# COAL MOUNTAIN ELEMENTARY

MARK NOWAK

WITH PHOTOGRAPHS BY IAN TEH AND MARK NOWAK



COFFEE HOUSE PRESS MINNEAPOLIS :: 2009

## FIRST LESSON

Coal Flowers: A Historic Craft

OVERVIEW: Students observe the process of crystallization in the making of coal flowers, a historic craft among coal mining families.

A 40-year-old woman has been waiting in a small room about 50 metres from the mouth of the Sunjiawan colliery since Monday afternoon's underground explosion. Compared to other distraught relatives clustered in the meeting room, where miners usually gather before descending into "the hole," the 40-year-old looked rather calm, a witness said. As a miner's wife, she said she had prepared herself for this day, but still it came too soon. "We didn't have the traditional new year lunch together because he had to work," she said. "His only day off for the whole year was [Lunar] New Year's Eve. We cooked dumplings. It was a good time." Her husband had been eager to get back to the hole, his wife said, "because he could get double pay on New Year's Day." She said she was not particularly sad but feared the scene when the dead would be brought to the surface and laid out in cold rows on the ground, awaiting identification. "I have no language for my feelings," she said. "And there's no way anybody else can understand it."

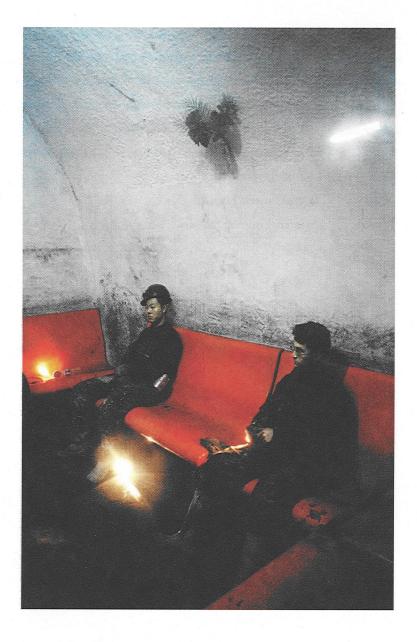
And that morning I just — I did actually notice though and I made the comment of an old wive's tale, you know, what does this mean, this lightning and thunder in January because where I'm from there's always a — you know, the frogs in certain part of the year and things like that. But I went to the door and opened the door because it was lightning and thunder carrying on so bad and it was so warm for the second day of January. You know, I asked two or three people, you know, what could this mean, you know. I mean, there's got to be a tale of some sort, you know.

#### **OBJECTIVES:**

Students will:

 re-create the historic process of making coal flowers, An explosion at a coal mine in north-eastern China has killed more than 200 miners, the worst known disaster to hit the country's accident-plagued industry in half a century. State media said yesterday 203 miners had died in the blast at Sunjiawan pit in Liaoning province on Monday. A further 22 were injured and rescuers were labouring to reach 13 still trapped. It comes after a series of accidents last year that included an explosion in northern Shaanxi province that killed 166 miners in November and a blast in central Henan that left 148 dead in October. During a visit to the site of the Shaanxi disaster last month, Wen Jiabao, Chinese premier, described the tragedy as a "lesson paid for in blood" and called for greater attention to safety to avoid any repeat. Mr. Wen's lunar new year's day pit visit, during which he ate lunch with miners underground, reflected efforts by China's leadership to stress its commitment to the welfare of ordinary workers and citizens. State media photographs from Sunjiawan yesterday showed miners clustered under billboards with government-promoted slogans such as: "Safety is the Sky and Quality is the Earth" and "Your Loved Ones Yearn for Your Safe Return."

Like on arrival at the mine, I went into the bathhouse and changed out of my street clothes into my mining clothes, put on, you know, my hard hat and my mining belt and boots, my rental uniform. And you know, we kind of sat around, joked with everybody, told stories and whatnot until it was time to go down over the hill. Proceeded over to the lamphouse, got my earplugs, cleaned my safety glasses, checked my light out and made sure it was working, put it on. You went down over to — into the pit.



#### OBJECTIVES (cont.):

- make observations
   about the crystallization process
   that occurs during this craft, and
- understand the role that the practice of making coal flowers played in coal mining families.

I always just talked to the guys until it was time to go in. We went over the hill and Two Left left, and we had to change a mantrip so we were behind them. And I got to my head about — Four Head about probably 6:15, something like that. When I got there, I fueled my duster up, got it going. Ate a cake and drank a milk and just walked out on my belt line and that's when it happened.

Xiao Wei has stopped tearing pages from the calendar hung on her broken wardrobe since Monday, when her father did not return from work. The teenager's 37-year-old father was one of the 244 miners who went underground on Monday at the Sunjiawan colliery in the Liaoning province city of Fuxin. As of yesterday, 210 of the 244 were reported dead from a gas explosion and rescuers were still searching for five missing miners. For Xiao Wei and her mother, Li Li, who declined to use their real names for fear of getting into trouble with authorities, the past two days have been hell, without word of whether the father and husband was alive or dead. Although relatives kept close, Ms. Li wept uncontrollably and fell into moments of exhaustion waiting for news of her husband. She knows in her heart that he is probably dead. "I am not prepared at all. He just left suddenly . . . and this is still the Lunar New Year," Ms. Li almost yelled through the tears. Xiao Wei, 14, held her mother's hands and sobbed quietly. "They forced him to leave 300 yuan as a deposit so that if he did not return to work after the Lunar New Year, they would deduct 100 yuan each day," Xiao Wei said. "Now what will happen to us, we have to look after old people and kids." Ms. Li said her husband started work as a coal miner two years ago because he wanted to earn more to pay their rent and Xiao Wei's tuition fees. "He used to be a security guard but he only earned 400 yuan [a month]. Our daughter is growing up now and will soon go to secondary school," she said. "That is why he began working as a miner and could earn about 1,000 yuan a month." Ms. Li's sister said: "Otherwise, who would take such a job? It is a job for living people working in hell."

