



## Journey to the Falls

# Key Words & Concepts

### Natural Environment

**cataract-** another name for a waterfall

**forest** – an ecosystem in which trees are the most dominant member

**gorge-** a deep and narrow river valley with steep rocky sides. A gorge is similar to a canyon but smaller and less wide.

**limestone-** a medium hard sedimentary rock composed of calcium carbonate deposited by the remains of marine animals; may contain fossils; Usually tan but or light gray.

**prairie** – a grassland community; ecosystem in which grasses are dominant

**rapids-** water in a river or stream moving quickly over and around rocks or other obstacles

**recession** – a movement backwards or upstream in the case of a waterfall

**sandstone-** a soft sedimentary rock composed of sand-like grains of quartz; color often white or yellow but can be red, or brown

**shale-** a hard sedimentary rock composed of mud, clay or silt; may contain fossils; usually gray.

### Mills and Milling

**boom-** a series of logs attached together end to end and placed in the river to form separated areas in the river in which to direct the logs from different logging companies.

**flour-** ground up grain (like wheat). Bread, cereal, and pasta are made from flour.

**flourmill-** a building with machines that grind grain into flour

**grain-** the hard seed of a plant

**grain elevator-** a building for storing and unloading grain such as wheat or rye

**lumber-** pieces of wood ready to use for building

**logging-** the process of cutting down trees in a forest

**log jam-** a non-moving group of logs piled together in a river

**lumberjack-** a worker whose job is to cut down trees; also called a logger

**mill-** a building where machines make or process (change) things. In Minneapolis wheat was ground into flour in flour mills, trees were cut into lumber at sawmills, and wool was spun and woven at woolen mills.

**millers-** a person who grinds grain into flour; a worker in a mill

**millstone-** big, round, flat stones used for grinding wheat

**sawmill-** a building with machines for sawing logs

**sawyer-** a worker that cuts trees into pieces of lumber

**wheat-** A plant type of grass grown in Minnesota for food. The grain [hard seeds] of wheat can be ground into flour to create breads, cereal, and pasta.

## **Waterpower**

**apron-** a wood or concrete covering placed over the underlying rocks of a waterfall to protect the rocks from damage or erosion

**direct drive-** a system to run machinery in a mill; the machinery is powered directly by the force of falling water

**drop-** the distance water falls inside a mill using waterpower. A large drop creates a large amount of power. A small drop creates a small amount of power.

**headrace-** the point where water enters a mill to power the machinery within the mill

**indirect drive-** a system to run machinery in a mill; the force of falling water is converted to electricity which is then used to power the machinery within the mill

**mill pond-** a pond that supplies the water for a mill. A part of a river formed to supply water

**tailrace-** The area where water exits a mill after powering the machinery within the mill

**turbine-** a machine with vanes or blades driven by the pressure of falling water

**water canal-** long underground waterway made to bring water from the Mississippi River above St. Anthony Falls to the mills located along the river. The canal was covered by wooden plank road.

## **Navigation, Locks & Dams, Bridges**

**arch bridge** - a bridge made up of one or more curved structures that support the deck (road). The Stone Arch Bridge and the Third Avenue Bridge near St. Anthony Falls are Arch Bridges

**dam** - a barrier constructed across a river to control the flow or raise the level of water

**drop** - the distance water is raised or lowered inside of a lock. The Upper St. Anthony lock has a drop of 49.2 feet. The Lower St. Anthony lock has a drop of 25 feet

**ferry** - a boat that takes passengers from one side of a body of water to another

**lock** - an enclosed chamber at a dam on a river with gates at each end used to raise or lower boats from one level to another by admitting or releasing water

**locking through** - the process of going through a lock

**miter gate** - a type of gate in a lock used in pairs for preventing the flow of water in or out of the lock chamber. Miter gates open and close from the center.

**navigation** - transportation by boat; moving of goods or people on waterways

**suspension bridge** - a bridge where the deck (road) is hung from cables. The cables are supported by towers and anchored into the ground

**tainter gate** - a type gate in a lock used to control water flow. A side view of a Tainter gate resembles a slice of pizza with the crust edge facing upstream; the gate pivots up and down from the point.

## **Archaeology**

**archaeologist-** a scientist trained to do archaeology

**archaeology-** the study of past human life through the finding and examination of items left behind, such as graves, buildings, tools, and pottery.

**artifact-** objects produced or used by people (spear points, flint chips, pottery, china and glass, gun parts, bricks, food remains.) These items are often removed from an archaeological site

**context-** the surroundings in which an artifact is found. This also includes other artifacts found nearby or in association with the artifact

**excavation-** the careful digging that archaeologists do to collect information by uncovering and recording artifacts, features, and associations

**features-** material remains that cannot be moved from an archaeological site such as fire pits, storage pits, wall foundations, and post holes

**grid-** a set of evenly spaced north-south lines that cross a set of evenly spaced east-west lines

**inference-** a conclusion or hypothesis based on observations

**observation-** recognizing or noting a fact or occurrence

**screen-** a tool used to sift the soil that comes out of an excavation site in order to find small artifacts that the excavator may have missed

**sites-** places where human activity resulted in features or deposits of artifacts, such as hunting camps, mills, farmsteads, villages, towns, battlefields, etc.

**stewardship-** protecting and caring for a resource like an archeological site

**trowel-** a small pointed hand-shovel used in archaeological excavations

## **History & Exploration**

**cartographer** – a mapmaker

**Dakota-** an American Indian people of the northern Mississippi valley

**expedition** - a journey by a group of people for a specific purpose, such as exploration

**explorer-** a person who travels through a country to find out about it

**journal** - a record, often daily, of occurrences, experiences, or observations

**Northwest Passage** - a sea route sought by early explorers from the Atlantic Ocean to the Pacific Ocean through northwestern America

**Ojibwe** - An American Indian people of the northern Great lakes and Upper Mississippi region; Anishinabe (pronounced ah-NISH-in-AH-bay) is the name they call themselves

**settler-** a person who settles in a new country or area

**tourist-** a person traveling for pleasure

**treaty-** a formal agreement between two or more nations (such as the Dakota and the United States) regarding peace, alliance, business, or other relations

**voyageur-** a man hired to take on many different tasks in uncharted territories during exploration voyages