Lesson 9: Pioneer Farming

Learning Goals:
Students will identify the characteristics of pioneer farming methods.

Iowa History Benchmarks:
4. Pioneer Life on the Prairie
   c. For most settlers, living on the prairie meant a change in farming and household practices.
   d. Pioneer raised or made most of the items they needed for daily life.

Materials:
Student Copies of the Pioneer Farming Reading Cards (1 set for every 4 students)
Pioneer Farm Tools Activity Sheets (1 set for every 4 students)
Map of Iowa's Native Vegetation Prior to Pioneer Settlement (from Lesson 2)

Activities:
1. Prior to the lesson make one set of the Pioneer Farming Reading Cards for every 4 students. Make one copy of the Pioneer Farm Tools Activity Sheets for every 2 students.

2. Introduce this lesson by reviewing the characteristics of Iowa land prior to pioneer settlement. Prior to pioneer settlement, tree-lined creeks and streams cut through Iowa's native prairie land. See Transparency: Iowa's Native Vegetation Prior to Pioneer Settlement from Lesson 2.

3. Have students identify key words to describe Iowa's land prior to pioneer settlement.

4. Introduce the following terms. Ask students to identify how these terms might be connected. (They are all tools or mechanisms for raising or processing farm products during early pioneer Iowa.)

breaking plow	scythe
harrow	corn knife
cradle	grist mill
flail	axe
husking pin	screen

5. Place students in groups of four. To each group provide a set of the eight Pioneer Farming Reading Cards and the Pioneer Farm Tools Activity Sheets.

6. Have students work as a group to place the eight Reading Cards in the proper sequence. Then have them cut out the pictures of farm tools and the descriptions and make a chart matching each picture to a description.

7. When each group has completed their work, bring the class back together again to share their results.

PIONEER FARMING READING CARDS
(Cut along lines making eight separate cards)

The earliest settlers were, in a sense, "squatters," as there was no legal way to take possession of the land they decided to "squat" on. Government surveys in Iowa began in 1836, but it was not until June 1838 that settlers could buy their land from the land offices either in Dubuque or in Burlington. The land sold for $1 .25 an acre, hard cash.

Settlers tended at first to try to stay near the river or creek banks. This proved to be a mistake for farming, as the soil there tended to be sandy, rocky, or shallow. Soon they began to see that the soil a short way back from the water was more suited for abundant crop production.

When a pioneer farm family found a place they wanted to call "home," there were two important "first" jobs. In the spring and summer the planting of crops had to be done first if there were to be food for the winter. Those who came late in the year knew that a shelter of some sort must be erected if they were to survive the winter cold.

Planting seed was not an easy task. First the prairie sod had to be broken. The ordinary wooden plow of that day was useless against the tough, tangled roots of the prairie grass. Centuries of grass had lived and died, and the tough roots were almost impossible to break. Until John Deere invented the steel-edged plow in 1837 (more widely used by 1847). the farmer had to use a huge **BREAKING PLOW** pulled by five or six yoke of oxen. This would cut a shallow furrow about twenty-four inches wide. This was said to sound "like the ripping of cloth." Seeds would be dropped in groups of four and covered by dirt by someone in the family following the plow. If a breaking plow were not available, the earliest pioneers would plant "sod corn" by cutting gashes in the sod two or three feet apart by using an **AXE**. Then four seeds were dropped in and covered. The need for four seeds is explained in the little rhyme:

One for the worm and two for the crow
Leaves one seed there to grow.

By June the young plants were up, and the ground around each hill had to be hoed. There were not many weeds the first season, but the ground had to be loosened

The first crop was usually corn or flax, as food and clothing were pressing needs.

For wheat, barley, rye, and oats, the soil had to be broken into finer pieces. This was done by dragging a heavy V-shaped timber called a **HARROW** over the ground.

To plant the smaller seeds of these crops, the farmer would walk across the fields with a large bag of seeds hung over his left shoulder. With his right hand, he "broadcast" the seed by swinging his hand full of seed out and back in rhythm with his walking. When the plants came up, the farmer could see how evenly he had distributed the seed.

As early as possible the farmer had to provide for the protection of his crops, for livestock usually roamed free. Wherever timber was within hauling distance, trees were cut down and split into ten- or twelve-foot sections called rails. These would be joined together in a variety of ways according to whether they were to fence hogs or larger animals. The production of rails was a long-term job, something to be constantly worked on whenever other tasks were not more pressing.

By June the prairie grass was ready to be mowed and dried for cattle feed and other livestock.uses. This was cut with a **SCYTHE**, spread out for drying, and stacked near the barn or sheds for use in the winter.

Small grains, such as wheat, rye, oats, etc., were harvested with a **CRADLE**. This was made by fastening a slender post with four parallel "fingers" to the scythe handle. With each swing of the cradle the grain was laid in neat rows with the heads all lying in the same direction. This made it easy to rake them into piles and tie them into bundles with bands of straw. These bundles were then set together into shocks for drying.

The dried grain had to be separated from the stalk. There were two ways of doing this "threshing." One was by hitting the piles of stalks with a **FLAIL**, a piece of wood fastened to a handle with a wooden or leather hinge. The other way was to drive oxen or horses around and around over the stalks until the grain was trampled out. The bundles had to be turned over frequently to get as much of the grain out as possible.

In order to have only the grain left, the next step was to toss it in the air in baskets. The wind would blow away the straw and chaff (as the lighter bits were called), while the heavier grain would drop back into the basket. Another method was to use a **SCREEN** that would sift the grain from the chaff.