NATIONAL STANDARDS:

National

Science

Education

Standards:

Science

as Inquiry,

K-4, 5-8;

**Abilities** 

necessary

to do scientific

inquiry;

Physical

Science, 5-8;

Properties of

matter

and

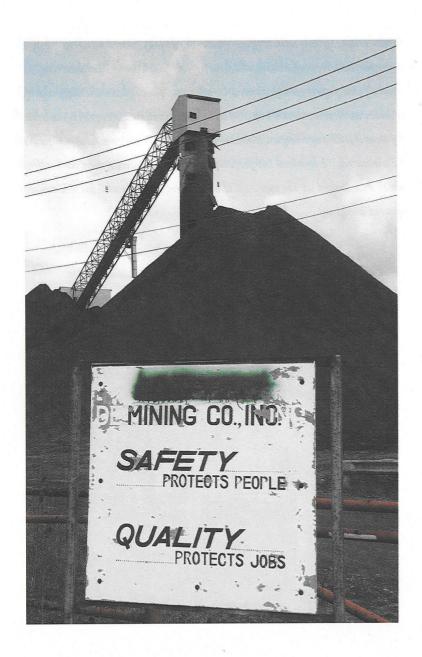
changes in

properties of

matter.

So I looked up at the clock, you know. And the clock's right there where you go out the door, and it was lightning real hard, thundering. And I opened the door and just raining to beat the band, you know. And I shut the door, and went that crack of thunder, my boss, Skip, or — James Scott's his name. He looked at me and George and he said that felt like an explosion. That's exactly what he said.

Open trucks filled with coffins made their way from mine to morgue through the streets of Fuxin, the freezing air thick with coal dust and the smoke from paper money burned in offering. Throughout the day, convoys of buses carried mourners bundled against the cold into a cemetery sealed off by security. Zhang Weiguo, a miner for more than 30 years, was the first to be cremated. "I touched his forehead, checked his teeth, then took off his shoes and looked at his toes . . . it is him but he is dead," his widow was quoted as saying.



Well, I felt this — we was setting there getting ready to go around the turn. I felt this kind of —. I didn't hear anything but a little bump, like a thump. And all this stuff started blowing down on us, coal dust, soot, ash, mud. It was just like volcano stuff, you know, it was just like being in a volcano. And I thought we was getting covered up with a roof fall at first. I said, oh, no, I'm going to get covered up in a mantrip, buried alive here.

TIME

NEEDED

Two class

periods.

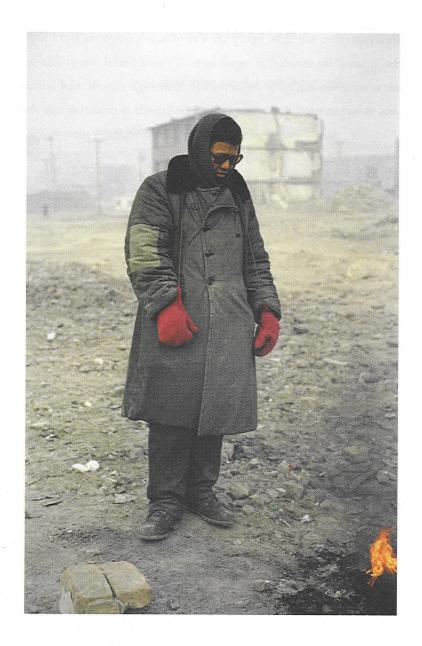
Zhou Liyuan, vice general-secretary of the Liaoning Provincial government, said at a press conference that the compensation work for the victims' families is well arranged and going on smoothly. He said 208 of the 214 bodies were claimed and 194 bodies were cremated. Family members of the 203 victims signed compensation contracts, and 146 families have received compensation money.

# MATERIALS: Shallow glass bowls (one for each team of students), Coal (several lumps per work team), Twigs and/or toothpicks, Small pieces of cloth, paper, or string, Paper towels, Glue,

I'll tell you just exactly like I told the senators and I told my son. If I put you in the bed of a pickup truck and I put that truck on the interstate, just everything that truck had in it, you couldn't get nothing more out of it, and then some way or another to fix it up so that somebody could get in front and throw sand, gravel, rock, blocks, mud, any and everything they could throw as hard as they could throw it in your face, that's close. That may be just a hair less, but it's close, for 10 — I said 8 to 10 to 12 seconds, some of them said it's 30 to 40, but —. And then it cut off, it — when it stopped, it stopped. There wasn't no gradual going down or nothing. It was one second, me and you are talking, the next second it's hitting you for everything it's worth, and then it's over with.

Mixing bowls or cups,

The death toll from a weekend gas blast that ripped through two coal mines in the north rose to 60 yesterday as rescue efforts to find nine more miners continued. The explosion occurred at the Xishui mine in Shuozhou city, Shanxi province, at noon on Saturday. The blast was so powerful that it blew through a safety partition wall and into the adjacent Kangjiayao mine. A total of 71 people were working in both mines at the time, CCTV reported. One of the 22 men working at the Kangjiayao mine was rescued soon after the blast and another made it to the surface by himself. The rest are either dead or missing. The ventilation systems in the two mines were working by yesterday morning, after overnight efforts by six teams hailed by Xinhua as the "most excellent rescue forces" ever mobilised in the province. Miner Luo Yuanbing, who said he counted himself lucky not to have been working in the mines on Saturday, said the blast was so strong it shattered windows in houses more than 100 metres away. "I was having my lunch and then the explosion came," he told Xinhua. "I said to myself: something terrible must have happened in the mines."



