

Classroom Activities to Accompany
MINING COMMUNITY:
ELKFORD, BRITISH COLUMBIA



Mining Community: Elkford, British Columbia

Teacher Information

Mining Community: Elkford, British Columbia is a story by Andrew, a young boy growing up in the mining community of Elkford in the west Kootenays. He tells about his life, his town and then about his visit to a mine and the new scientific questions the visit there creates. The reading level is Grade 2-3. The book can be useful in presenting many aspects of curriculum.

Science:

- introduction to fossils
- introduction to coal
- introduction to sandstone and other important rocks
- a dinosaur

Social Studies

- comparison of communities
- discussion of job occupations
- discussion of hobbies and recreation
- introduction to mapping

Computers/Technology

- introduction to using the internet
- investigating mining machinery seen in the book

Language Arts

- creative writing "What would it be like if dinosaurs were still around today?"

Reading

- share the book with classmates and friends

Library

- encourage research opportunities in science topics cited above

Art

- make fossils
- dinosaur projects
- rock and fossil displays

Additional information and classroom activities include:

Mining in the Kootenays

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Elkford Community

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Dinosaur that Roamed the
Elk Valley - p.15

How Coal Forms - p. 16

Credits:

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Illustrations: Jackie Chau, Sheila R. Stenzel

Figure 2 courtesy of Fording River Operations; Figure 3 courtesy of Coal Mountain.

Teacher Information

Mining in the west Kootenays of BC

Southeast BC and southwest Alberta have been active coal mining areas since the early 1800s. Today in the Elk Valley alone there are five operating mines: Coal Mountain, Elkview, Line Creek, Greenhills and Fording River (Figure 1). All of these are operated by Teck Resources Ltd., a Canadian company headquartered in Vancouver. Together they employ around 3000 people and are the main economic force in all towns in the region.

Elkford is small community (~3000 people) at the end of a long paved road that runs north of Sparwood. The town was carved out of the wilderness in the mid-1970s and built solely for the purpose of housing miners at Greenhills and Fording River Operations. It is one of the highest elevation communities in the province and boasts the title “Wilderness Capitol of BC”.

This is a mountainous region of BC and all the mines are developed in mountainous terrain. The coal at all the mines occurs in basically the same sedimentary rock unit which underlies the peaks of the mountains (Figure 2). The rocks, and the coal, are folded and faulted.

Coal mining in this area is surface mining. It is typically described as open pit. However, mining here does not create a conventional circular hole. Rather surface mining here involves removing the tops or sides of the mountains where the coal is exposed (Figure 3). Detailed drilling into the sedimentary rocks provides engineers with the best information of how much can be economically mined.

Coal produced from these mines is loaded directly onto rail cars and transported to Vancouver. From there it is loaded onto large ships, either from a terminal along Burrard Inlet in North Vancouver, or from Roberts Bank coal loading facility Tsawassen. Most of the coal is valuable bituminous coal, which is used in the production of steel. Coal loaded onto ships is destined for Asian steel manufactures.

Figure 1

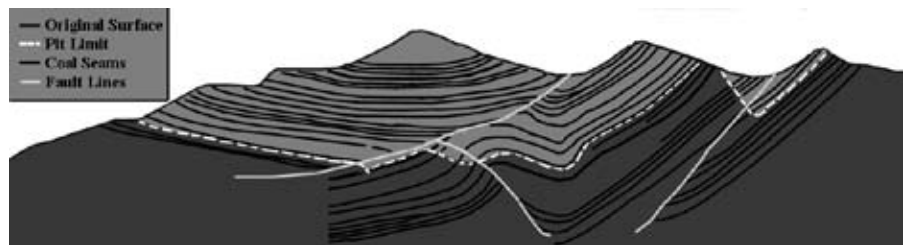
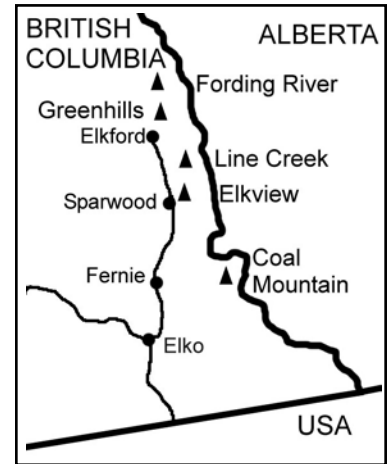


