.
- The Stone Arch Bridge was built to accommodate automobile traffic.
- Falling water powered the machinery in this mill in 1880.



Minnesota Historical Society

## MILL CITY MUSEUM SCAVENGER HUNT

### TEACHER & CHAPERONE ANSWER KEY

### Scavenger Hunt Instructions

As a Teacher or Chaperone, you will be facilitating a small group of students through the scavenger hunt.

- Choose one of the objects, answer the first question, read the fun fact, and answer the follow-up question.
- Check for the answers underlined next to each picture. (The location of each object is indicated with the same number on the map on the back.)
- If an area is crowded, try looking for another object.
- When you are finished, try the Bonus Question, located on the back page below the map.

**When you are finished, please return pencils to the bucket on the 1<sup>st</sup> floor desk.**

**Please stay with the students throughout the entire field trip, and help us to enforce museum rules:**

- Please WALK
- Use indoor voices.
- No food, drinks, gum, or pens in the exhibits
- Please be careful with museum items so that they do not break.
- Only 5 students can be in the store at a time; a chaperone must accompany them.
- Please stay on the concrete patio if going into the Ruin Courtyard, refrain from entering the gravel rock area.
- ASK QUESTIONS! People in white aprons can answer them.
- HAVE FUN!