MATERIALS (cont.):

6 tbsp salt per work team,

6 tbsp laundry bluing per work team,

6 tbsp water per work team,

1 tbsp ammonia per work team,

Food coloring,

Thermometer

to measure air temperature,

Coal Flowers Worksheet

for each team.

Now, I lost everything exactly at 6:31. That's what the computer time was telling me. Like I said, I'll never forget it, because the Second Left section belt, the CO right there at the tailpiece, the CO midways at the belt and the alarm at the tail turned gray. Five belt went to power loss. Six belt went black, it went gray. It was like it didn't exist.

Dai Longcao said she had not been able to eat since the Sanhuiyi Coal Mine was ripped apart by a massive blast on Tuesday. "I held my children's hands and walked three hours along the mountain path to the coal mine," said the 42-year-old woman. "I took off immediately after I heard the news, and didn't even get a minute to let my parents know what happened." As her husband's meagre salary provides for the whole family, the housewife said she feared for the future of her son and daughter. Her fears were shared by a pair of sisters whose spouses were also their families' only breadwinners. Xia Xingrong and Xia Xingbi have their fingers crossed for their missing husbands. "If anything happened we'd be helpless," they said.

#### MATERIALS (cont.):

If the grocery
or hardware store
does not carry laundry bluing,
check with a pharmacy.
It can also be ordered
through many women's magazines
or purchased over the Internet
at www.mrsstewart.com.

I threw the phone down because lightning ran in on the phone. I told Jeff — I picked back up the phone and said, Jeff, there's something wrong. I have immediately lost all communications. I said, the belts is going down. As soon as it happened, I said I lost all the belts and everything. It popped the phone. Just like a pop on the phone itself. Just like noise, like electric. I threw down the phone and looked — I mean, a split-second — when I was talking to Jeff, I just threw it down. It hurt my ear. I picked up the phone and told Jeff that we lost the belts. Second Left is showing me just dead.

The death toll of a coal mine explosion last Thursday night in northwest China's Shaanxi Province rose to 21 as another miner died in hospital Monday evening, rescuers said on Tuesday. Zhang Zhifeng, a miner injured in the explosion, was rescued Saturday morning at Shangyukou Colliery, a private coal mine in Hancheng city. With serious burns and respiratory tract hurts, however, Zhang had been in a coma since being sent to hospital and died on Monday evening as all rescue efforts failed.



#### DISCUSSION QUESTIONS:

What do you know about crystals?

Where have you seen them?

How are they formed?

Have you ever heard of "coal flowers"?

If so, do you know when and how they were made?

Relatives of over 50 miners were last night hoping their loved ones had survived an underground blast at a coal mine in Chengde in North China's Hebei Province. Fifty one miners are believed to be trapped after the explosion at Nuan'erhe Coal Mine in the early hours of yesterday morning. It is unclear whether the trapped men are alive. Relatives of those trapped are keeping an emotional vigil at the colliery. "It's not clear whether they are alive or not," the State Administration of Work Safety's press official said.

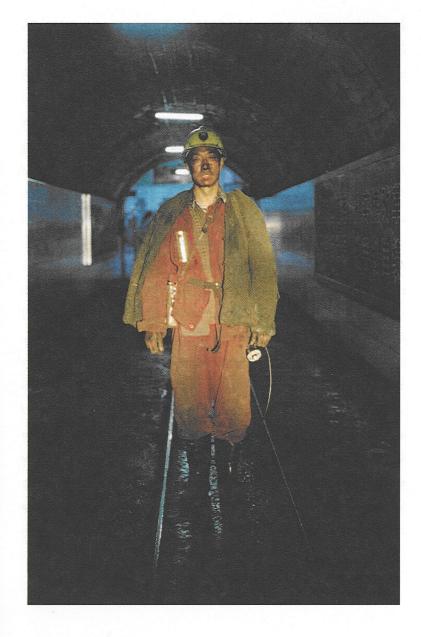
I said, I'm going to stay in here and see what I can do because I got a brother up here. And I know — you know what I mean, I'm knowing that they're still trapped up there somehow, someways. And my men begs me to go with them, but I said, no, you all go. I said, I got to go see if there's anything I can do.

#### PROCEDURE:

1. Begin by explaining to students that the making of coal flowers is a historic craft that was practiced by coal mining families in the late 1800s and early 1900s. When mining families had little money to buy decorations or purchase toys, they used common household products and coal to make beautiful crystal flowers. It was entertaining to watch the crystal flowers grow, because the changes took place in a relatively short period of time. Coal flowers were sometimes used as Christmas decorations because they resemble snowflakes.

Rescuers said by Monday they had discovered 45 bodies at the site of a coal mine blast that occurred last Thursday in Chengde, north China's Hebei Province. Only one miner was rescued from the explosion scene. Another five miners remain missing. Sun Jisheng is the only one of the trapped miners who has been rescued. The former safety inspector, who was in a coma when he was brought to the ground on Saturday, woke up earlier Sunday but lost memory due to cerebral hypoxia for a long period of time, said doctors with the No. 266 Hospital of the PLA (People's Liberation Army) based in Chengde.

I had a little rough time, especially — well, stumbling around because I have an artificial leg and it's hard to walk on rough surface. The section foreman said I'm going back after my brother. So we told him he couldn't do that. So I said, well, what about my brother-in-law, so I broke out in tears then. And he said, well, I'm going to try to go find them.



