

Module 2 Process

Learning Objective

To know the process of taconite production

Student Outcomes

By the end of Module 2, the student will

- describe the taconite process.
- describe land reclamation.

Supportive Resources and Curriculum Materials

Videos

Where Steel Begins

Description: A 15-minute video that describes the process of mining taconite. Mining occupations are shown in the video.

Posters

“Let’s Rock!”

“Reclaiming the Land”

Materials for Assessment

(Some art materials may need to be supplied to the students.)

Part I Activities

Where Steel Begins video and “Let’s Rock!” poster

1. View video, *Where Steel Begins*.
2. List and discuss the taconite process. Use the sample taconite packet and the “Let’s Rock!” poster.
3. Use the “Let’s Rock!” poster and Worksheets 2-A or 2-B:
 - 2-A: have students complete the identified tasks.
 - 2-B: have students design tasks under each heading.

Part II Activities

“Reclaiming the Land” poster

1. Introduce poster.
2. Assign partners or let students choose a “study buddy.”
3. Do Worksheet 2-C, discussion questions.
4. Discuss and define the terms on the back of the poster.

Worksheet 2-A

Let's Rock!

Activity Guide

for the IMA "Let's Rock!" poster

MATH

1. change words into numbers
2. convert tonage into pounds
3. compare numbers:
mini van = weight
4. change large numbers to expanded notation

Vocabulary

1. Taconite
2. Iron ore
3. Iron Range

Creative Writing

1. Comparing the naming of the Cuyuna Range, rename a range of your own. Tell why.
2. Pretend you are the rock being crushed. Describe the feeling.

RESEARCH

1. List other steel products.
2. Describe the route of ore boats.
3. Measure the distance of a route.

Worksheet 2-B

Let's Rock!

Activity Guide

for the IMA "Let's Rock!" Poster

MATH

Vocabulary

Creative Writing

RESEARCH

Name _____

Worksheet 2-C
Discussion Questions

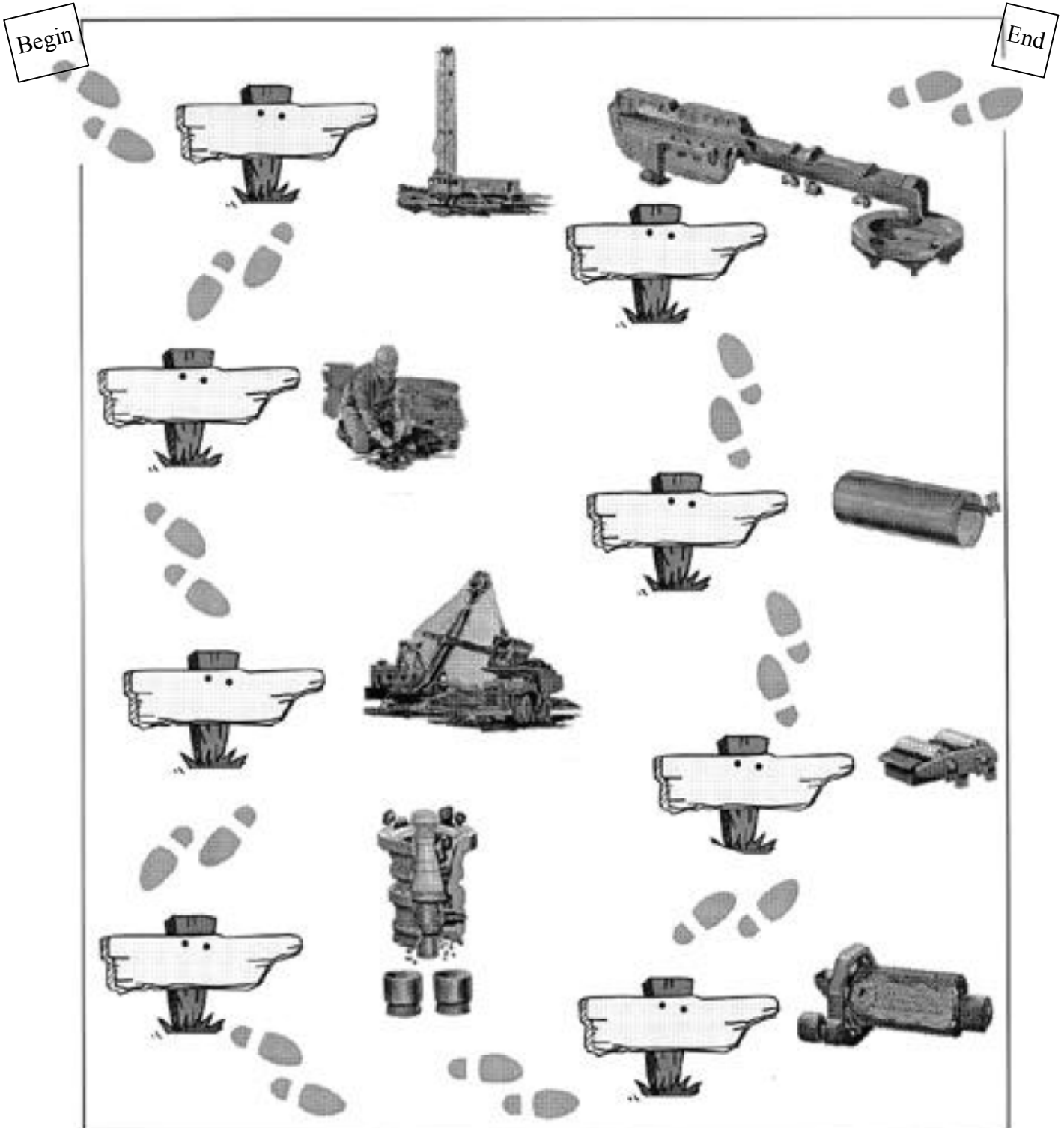
“Reclaiming the Land” poster

1. In what way has mining changed the environment?
2. Name the ways of reclamation.
3. Name ways of preventing erosion.
4. List ways in which the mining company has put nature back on track. Why is this important?
5. Can you think of special projects that the mining company has done to restore our community environment?
6. Compare and contrast public land use to mining land use.
7. Without reclamation, what would the land be like?
8. List the cause and effect of water and air pollution and the removal of top soil.

