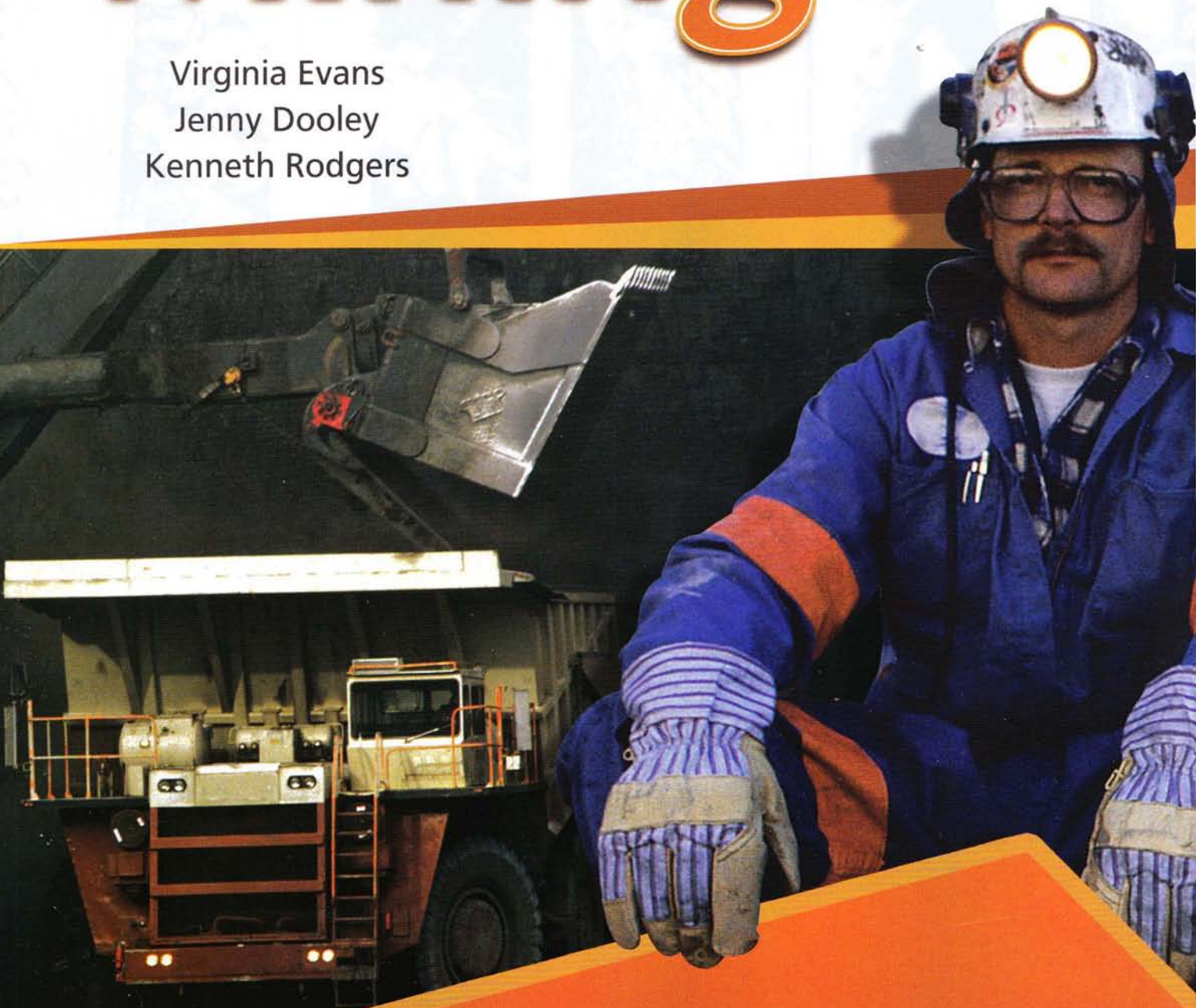


**CAREER
PATHS**

NATURAL RESOURCES II

Mining

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1

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Scope and Sequence

Unit	Topic	Reading context	Vocabulary	Function
1	The Role of Mining in the World	Pamphlet	agriculture, coal, construction, fertilizer, fossil fuels, manufacturing, minerals, power plants, precious metals, precious stones, steel	Adding information
2	Non-metallic Ores	Report summary	diamonds, gangue, gravel, gypsum, industrial minerals, ore, petroleum, potash, sand, waste rock	Presenting results
3	Metallic Ores	Textbook excerpt	base metals, copper, ferrous metals, gold, iron, lead, platinum, radioactive metals, silver, stainless steel, uranium	Identifying an error
4	Ore Deposits	Report	bank deposit, bench deposit, grade, lens-type, ore deposit, placer, seam, tabular, uniformity, vein	Disagreeing
5	Basic Mining Actions	Brochure	blasting, bore, channeling, dig, drill, excavation, extract, haul, hoist, load	Describing sequence
6	Types of Surface Mining	Webpage	borehole mining, dredging, highwall mining, hydraulicking, leaching, mountain top removal, open-cast mining, open-pit mining, placer mining, quarry	Explaining a term
7	Types of Subsurface Mining	Poster	block caving, caving methods, cut-and-fill stoping, longwall mining, room-and-pillar, shrinkage stoping, square-set stoping, stull stoping, sublevel stoping, supported methods	Talking about pros and cons