Living in a row of one-storey tiled houses with three kids, 40-year-old Cai Zhuhua has been struggling with life since her husband died in a mine tragedy that claimed 20 miners at the end of 2001. A 14-inch black-andwhite TV and a rusty refrigerator are the most expensive items in her family's shabby two-room apartment. "Time has not dimmed the pain of losing my husband, and it never will," says Cai, who says that almost every morning at five, her husband rose to leave on an early shift after caressing her and the children and bidding them goodbye before closing the door. Cai is illiterate and now works as a part-time cleaner at the husband's Jianxin Coal Mine and says it has become increasingly hard to make ends meet as the kids get bigger. "High costs for education have hit us hard," says Cai, whose face shows anxiety and distress. With a total income of less than 700 yuan (US\$87) per month, Cai had to make her eldest daughter drop out of high school last year to earn money for her younger sister and brother. The daughter has been persuaded by friends to go to work in Mianyang of Sichuan Province in Southwest China but has not been able to find a job there. "My sister's lesson has shown us how difficult it is to find a job and I should be well prepared," says Cai's second daughter Li Ying, 17, who has been burning the midnight oil to prepare for the coming college entrance examinations. Still sharing a room with her 16-year-old brother Li Hong, she is confident that she will pass the examination next month and hopes to study journalism at a university. "My dad didn't live a single day of a happy life, but I will try hard to earn a happy life for my mother," said Li Ying.

#### PROCEDURE (cont.):

2. In this activity, students will make their own coal flowers. Explain that the coal actually plays no chemical role in the creation of the crystals and is no more critical an ingredient than the toothpicks used. In addition, students will use food coloring to enhance the beauty of their coal flowers, although original coal flowers were made without this additive.

That's all I ever knowed him by is Doc. He's a little bit shorter than me. And I told him, I knowed he wore glasses like I did. I said, reach up and wipe off your glasses and wipe off the top of your hat — light so you can see. There's dust on it. And he said something else. And I said, well, I said, let's go. I said, we'll just ease down out of here nice and slow. I said, there's no great big hurry right now. We're all right. And he said, well, don't leave me. And I said, I'm not going nowhere. I'm going to be right here with you, come on, and I started backing up real easy. I had my dinner bucket and my rescuer. The reason I grabbed my dinner bucket, because I had the idea that we was going to walk out of there and somebody was going to need a drink of water. One other boy grabbed his water jug. And I eased Doc down around the side of the mantrip, and I told him when he got in to where his feet was inside that track, I said, you go down the track. Don't get out of the track, and I'm going to be right here with you.

Owners of a coal mine in Shanxi played down the death toll from an explosion two weeks ago by hiding or sending to neighbouring Inner Mongolia at least 17 bodies. The cover-up was revealed yesterday by the State Administration for Work Safety on its website. Rescuers found 19 bodies in the Jiajiapu mine in Ningwu county following a blast on July 2. But they could not determine exactly how many died. Authorities discovered after an investigation that the bodies of seven miners had been stored at a hospital. Another three were taken to a crematorium 150 km away in Ulanqab and seven more to Fengzhen, both in Inner Mongolia.

Well, I do remember the dispatcher saying we had an explosion. He repeated that out loud to himself and his face — his facial expression, he was real nervous and he was trying to figure out what was going on, what we needed to do and who we needed to call and —.

#### PROCEDURE (cont.):

- 3. Divide the class into manageable work teams of two to four students each. Give each group the necessary materials. Display the following procedures for each group to follow in making their coal flowers:
- a. In the shallow bowl,place several small lumps of coal.
- b. Arrange any combination of twigs, toothpicks, paper, cloth, or string with the coal.Use glue to hold the pieces to the coal if desired.
- c. In a separate bowl or cup, mix the salt, laundry bluing, water, and ammonia.
- d. Pour this mixture over the coal mound.
- e. Sprinkle dots of food coloring over the mound.



Zhang Li, of the China Coal Industry Development Research Centre in Beijing, said most mainland miners lacked safety awareness and received little training. "Coal miners usually come from various provinces. Some of them are illiterate and most only have a primary education. They don't know how to protect themselves," Mr. Zhang said. "Many workers go down the mines the day they are recruited." He said miners today were generally one of the lower social classes in China. "They earn less than 1,000 yuan a month and many labour 10 hours a day every day." Wei Hailin, who has worked for more than 30 years at Pingxiang Coal Group in Jiangxi that has more than 3,000 small mines, said most miners were peasants desperate for work. "They know the danger but still want to be coal miners because they cannot make a living on the land."

#### PROCEDURE (cont.):

4. Distribute copies
of the Coal Flowers Worksheet.
Have students
immediately complete
the first three questions,
documenting
the air temperature
according to the thermometer.

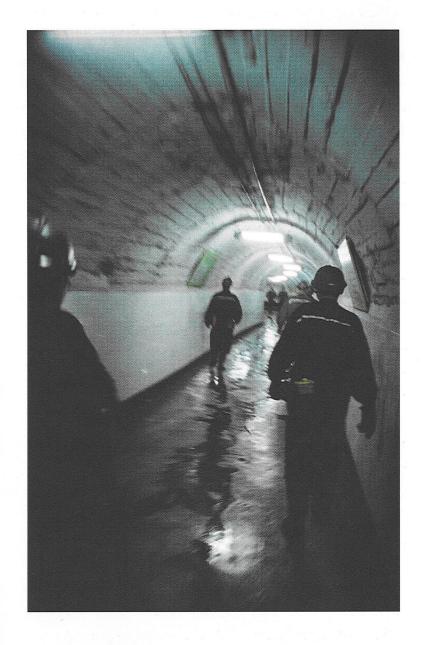
And Mr. Wilfong got off the Jeep there and asked the dispatcher if he had heard from the Two Left crew. They never had any communication with the Two Left crew. And we stopped at 25 block, at the phone again, and Dick Wilfong called the dispatcher and told him — I think his words were, we've got something bad wrong, call the state, the federal, get the mine rescue teams, get the emergency squad, get everybody out here.

