

THE EQUIPMENT



What did this machine replace? Millstones ①

The first Washburn mill had 41 pairs of millstones. In 1880, the rebuilt mill had 15 pairs of millstones and 86 roller mills.

QUESTION: Both the millstone and the roller mill ground wheat into flour, but the roller mill revolutionized the milling industry. Why?

ANSWER: Rollers are more efficient – they produce a higher percentage of fine white flour, and are lighter and easier to maintain.



How far did St. Anthony Falls drop? 50 feet ②

Water must flow or fall to create power. Flowing, it turns water wheels; Falling, it turns turbines. Turbines powered the Minneapolis mills. You can still see the location of the original turbines for this mill in the courtyard.

QUESTION: Look at the Pugsley model of the Pillsbury Mill. How much horsepower did one turbine provide?

ANSWER: 2,000 horsepower



What type of machine is this? Middlings Purifier ③

This machine is one step in the gradual reduction milling process. That process uses a series of grinding and sifting steps to remove bran and germ. This machine was perfected in Minneapolis and incorporated air-flow into the sifter to make high quality flour from hard red spring wheat.

QUESTION: How many particles are in one cup of all-purpose flour?
ANSWER: More than 100 billion



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 PLAYERS



What crew were these men on? A threshing crew ⑤
How much did they earn? (Read the backs of the chairs.)
\$18/month room & board; \$2.25/day

Bonanza farms were large farms of 1,500 acres to 100,000 acres that specialized in only one crop. Over 1,000 migrating 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.



Why did William de la Barre come to Minneapolis? ⑥
To sell dust collectors Did he succeed? Yes

To convince C.C. Washburn to buy his product, de la Barre used his own savings to purchase and install three dust collectors in the mill on a trial basis. Later, de la Barre was hired to work for Washburn. He became influential in maximizing the power of the Mississippi River by deepening the water canal and the turbine pits.

QUESTION: How else did he maximize the power?
ANSWER: He built reservoirs to regulate water flow.



What was this woman's job? Flour packer ⑦

Women started working at the Washburn Crosby Mill as early as 1902. From then on they were employed as sewers and packers. Although they could not “cross-over” and become millwrights or head millers they did get promoted to supervisors in their departments.

QUESTION: Listen to Mildred Hamblett on the TV. What happened to women at the mill once they got married?
ANSWER: They had to quit.



Which workers “struck” in 1917? Flour packers ⑧

While the strike was considered successful, workers soon felt the need to join the national union – International Union of United Brewery, Flour, Cereal, and Soft Drink Workers.

What was the name of the union leader's main opponent?
William Edgar
What did he do for a living? He edited *The Northwestern Miller*

THE PRODUCTION AND PROMOTION



In what year did Poppin Fresh™ first appear in Pillsbury ads? 1965 ⑨
How many commercials has he appeared in? 600+

Poppin Fresh™, created by Pillsbury to help market its products, is so popular that he receives 200+ fan letters per week.

QUESTION: The fictional character created to market the Washburn Crosby Co.'s products is just as popular. What is her name?
ANSWER: Betty Crocker



Two slogans were part of an advertising war between the Washburn Crosby Co. and Pillsbury, what were they? Eventually, Why not now? ⑩
Because Pillsbury's Best

With new milling techniques in the 1880s, better products were produced and flour advertising began.

QUESTIONS: How are these slogans related? Pillsbury's “Because Pillsbury's Best” answers the Washburn Crosby Co.'s question, “Eventually, Why not now?”

Name a current slogan: Answers will vary.



Cooks and bakers all over the world use flour products. Read the exhibit text and look at the artifacts in their cases to learn more about how some recent immigrant families use flour and grains in their cooking. ⑪

QUESTION: Complete this chart.

	Poland	Mexico	Laos	Somalia
Something that grinds	X	<u>Stone mortar/pestle</u>	<u>Stone mortar/pestle</u>	<u>Metal mortar/pestle</u>
Spice or flavoring	<u>Vanilla</u>	<u>Hibiscus flower/Chilies</u>	<u>Dried chili</u>	<u>Chicken stock</u> <u>Nutmeg</u> <u>Cardamom</u>
Type of grain	<u>Rye/wheat flour</u>	<u>Maiz</u>	<u>Rice flour</u>	<u>Whole wheat</u>
Name of Family	<u>Szkara-dzinski</u>	<u>Lopez-Ocotoxtle</u>	<u>Her-Thaos</u>	<u>Jama-Samatar</u>
Number of Family Members	<u>4</u>	<u>8</u>	<u>7</u>	<u>4</u>
One Native Food	<u>Nalesniki</u>	<u>Tacos</u> <u>Tortillas</u> <u>Tamales</u>	<u>Wonton egg rolls</u>	<u>Sabaayid</u>