8	The Surface Plant	Memo	administration building, change house, electrical substation, emergency building, fuel station, fuel storage, fuel tanks, maintenance shop, vehicle storage, warehouse	Asking for clarification
9	The Crew	Career's webpage	apprentice, black hats, certification, equipment operator, maintenance worker, mechanic, medic, red hats, shift foreman, shift supervisor	Expressing desires
10	Hand Tools	Equipment catalogue	chisel, drill, hammer, knife, pliers, rock pick, screwdriver, shovel, wire cutters, wire stripper	Placing an order
11	Basic Gear	Handbook excerpt	belt pack, boots, cap lamp, coveralls, dust mask, earplugs, face shield, gloves, goggles, hard hat, pick holster, rain suits	Talking about sizes
12	Describing Places in a Mine	Daily report	back, bottom, breast, fall, head room, inby, outby, overhand, rise, steep, underhand	Giving instructions
13	Numbers 1: Volume/Weights	Advertisement	bank cubic meter, capacity, cubic feet, cubic feet per ton, cubic meter, m ³ /ton, operating weight, power shovel, ton, yd ³ /ton	Persuasive language
14	Numbers 2: Distance/Depth	Report	centimeter, core sample, depth, diameter, foot, inch, kilometer, meter, mile, millimeter, recover	Providing a solution
15	Numbers 3: Math Symbols	Chart	angle, decimal, degree, fraction, percent, ratio, X over Y, X point Y, X to Y, X-Yths	Confirming facts

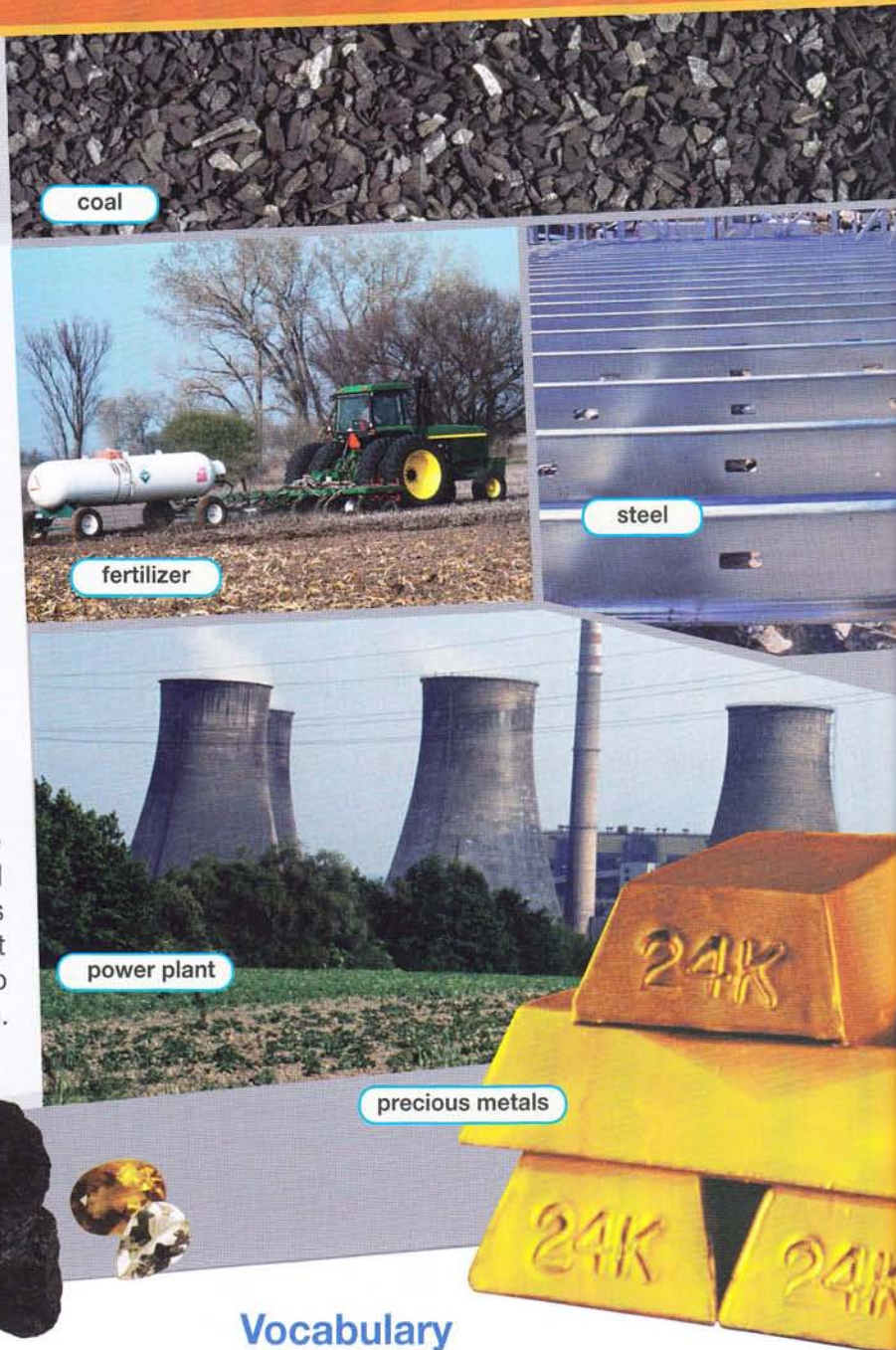
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Jackson Mining Co. Employee Manual