The final death toll from Tuesday's coal mine gas blast in Northwest China's Shaanxi Province has been confirmed as 26, with the last two missing miners found dead on Wednesday night, local officials have announced. The accident happened on Tuesday afternoon, when 40 miners were working underground at the No. 5 Coal Mine in Jinsuoguan. Eleven of the miners escaped unharmed, three were injured and 26 were found dead deep in one of the tunnels, according to the Shaanxi Provincial Bureau of Coal Mine Production Safety Supervision. "The dead miners are all local farmers in Shaanxi and their family members and relatives have been in Tongchuan for the funeral proceedings. The local government may make proper arrangements for them and compensate the victims in accordance with the regulations," said Yang Jianbo, an official with the Tongchuan city government.

#### PROCEDURE (cont.):

If possible, document
the crystal formation
on an hourly basis
(either on the worksheet
or in a science journal),
noting change in size, shape, and color
or color vibrancy of the crystals.
Complete the rest of the worksheet
once the flowers are fully formed,
which should take no more
than eight hours.

When he told me that there was a problem at the mine, I questioned him where was the superintendent. And he told me that he was underground. I said, well, where is the maintenance superintendent. He's underground. Well, where's the safety director. He is underground. And I proceeded to make phone calls that morning. I started with our company people, calling phones and leaving messages on answering machines. Then I tried to call the state office and there was no answer of course at the state office. That was approximately 7:50 — 7:40, I'm sorry. 7:40. I got Mark Wilfong and Brian Mills' phone numbers off the answering machine. I called Mark Wilfong's home phone number. I let it ring ten times and there was no answer. I called Brian Mills' that was on the answering machine and got a message that the number had been disconnected. My wife was there helping me and I'm asking her to look up phone numbers in the phonebook. I then called John Collins at home, left a message on his answering machine. I then tried to call — I made so many phone calls, I don't want to get them mixed up. I tried to call the mine rescue team numbers that were on the board and was not having any luck with that. I made a phone call to Jeff Rice's home. He was not there. I made a phone call to the mine rescue station. This was approximately eight o'clock, maybe five minutes after 8:00. Their answering machine had been turned off. There was no answering machine. It had been turned off. I called Kenny Tenny's home and left a message on his answering machine. Then I called the District III office in Morgantown, and I had to call it twice to get all the phone numbers and names that were listed on their answering machine. I then called Carlos Mosley's cell phone number, which was listed on their answering machine, and I left a message. I called Bill Ponceroff's cell phone, left a message. I called Kevin Stricklin's phone and I left a message. I then had my wife look up Jim Satterfield's phone number. I called it and it was a wrong number. There was two Jim Satterfields listed in the book.



#### ASSESSMENT:

Place the experiment in its historical context by discussing why this activity might be a natural one for coal mining families in the late 1800s and early 1900s.

Well, a little bit of time went by, and they kept trying to get ahold of people, you know, to see what had happened. And I'm going to be real honest with you. I've been around mining all my life, and I'll tell you what, I was nervous, because I know — this is because I've been around, I know the worse that could happen. So I was nervous. I wanted to see what I could do to help or whatever.

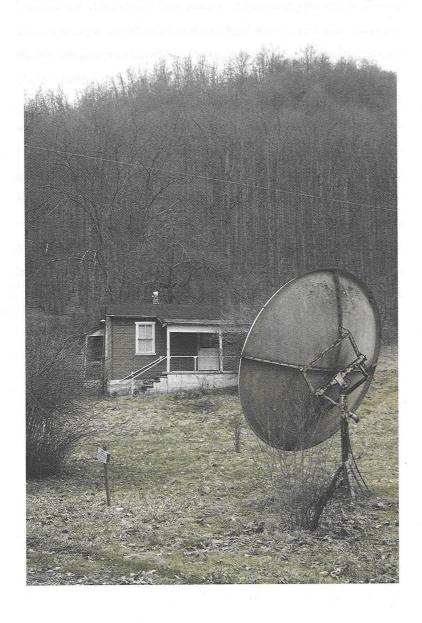
The mayors of Xingning and Meizhou have been suspended from duty for alleged incompetence in supervising a colliery that flooded on Sunday, leaving 122 miners trapped underground and feared dead. By yesterday—three days after floodwaters filled the Daxing Colliery in Xingning's Huanghuai town—only one of the trapped miners' bodies had been recovered. At a meeting chaired by Premier Wen Jiabao yesterday, the State Council ordered the creation of an investigation team to look into the disaster. The council also said the rescue operation should continue as long as there was a glimmer of hope. The council decision came as the first miner's body was recovered from 240 metres underground and brought to the surface at 3:45 a.m. An officer, surnamed Ye, of the Huanghuai police station near the mine, said the body floated up as rescuers were checking the water level.

#### ASSESSMENT (cont.):

Either photograph
the crystals
or have the students
draw them and explain
in their own words
how they made
the flowers.
They should describe
the process
as well as the changes
they noticed over time.

After we were outside maybe — again, I'm guessing, 5, 10, 15 minutes, because as soon as I got outside, I called my wife. And I gave the phone to another boy and I said, as soon as you call your wife, you give it to another guy and have him call his wife. Get all of us get our families notified. Don't tell them what happened, just tell them, okay, we're outside, we got a problem, and let it go at that. Because I knowed — and again, from a little bit different experiences, but close to it, that when all this started, the phones was dead to us. We couldn't talk to our families. And I didn't want any of the families to find this out over the scanner. Unfortunately, it did. You don't hide nothing from people. How these people found it out, I don't know, but they did.