Figure 2

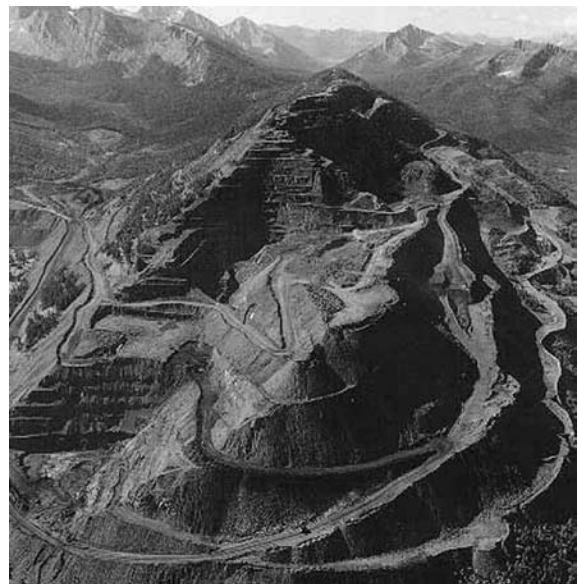
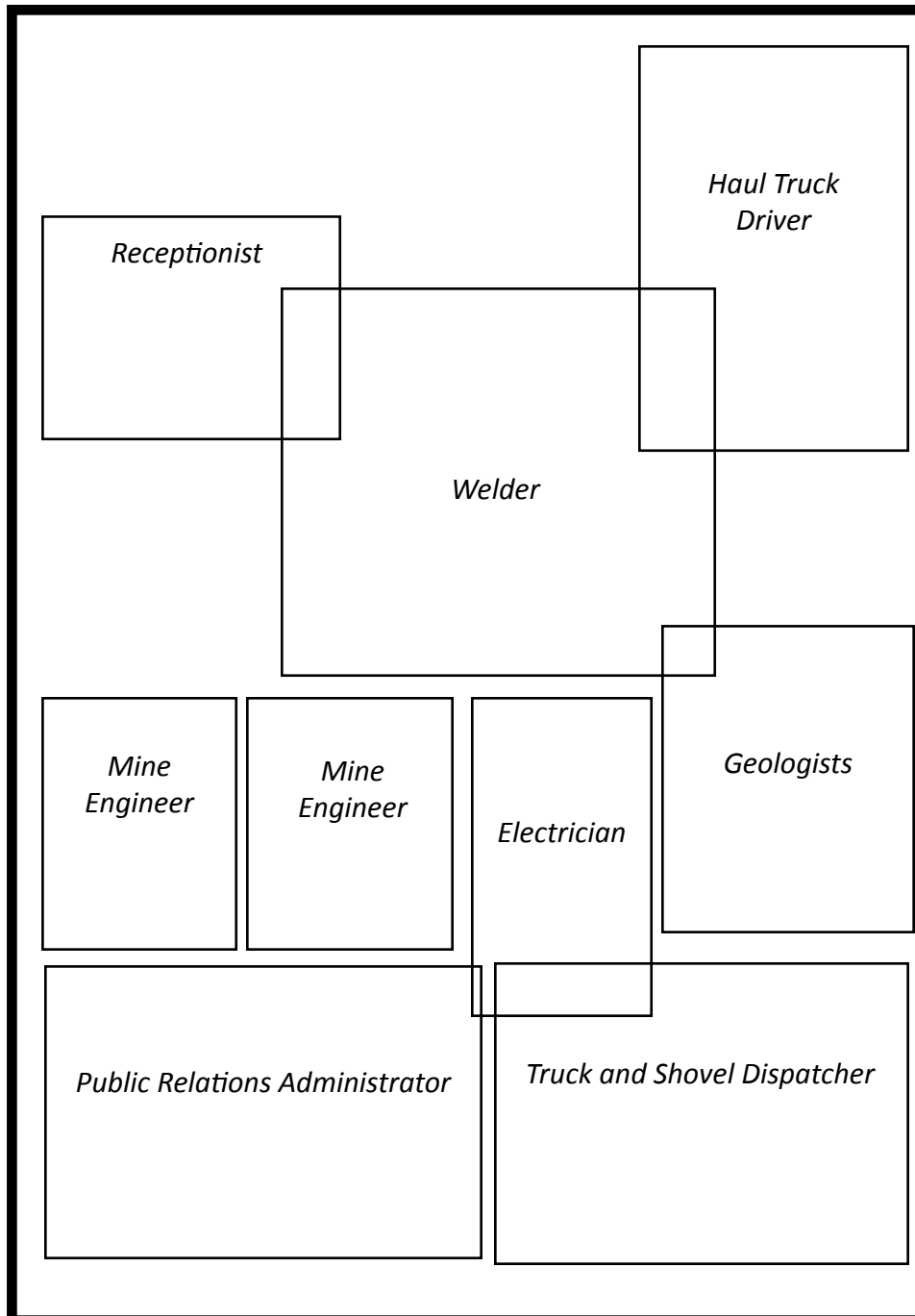