Assessment Module 2, Part I

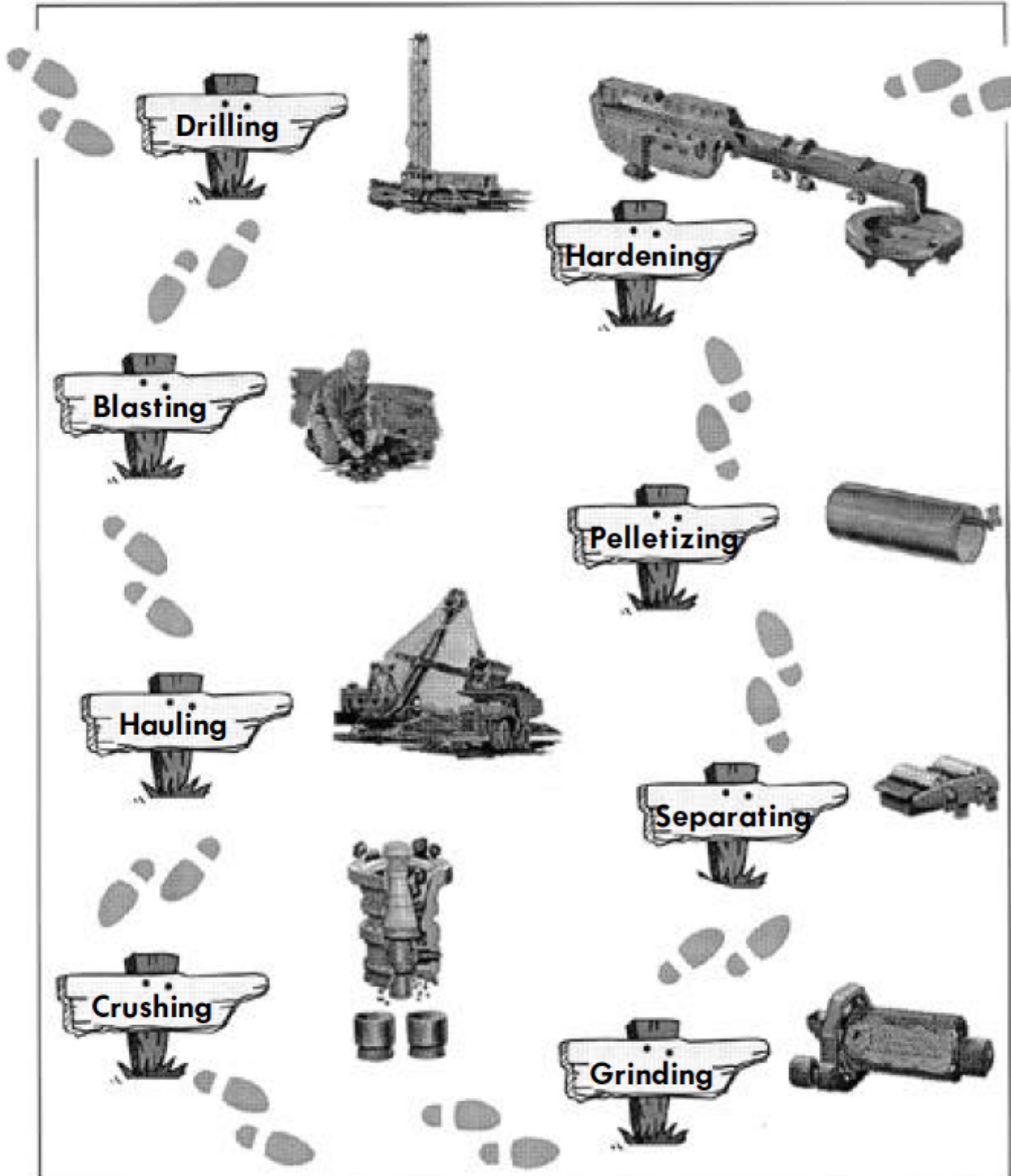
Steps in Processing Taconite Rock

Directions: Label the signpost at each stop during your walk through the steps in processing taconite rock into pellets, ready to be shipped to the nation's steelmakers.



Teacher's Key**Assesment Lesson 2, Part I****Steps in Processing Taconite Rock**

Directions: Label the signpost at each stop during your walk through the steps in processing taconite rock into pellets, ready to be shipped to the nation's steelmakers.



Assessment Module 2, Part II Reclamation

1. Draw a picture or poster or create a 3-dimensional model. Label your reclamation project.
2. Describe your project by writing a paragraph to tell how you reclaimed a pit or a parcel of land to make it more usable. Be sure to include the materials used, people needed and the time it would take for the reclamation project.

*Teacher-directed
assessment*