Xiao Ying, the wife of a trapped miner, told Xinhua that her husband should not have died. "It wasn't my husband's turn to go down the pit, but the boss said there were not enough people and forced him to work. Now he will never come back," she cried. Her husband, 30-year-old Chan Dongming, has also left behind five-year-old and four-month-old daughters. She said the workers did not want to go down the pit, but the owner ignored their concerns. "The boss said that they couldn't work in the day time, but night time was available," Mrs. Xiao said. Zhao Xianming and another miner surnamed Ke from Jiangxi backed the claims. They said they worked around the clock in two or three shifts each day until an accident in another pit on July 14 killed 16 miners. "We stopped for a short period after that, but started working secretly on the night of August 6," Mr. Zhao said.



We must have got outside about 7:30, before 7:30. Because my wife said I called her at 7:33 on the cell phone to tell her I didn't want her to see it on the news, you know. I told her what happened. I was okay, so she wouldn't see it on the news and go off the deep end.

#### **EXTENSION:**

To more thoroughly understand the role that temperature plays in the crystallization process, repeat the experiment under heat lamps and in refrigeration.

Make sure to document the air temperatures and contrast the timing of the process at different temperatures, as well as the color vibrancy of the crystals.

I called my daughter and wife. I don't remember which one answered the phone. I believe it was my wife answered, yeah. And told her that the mine had blew up and her brother was still in there and told her to come on up to the mine. On Monday, rescuers said heavy rains forced them to suspend their search for 122 miners missing since Aug. 7, when millions of gallons of water flooded the Daxing Colliery mine in southern Guangdong province, trapping the men about 1,400 feet below the surface. Relatives have been asked for DNA samples to help identify any bodies recovered after long exposure underwater. Relatives and friends of the trapped miners have descended on Xingning. Many are staying at the state-owned Forestry Building hotel. One of them, Zhong Wenfeng, came to comfort his girlfriend, Li Meili, who lives in Hunan province. Her father and two brothers were trapped in the mine and were still missing Monday. "The one sound we hear at the hotel is crying," Zhong said.

#### DIFFERENTIATION:

Challenge

higher-level students

to research

and report

on the actual

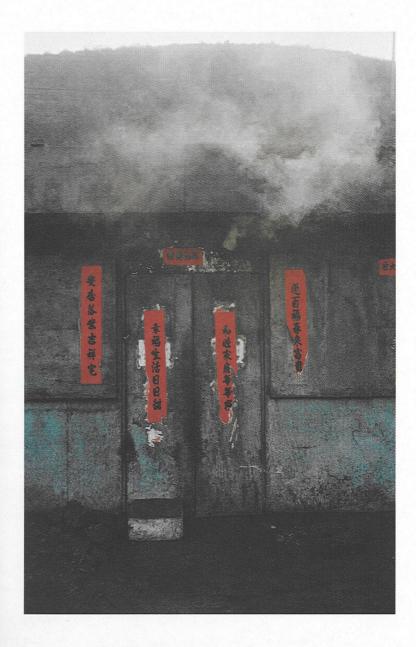
chemical

reactions that caused

the crystallization

on the coal.

Guangdong authorities yesterday officially abandoned efforts to find the bodies of miners trapped at the flooded Daxing Colliery in Meizhou. Zeng Haiying, spokesman for the Meizhou government, said all 123 miners were now considered dead. "We cannot officially declare them dead, but an official declaration will be made by the local court soon," he said.





### THIRD LESSON

Coal Camps and Mining Towns

OVERVIEW: Students look at the history of the coal mining industry by researching coal mining towns built by mining companies. Students then write short stories that highlight the people who lived in coal communities, focusing on the relationship between the coal companies and the miners and their families.

When Mr. Wei was a young boy growing up here in the 1960s, he said, Shangma Huangtou was a village of about 500 people set up against the hills, with corn and soybean farms and a stream running through the middle of the village. "I remember you could drink from that stream," Mr. Wei said. Everyone here talks about the stream. "When I was young this stream was very clear," said Lin Youmao, the village's elected chief. "We could find fish and shrimp in this little river. And we could swim in it." In the early 1980s, however, when China was just waking from its long economic slumber, the village turned into a coal mining town after rich deposits were found in the area. Armand Hammer, the American industrialist and the founder of Occidental Petroleum, formed one of China's first joint ventures here in north China. In 1982, his company signed an agreement to create a huge open-pit coal mine in Shanxi Province, which had just been designated as the nation's new energy base. The mine was created about a mile east of the village. And when the new project broke ground, residents recall, Mr. Hammer flew in by private jet and Prime Minister Li Peng came for the ceremony. Years later, Mr. Hammer pulled out of the project, unhappy with its progress. But the An Tai Bao open-pit coal mine continued to grow, scooping up millions of tons of coal and piling mountains of coal waste next to the village.