Figure 3

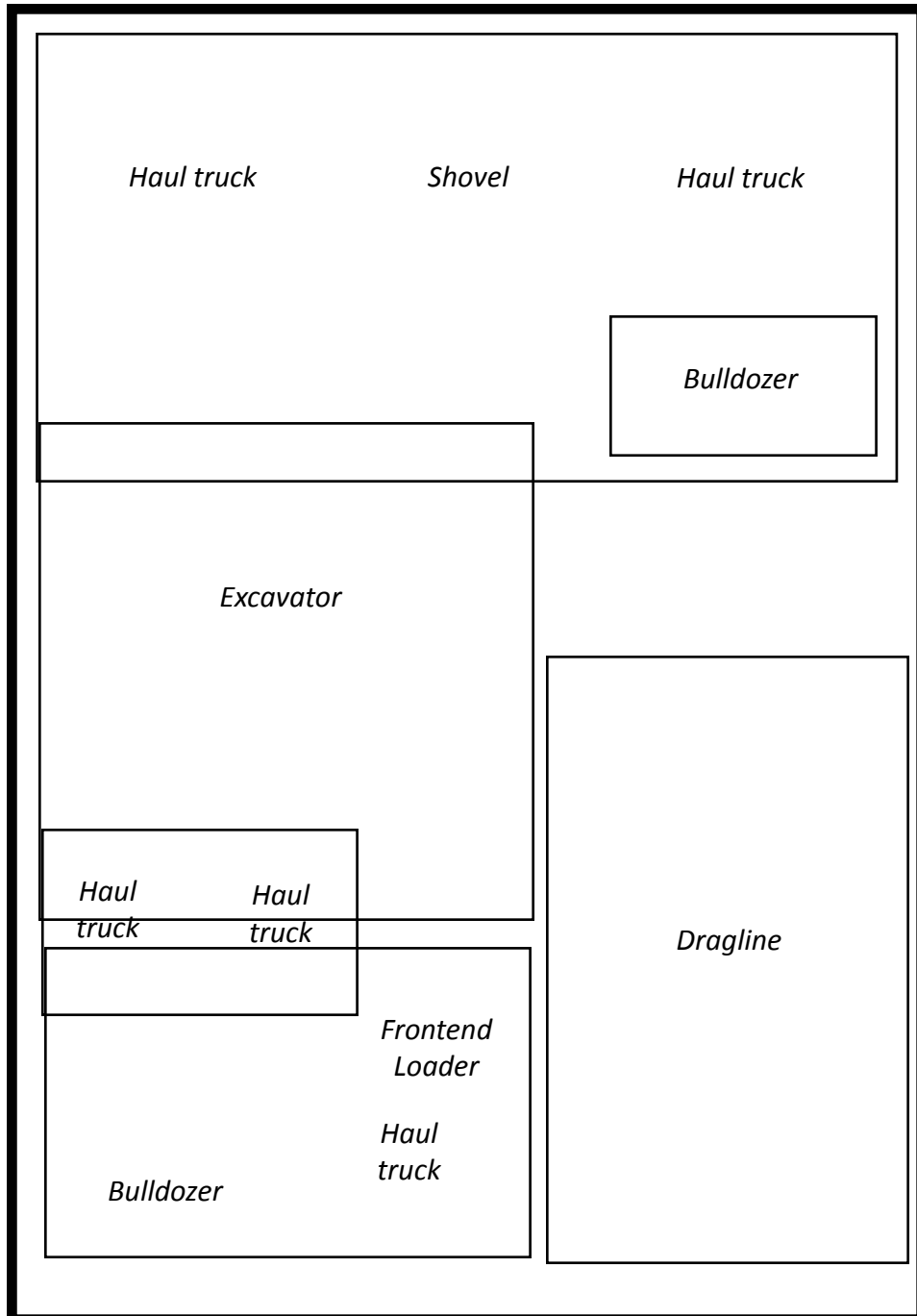
Teacher Information

Mining occupations of people in photos on Page 6 in Mining Community: Elkford, BC.



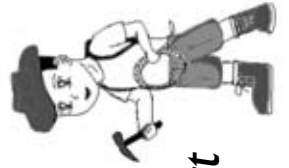
Teacher Information

Mining equipment in photos on Page 10 in Mining Community: Elkford, BC.