Corn was usually gathered from the stalks using a **CORN KNIFE**, husks on, and laid in the barn to dry. Later the neighbors were invited to a "husking bee" which was an occasion for fun as well as work. The husks would be removed from the ear using a **HUSKING PIN**.

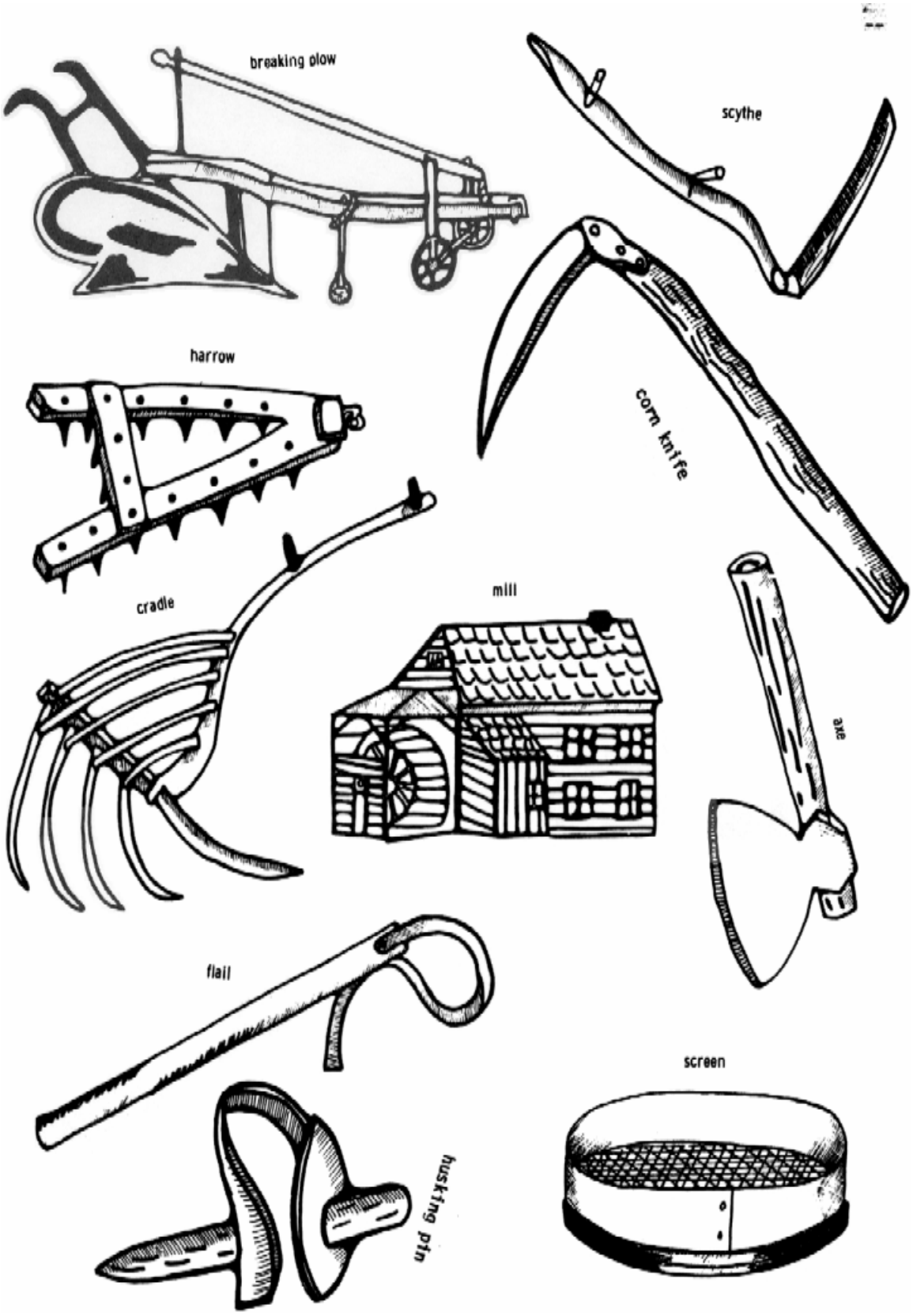
Before the grains could be used for food they had to be ground. In the most isolated homes this had to be done by someone in the family. Some rubbed ears of corn over a grater. Sometimes the grain was poured into a hollowed out stump and pounded with a heavy stick rounded at the end. Sometimes a coffee mill was used to make coarse meal or flour. Soon mills run by horse power made grinding a little easier although they might just crack the corn. As soon as several farmers settled in an area, someone was likely to set up a **GRIST' MILL** run by waterpower. These, of course, had to be on a river suitable for making such power, so farmers often had to go fifty to one hundred miles to get grain ground finer.

Pioneer farming was not an easy job. Most jobs were done by hand, which meant long working hours for the whole family.

PIONEER FARM TOOLS

DESCRIPTIONS:

A tool used for chopping logs and making fence rails.
A tool used for cutting grain crops and laying them in rows.
Pulled by oxen, the farmer would use this tool to cut through the roots of the prairie grass.
This tool was used by the farmer to separate the chaff from the grain.
The farmer pulled this over the plowed ground to smooth the earth for planting.
This tool was used to beat the grain so that the grain would be separated from the stalks.
Grain or grass could be cut with this tool.
Grain was ground for flour using this device.
Corn was cut from the stalk using this tool.
The husks would be separated from the ear of corn using this tool.


breaking plow
scythe
harrow
corn knife
cradle
mill
axe
flail
husking pin
screen