So we drug him down and laid him out in a turned position, but we had to move the guy - one of the guys that was next to him fell over on his lap. He was - you know. And I checked him real quick to make sure he wasn't — to see if he was alive, you know, but he was fell over on his lap, and then you could see where he had bled a lot. I mean, a good bit. Well, anyways, we moved him off, then we pulled Randal down and got him laid down. And I'm rubbing his legs trying to get circulation going, because it's cold, you know. And I'm rubbing, trying to get circulation going in his legs, and just trying to get him - and Jim says take over up here with this, and hold this in his mouth, and you know, try to get him breathing. I said just wait, let me get another one, I got another one I think, and we opened it up and put it in his mouth, you know, just to make sure it was good, you know. I believe I did. I can't really place whether I did or not, but I think that we did. I'm not for sure. And I'm still trying - I'm rubbing McCloy's head, you know, telling him it's going to be all right, we're going to get you out of here, trying to get some you know — because his eyes was open and he was looking, you know. You could tell he was, you know, dazed or whatever. And we're - I'm trying rubbing his head. I'm concerned with him more or less anything else. And you know, I'm trying to get him - you know, talking to him. We're going to get you out of here, you know. You'll be all right. We're going to get you out of here.

#### OBJECTIVES:

Students will:

- gain an understanding
   of the historic role
   of the coal mining companies
   and the establishment
   of mining towns;
- research and consider
  the relationships between
  miners, their families,
  and coal companies; and
- 3. create a fictional short story about a person or persons in a mining town.

The big gentleman that fell over on top of him — was on his chest, and he didn't — he wasn't taking as deep as breaths as the rest of the people. And I think that's probably — it kept him warm.

Some residents later talked about the village's founding myth, an old fable about how the beautiful village was founded in ancient times with a small lake in its center. But one day, according to the fable, a smart man from southern China came and stole the village frog, bringing ruin to Shangma Huangtou. "I don't believe this myth," Mr. Lin, the village chief, said. "I believe there's no water because of the coal mines. The earth is like the human body. And the water is like the blood in your veins. But now there's no water; no blood."



But bringing him outside, I just didn't think that — I didn't think that this boy was going to make it, you know. After we put my machine on him, I felt like he was breathing a little bit quicker. You couldn't hear him gasp for breath, but his fingers was drawed up. And the track — and going outside, the track, if the mantrip would hit a kink or bump in the track, his eyelids was opening, and you'd see his eyes were rolled back in his head. You'd just see the whites of his eyes. And then going outside, I didn't think that this boy was going to make it.

Fifty-three people were confirmed dead from the colliery explosion in north China's Shanxi Province after the attempted rescue operation ended on Wednesday. The rescue operation headquarters said that 53 bodies had been retrieved, revising the figure that 59 miners, instead of 64 that was previously reported, were working underground when the blast hit the Linjiazhuang Coal Mine of Lingshi County, Jinzhong City, at about 4:40 p.m. Saturday. Six miners managed to escape and another one was rescued alive, the headquarters said, adding that another miner died from carbon monoxide poisoning while helping with the rescue operations.

#### NATIONAL STANDARDS:

National Council for the Social Studies

Standards: Culture; Time, Continuity, and Change;

People,
Places, and
Environment.

National Council of Teachers of English

Standards: Students

employ

a wide range of strategies as they use different writing elements

to communicate
with diverse audiences
for a variety of purposes.

I'm going to tell you, the only thing — carrying Mr. McCloy out, I was on the right-hand side in the back, close to his head. And what I was doing, and we all were doing it, we were talking to him all the way out. Hang in there, we're going to get you out. And I put myself, my eyes on his hand, and I noticed he had a wedding band on, and I'm thinking about this young man. And I watch his hand all the way out to see if he moved any, and that's what I did. I was watching to see if I could see any movements. But I did notice his wedding band on his hand. He never did move his hand that I could see.

Rescuers found the bodies of the last three missing miners in a coal mine collapse in northwest China's Xinjiang Uygur Autonomous Region Monday afternoon, bringing the death toll to 13. Another seriously injured miner was rescued Sunday and is being treated in hospital. Doctors said that he has not been out of danger yet.

### TIME NEEDED:

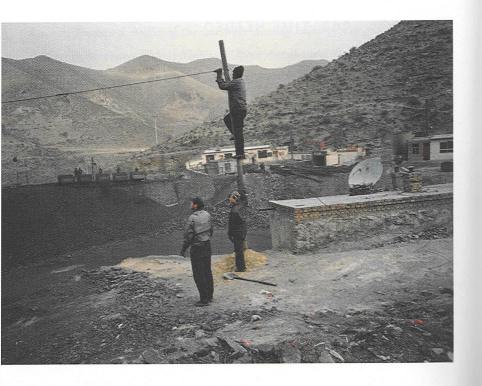
Two class periods,

with time in between for research and writing.

### MATERIALS:

Pen and paper,

A computer with Internet access.



# DISCUSSION QUESTIONS:

Where and when did coal mining towns exist?

Who lived in them?

What role did coal mining play in the lives of those who lived in the towns?

Do you think these towns still exist?

We got him all the way to the neck and there was Kevin Strickland, a bunch of people standing there, and they're going, where's the rest of them. And that's just when we all — everybody carrying that stretcher just died. They just went -. That's when we first knew that miscommunications —. So I went over to the fresh air base and called outside and talked to Rick Marlow. And it was apparent that he didn't know. And finally, I had to tell him, you know. They wanted me to tell him items, item one, item two, you know. They didn't want no names coming over because they said people were eavesdropping and stuff like that. So I told him we had 11 items, and he said, what. I said, we got 11 items. And he said, forget the code. What do you mean? I said, there's 11 deceased people. And he was just — he was speechless. He couldn't —. They just asked where the rest of them were. I said, there is no others. And that was just when everybody just — the whole ye-hah stuff went sour. Yes, they didn't - no one knew yeah. That's when the no survivors and all the survivors, that's when it — I can't describe what it was like.