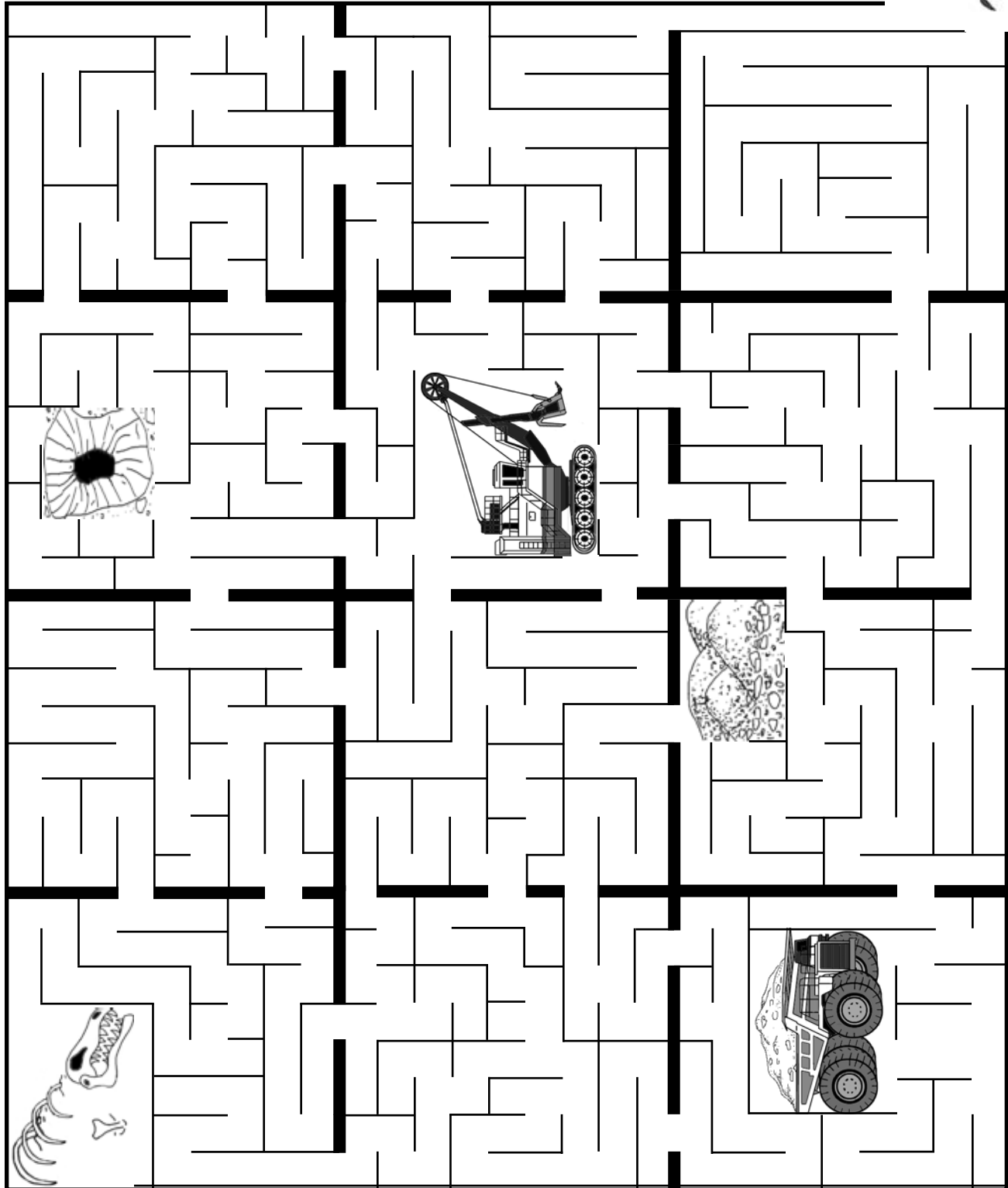


Name _____

Fossil Hunt Maze



Start



Finish

Name _____

Elkford Community Word Search

B	I	K	I	N	G	H	R	D	N	U	O	R	G	Y	A	L	P	W	D
E	P	J	N	V	O	H	I	K	H	P	O	M	B	U	J	K	O	G	F
F	T	B	K	O	L	J	Y	D	J	K	P	I	A	F	A	M	I	L	Y
N	M	H	G	T	F	D	A	D	D	R	E	S	S	L	P	I	Y	H	F
P	I	I	H	D	I	G	T	U	J	L	I	U	T	F	D	H	J	I	S
X	N	C	Y	I	N	I	K	O	J	O	I	C	I	N	I	L	C	Y	C
B	E	N	T	I	G	S	G	O	A	Y	A	A	O	K	R	O	N	S	H
U	C	K	I	S	H	I	B	S	G	M	A	I	I	M	M	A	H	A	O
F	M	A	N	C	U	S	S	N	G	O	T	N	T	H	I	T	C	B	O
R	Y	A	U	G	I	A	I	N	T	A	G	M	A	R	S	H	R	M	L
I	E	L	M	L	O	P	W	J	T	A	M	N	I	E	I	S	U	T	H
E	E	U	M	L	M	T	I	S	M	A	T	E	I	S	T	I	H	K	F
N	I	G	O	A	H	T	E	E	R	S	N	O	N	H	E	Y	C	R	U
D	S	O	C	C	E	R	T	O	D	T	O	M	A	N	S	Y	O	U	T
S	T	R	Y	H	I	N	G	H	I	O	N	K	T	H	U	I	A	T	I
C	A	W	N	F	T	S	R	C	E	R	Y	W	Y	L	O	K	F	O	U
O	V	E	O	R	W	I	T	H	M	E	A	S	O	K	H	I	L	Z	B
G	Y	R	H	R	M	D	E	M	O	N	L	O	S	H	O	T	M	U	H
A	B	A	N	J	K	E	C	I	L	O	P	H	O	E	M	A	N	R	O
N	E	I	G	H	B	O	U	R	S	X	O	R	L	I	B	R	A	R	Y

- | | | | | |
|---------|------------|---------|---------|--------------|
| BIKING | PLAYGROUND | POLICE | CLINIC | JOBS |
| FISHING | SCHOOL | STORE | FRIENDS | CAMPING |
| HIKING | HOUSE | MINE | FAMILY | FIRE STATION |
| SOCCER | ADDRESS | LIBRARY | CHURCH | NEIGHBOURS |
| GOLFING | COMMUNITY | POOL | WORK | PLAY |