Section 1: Introduction

Welcome to Jackson Mining Co! You are part of an important team. Together, we improve lives and industries. For example, we supply **power plants** with **fossil fuels**. We mine **coal** that generates electricity for homes and businesses, and we mine for metals, as well. They become **steel** for **manufacturing** and **construction**. But that's not all. We also improve **agriculture**. Many **minerals** make excellent **fertilizers**. So Jackson Mining even helps farmers. Finally, we improve people's lives. We mine for many **precious stones** and **precious metals**. Those products become valued gifts and important components of electrical circuits. So remember, you're not just mining. You're improving the world.



Get ready!

- 1 Before you read the passage, talk about these questions.

- 1 What are some substances that come from mines?
- 2 Why is mining so important?

Reading

- 2 Read the pamphlet. Then, mark the following statements as true (T) or false (F).

- 1 ☐ Jackson Mining Co. also owns a power plant.
- 2 ☐ According to the manual, farmers rely on mining for fossil fuels.
- 3 ☐ Precious metals are an important component of electrical circuits.

Vocabulary

- 3 Read the sentence pairs. Choose which word or phrase best fits each blank.

- 1 precious metal / precious stone

- A A diamond is a type of _____.
- B Gold is a type of _____.

- 2 minerals / fossil fuels

- A _____ are often burnt to generate energy.
- B The rock contains many types of _____.

- 3 coal / steel

- A _____ is a black substance which can be burnt.
- B _____ is a very strong metal used in construction.

4 Write a word or phrase that is similar in meaning to the underlined part.

- The company built a factory which generates energy.
_ o _ _ r _ _ p _ _ t _
- Rita studies the art of raising crops and livestock at college.
a _ _ _ c _ _ t _ _ e
- The farmer put minerals which make healthy soil on his field before planting the seed.
_ e _ _ _ _ _ z _ r
- Mines provide a lot of materials for the industry of making products.
m _ _ _ f _ _ t _ _ _ _
- Benny has a lot of experience working in an industry that builds structures.
_ o _ _ t r _ c _ _ o _

5 Listen and read the pamphlet about mining again. What is the most important thing that mining provides?

Listening

6 Listen to a conversation between a miner and an interviewer. Choose the correct answers.

- What is the conversation mainly about?
A the man's mining experience
B the positions available at the company
C the types of metals the company mines
D the mines the man will be assigned to
- What is true of the man?
A He expects to mine minerals at the new company.
B He knows the process of mining steel very well.
C His first job was mining precious metals.
D He mined coal at a previous job.

7 Listen again and complete the conversation.

Interviewer: Thanks for 1 _____ today.
Miner: My pleasure. I'm very 2 _____ in the position.
Interviewer: Now, you worked at Jackson 3 _____ before?
Miner: I did. My group mined metals and 4 _____.
Interviewer: I see. But this company mines 5 _____. We need someone with that experience.
Miner: Yes, of course. I mined coal at my first job.
Interviewer: 6 _____ hear it. When was that?
Miner: It was about five years ago. But I remember the process very well.

Speaking

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

You worked at ... before?
My group mined ...
But this company mines ...

Student A: You are an interviewer at a mining company. Talk to Student B about:

- his or her previous company
- what material your company mines
- his or her work experience

Student B: You are a miner. Answer Student A's questions.

Writing

9 Use the conversation from Task 8 to complete the interview notes.



Interviewee Name: _____

Previously worked at _____

Materials mined there: _____

Has experience mining: _____

Further comments: _____