THE IMPACT



Flour milling entrepreneurs chose the riverfront because of cheap power provided by St. Anthony Falls. As over two-dozen mills grew up on the banks of the Mississippi, people flooded in from all over the world to work in the mills, setting the stage for Minneapolis as a major metropolitan city. 12

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 13

St. Anthony Falls is here today due in part to the millers. Read the panels 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) The falls were eroding (2) An apron was built to protect the edge of the falls (3) The falls would have eroded away into rapids



Milling and its population boom brought changes to Minneapolis. Many had lasting impact. 14

QUESTIONS: What does Minneapolis mean? (Step 1) Waterfall City
What was the original function of the Stone Arch Bridge? (Step 2)

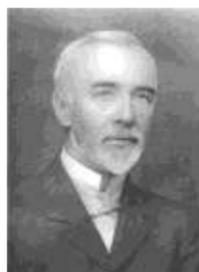
It was a railroad bridge.

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



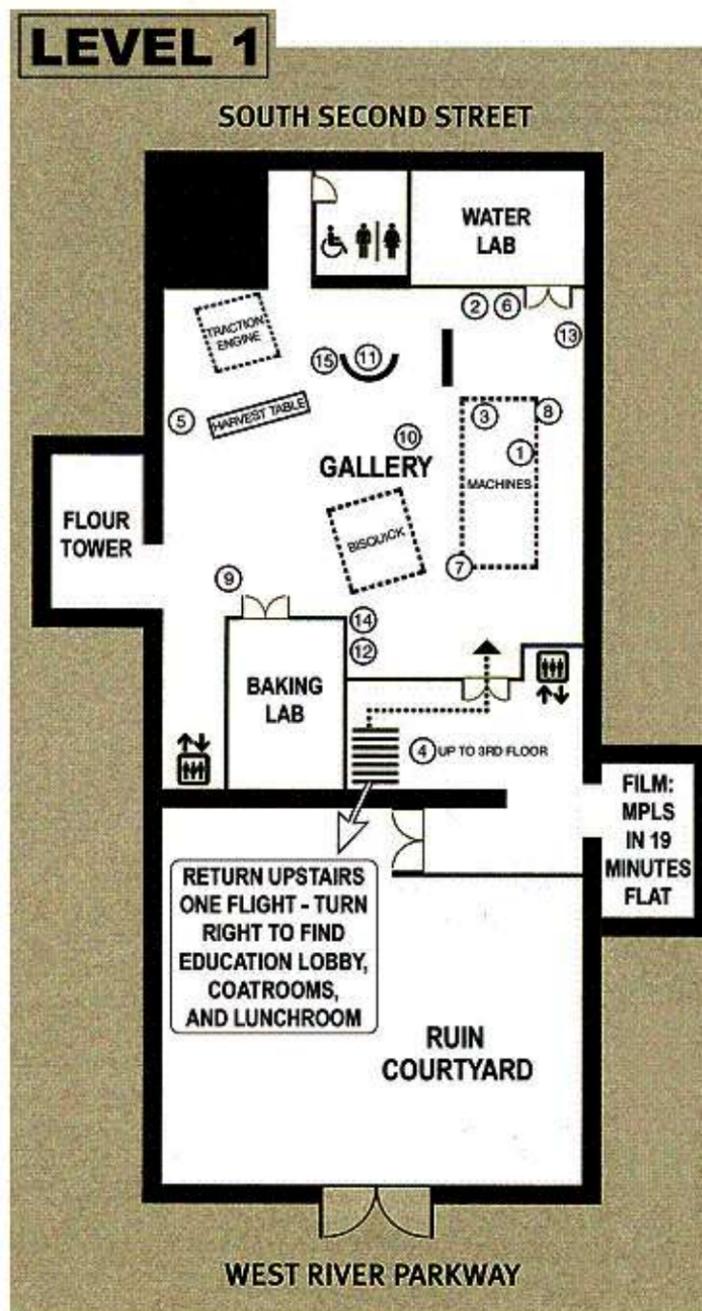
Who is this, and why was he in London in 1877? William H. Dunwoody To sell Mpls. flour 15

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, Egypt, England, Guatemala, Haiti, India, Russia, etc.)

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 Bonus Question:

Enter the gallery and look to your right.

Read the exhibit's main message.

What do you think it means?

"More than 100 years ago, converging forces made Minneapolis the flour milling capital of the world. Whoever you are, wherever you're from, what happened here continues to shape your world."



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.

1. Choose one of the objects, answer the first question, read the fun fact, and answer the follow-up question.
2. 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.)
3. If an area is crowded, try looking for another object.
4. 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 1st 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!