Answer Key

Elkford Community Word Search

B I K I N G # # D N U O R G Y A L P # #
O # # # # # # # # # # # # # # #
L # # # # # # # # # F A M I L Y
M # # # F # A D D R E S S # # # # # # # #
I # # # I # # # # # # # # # H # # S
N # Y # N # # # J # # C I N I L C # C
E # T # G # # O # # # # O K # # # # H
I # # # B # G # # I I # # # H # O
F # # N # # S # N # # T N # # # # C # O
R # # U # # # I # # A G # # # # # R # L
I # # M # # P # # T # # N # # # # U # #
E # # M # M # # S # # # # # I # # # H # #
N # # O A # # E # # S # # # H E # C # #
D S O C C E R # # # T # # # # S # # # #
S # # # # I # # # # O # # # # U I # # #
W # F # # # # # R Y # # L O # F # #
O # # # # # # # E A # O # H # # # #
R # # # # # # L O # # # # # # #
K E C I L O P # # # # # # # # #
N E I G H B O U R S # # # L I B R A R Y

BIKING
FISHING
HIKING
SOCCER
GOLFING

PLAYGROUND
SCHOOL
HOUSE
ADDRESS
COMMUNITY

POLICE
STORE
MINE
LIBRARY
POOL

CLINIC
FRIENDS
FAMILY
CHURCH
WORK

JOBS
CAMPING
FIRE STATION
NEIGHBOURS
PLAY

Name _____

Elkford Story Scramble

Unscramble the letters in the left column to make a word in the blanks on the right.

- | | |
|-----------------|-------|
| 1. nemi | _____ |
| 2. nimucomty | _____ |
| 3. amp | _____ |
| 4. drusonai | _____ |
| 5. gleend | _____ |
| 6. hosloc | _____ |
| 7. danesnotes | _____ |
| 8. gierneen | _____ |
| 9. holevs | _____ |
| 10. droflek | _____ |
| 11. tointfrop | _____ |
| 12. stoinmaun | _____ |
| 13. elest | _____ |
| 14. loac | _____ |
| 15. sloifs | _____ |
| 16. oplexre | _____ |
| 17. tlanp | _____ |
| 18. rifend | _____ |
| 19. mailan | _____ |
| 20. tytricleeci | _____ |
| 21. menect | _____ |
| 22. lafe | _____ |
| 23. kroc | _____ |
| 24. spawm | _____ |
| 25. rayles | _____ |
| 26. gikbin | _____ |

Name _____

Elkford Story Scramble

Unscramble the letters in the left column to make a word in the blanks on the right.

- | | |
|-----------------|---------|
| 1. nemi | m _____ |
| 2. nimucomty | c _____ |
| 3. amp | m _____ |
| 4. drusonai | d _____ |
| 5. gleend | l _____ |
| 6. hosloc | s _____ |
| 7. danesnotes | s _____ |
| 8. gierneen | e _____ |
| 9. holevs | s _____ |
| 10. droflek | E _____ |
| 11. tointfrop | f _____ |
| 12. stoinmaun | m _____ |
| 13. elest | s _____ |
| 14. loac | c _____ |
| 15. sloifs | f _____ |
| 16. oplexre | e _____ |
| 17. tlanp | p _____ |
| 18. rifend | f _____ |
| 19. mailan | a _____ |
| 20. tytricleeci | e _____ |
| 21. menect | c _____ |
| 22. lafe | l _____ |
| 23. kroc | r _____ |
| 24. spawm | s _____ |
| 25. rayles | l _____ |
| 26. gikbin | b _____ |

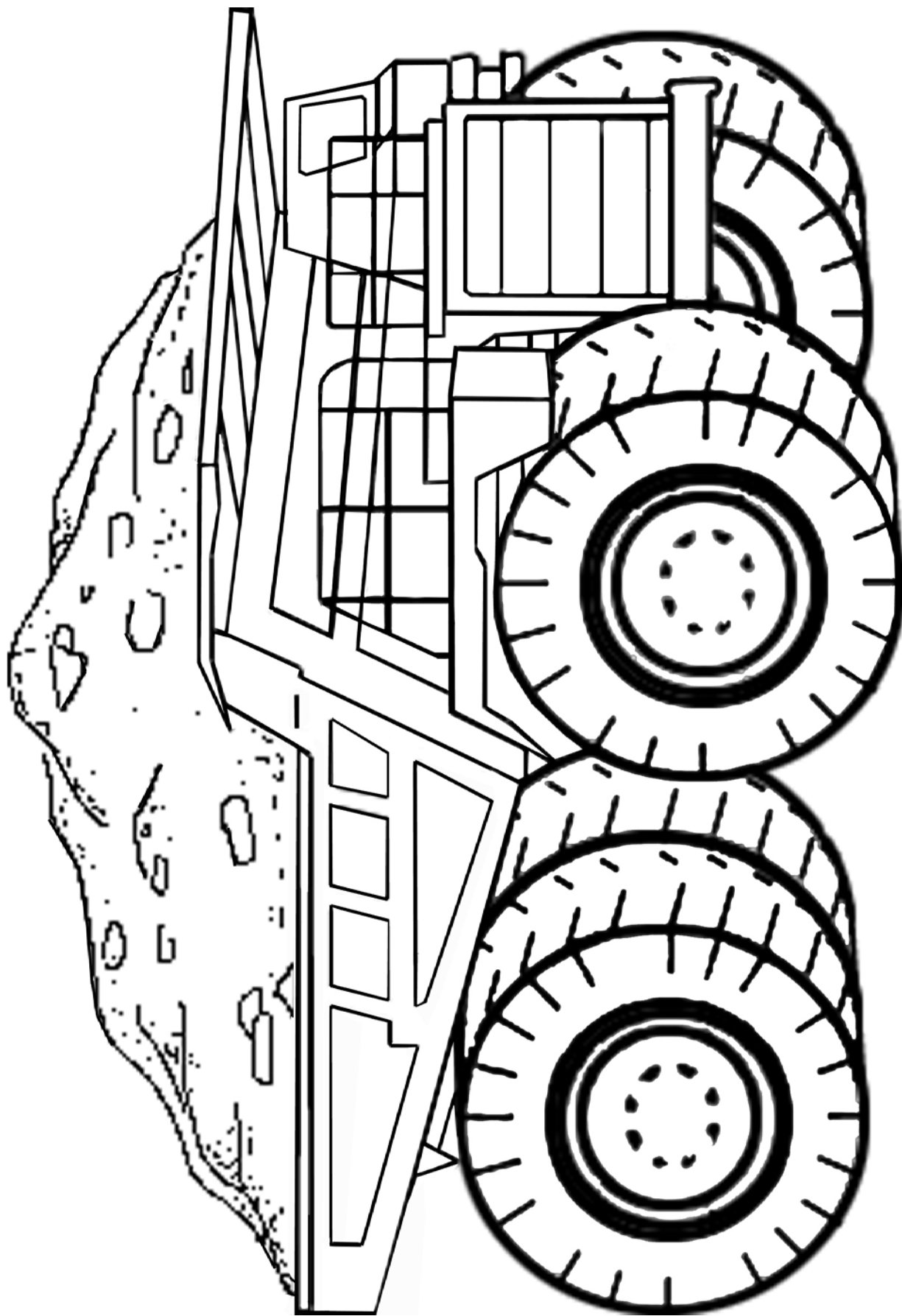
Elkford Story Scramble

Unscramble the letters in the left column to make a proper word in the blanks on the right.

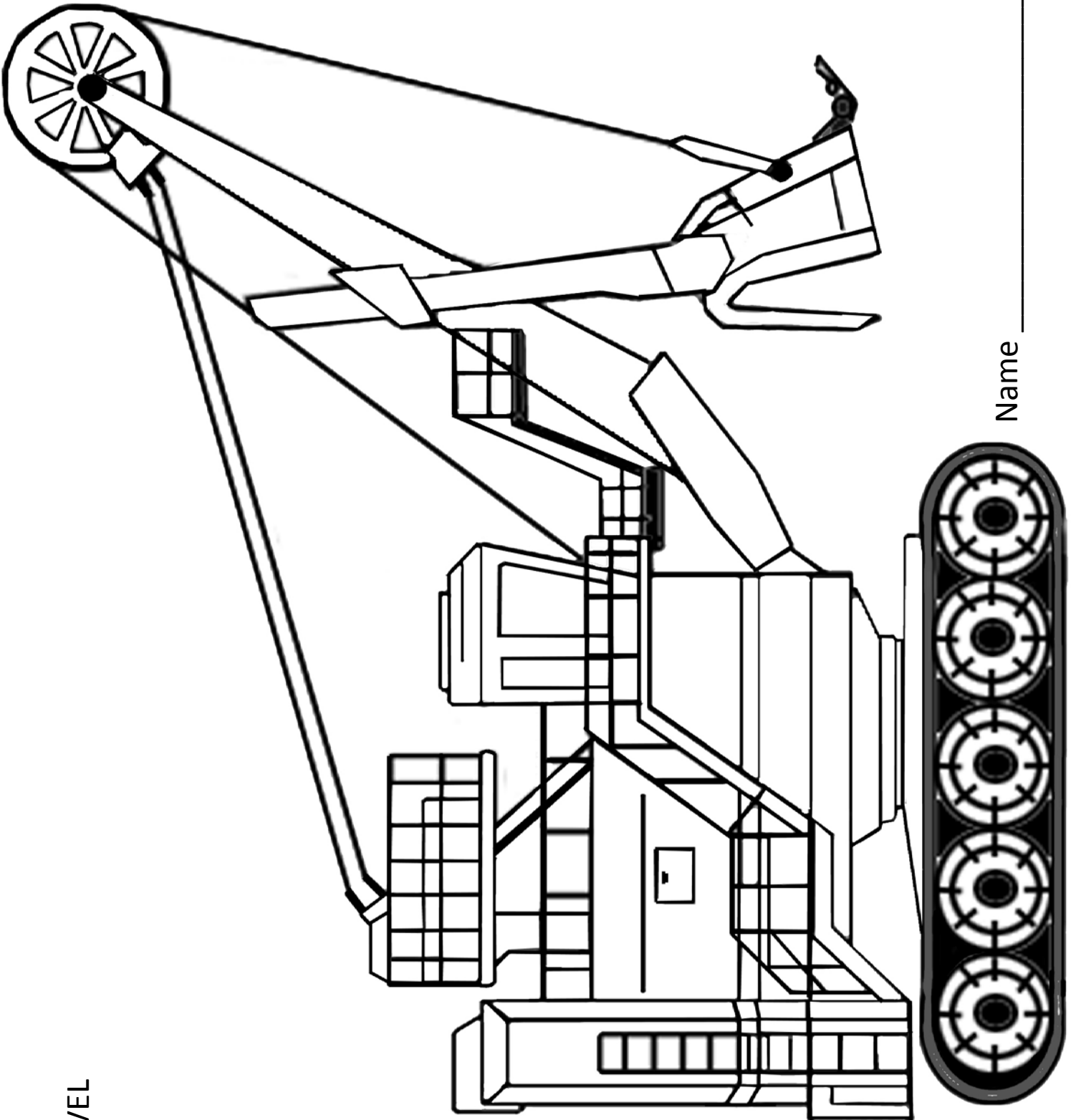
1. mine
2. community
3. map
4. dinosaur
5. legend
6. school
7. sandstone
8. engineer
9. shovel
10. Elkford
11. footprint
12. mountains
13. steel
14. coal
15. fossil
16. explore
17. plant
18. friend
19. animal
20. electricity
21. cement
22. leaf
23. rock
24. swamp
25. layers
26. biking

Name _____

HAUL TRUCK



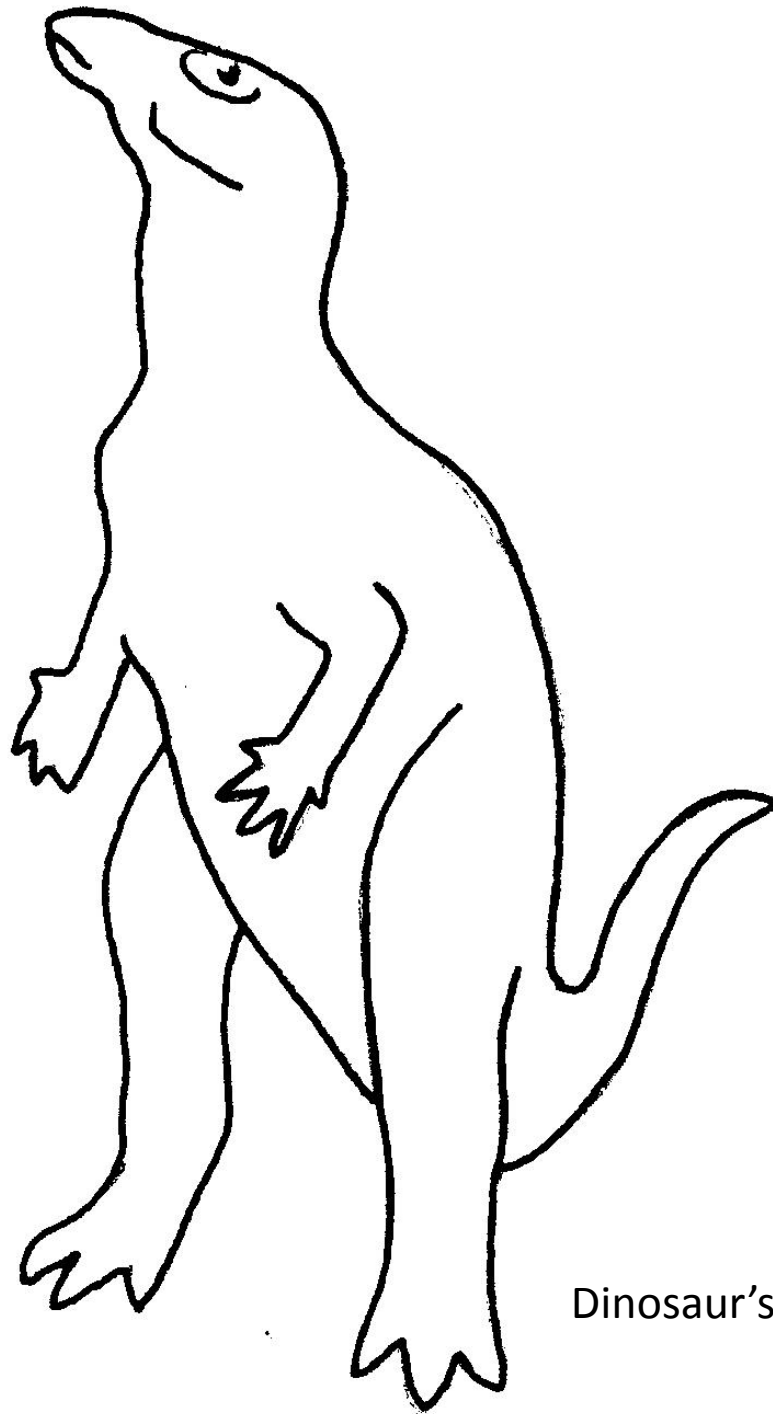
SHOVEL



Name _____

Name _____

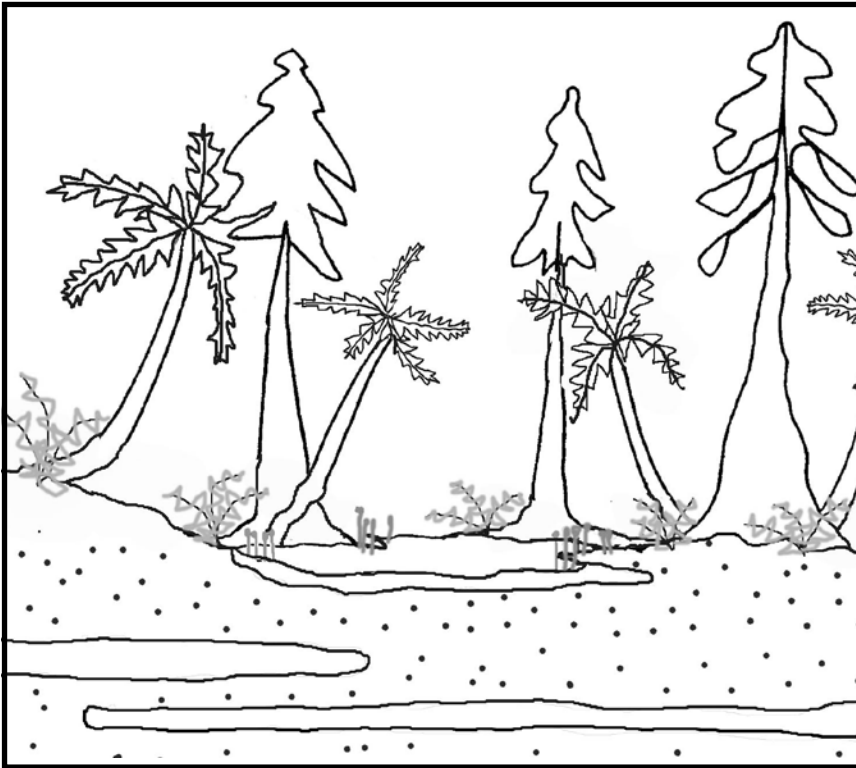
A Dinosaur That Roamed the Elk Valley



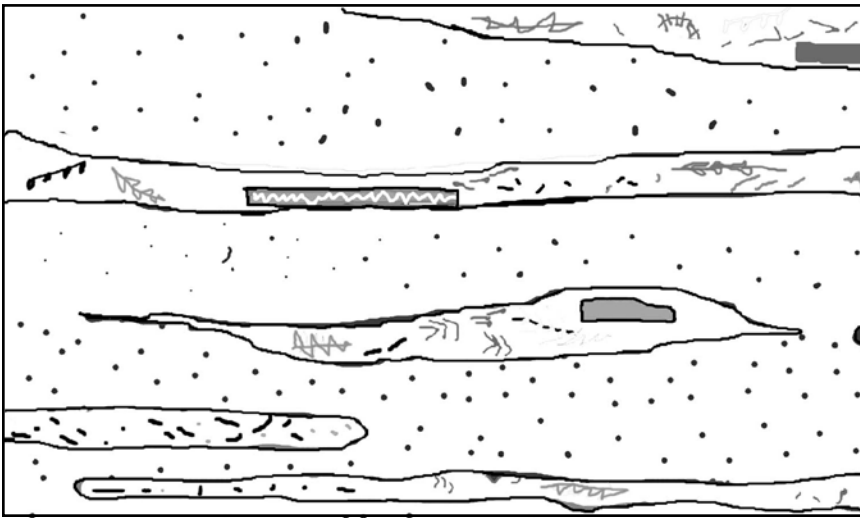
Dinosaur's Name:

Name: _____

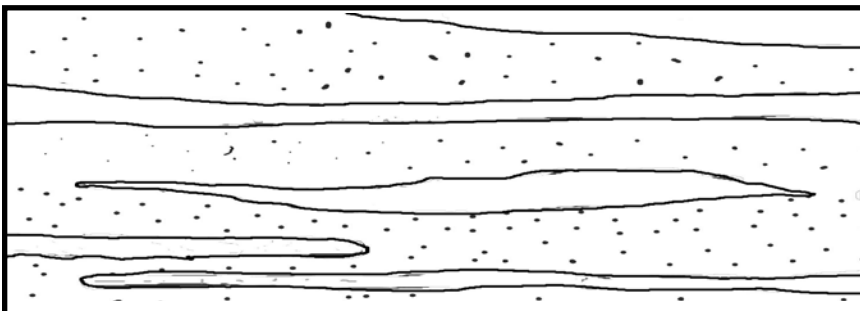
How Coal Forms



Plants that grow in swamps die and fall into the swampy water. There they become covered with mud and sand.



Over time the swampy plant layers become buried by more sand and mud.



The deeper the plant layers are buried, the more they compact and the plant layers turn into coal.



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