#### PROCEDURE:

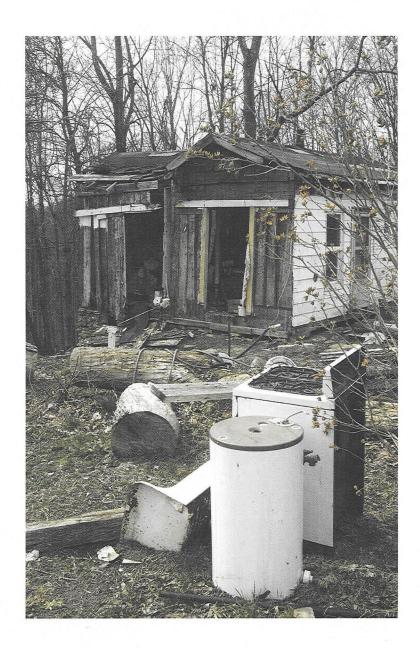
1. Begin by providing students with a brief history of coal mining towns. Explain that Pennsylvania was the largest coal mining state during the 19th and early 20th centuries, until West Virginia surpassed it in 1930. Wyoming has since surpassed West Virginia in mining productivity. In all three of these states, mining townsknown as coal patches or coal campswere very common from the late 1800s to the early 1900s.

Twenty-nine people were confirmed dead and 19 injured in a coalmine gas explosion in Northwest China's Gansu Province, rescuers said yesterday. The explosion occurred at 12:16 p.m. yesterday at the Weijiadi mine belonging to Jingyuan Coal Industry Corporation in the city of Baiyin. A ventilation system was being checked when the blast occurred, said Wang Jun, general manager of the company. Workers above ground only realized an accident had occurred when a sudden blackout of gas monitoring and communication systems occurred at 1:36 p.m. They immediately started emergency procedures, Wang said. The 29 fatalities occurred at one level, where six miners were injured including one seriously. Thirty-six miners, including 13 injured, were rescued from other levels. All the injured are being treated at local hospitals. State-run Jingyuan Corp. has an annual output of 8 million tons of coal. It ranks 59th in the nation's top 100 coal producers according to Chinacoal Website, recording a turnover of 1.2 billion yuan (US\$154 million) in 2005. In May, one of its mines was the site of a carbon monoxide poisoning accident that caused nine deaths.

But unfortunately, I said, you know, we got to confirm, you know, let's clarify it. And the room erupted, but we were still doing business. And I never seen so many old hairy guys cry in my life. But I was outside stretching my legs. I had sat in my chair so long that I was having trouble with my feet. And I don't know, it was sometime there after then, they called me back in, and they had used the code word, because we had told them not to say bodies over the phone. To use the word, you know, items. And that — you know, that confused us. And that's when, I don't know who it was, said they had — it was 12 dead and one alive, with his head that way. And that, that was the worst moment personally and professionally in my life.

# PROCEDURE (cont.):

These communities were created by coal companies so that workers could live near the mines. The coal companies built and owned everything, including schools, churches, stores, theaters, and residential structures. Ask students to list the pros and cons of living in such towns. Encourage students to think about what other employment options existed for some of these people, who had limited education and skills; what happened when the coal mines closed down; and how small communities such as these created a sense of family among the residents.



Winter is a dangerous season for miners. Last week, at least 40 miners died or remain missing in the Xinjiang Uygur Autonomous Region, Jilin, Hebei and Guizhou Provinces, according to the website of the State Administration of Coal Mine Safety. "There is a much higher coal demand in the winter, which increases production," an official from the administration warned in a recent work meeting.

So I know it's somewhere — two and a half to three hour time frame went by, but from my perspective it all went by very quickly. It took an inordinate long time to get from the mine office over to the church due to the crowds. And then at that point we went to the church. And it was my understanding that the families had been notified already. It wasn't until I walked into the church and looked out on the crowd and saw all those smiling faces and all the happiness that I realized that they had not been notified. So the news was broken. Just the opposite of the jubilation that had occurred three hours earlier occurred in that church. It was just gut-wrenching.

## PROCEDURE (cont.):

2. Divide the class into three groups.

Assign each group one of the following coal mining states: Pennsylvania,

West Virginia, or Wyoming.

Tell students that they will be researching coal patches,

or camps,

in their assigned state.

They are to find out as much as they can about the history of mining in that state, as well as the development

(and demise, if relevant)

of the mining communities.

We arranged for the three ambulances that was on site to go down close to the portal. There was some discussion that someone believed that there was reporters trying to get a shot of the bodies, you know, on the hills or a helicopter possibly, something like that, so we sort of — a couple of us got together and discussed how we could handle the bodies in a very respectful, you know, very delicate way when we had to bring them from the mantrips to the ambulances. So we kind of talked about that a little bit.

## PROCEDURE (cont.):

In their research, students should seek answers to the following questions:

What camps or patches existed in this state?

When were they built?

What coal companies owned the camps or patches?

What services in the camps were owned and run by the coal companies?

What types of coal were mined?

Who (what ethnic groups)

populated the communities?

When did the communities flourish?

Did the mines stop producing? If so, when?

What does the community look like now?

3. Provide students with the following
Internet links to begin their research.
Encourage them to study
the photos on these Web pages
to get a feel for the appearance
of each community
before they begin
gathering information.
Give students ample time
to conduct research
and document their findings
in their journal.



Seven people were killed in a colliery accident in Southwest China on Monday, bringing the death toll in coal mine tragedies to 85 over the past three days. Eleven workers who were sorting impurities from a coal heap were buried when the heap collapsed at 9:47 a.m. at the Shuicheng Coal Mine Group colliery, in mountainous Guizhou province. Seven workers died and four were rescued, said the work safety administration in Liupanshui city, where the group is located. The cause of the accident is being investigated.

## PROCEDURE (cont.):

4. Once the groups have completed their research, have them work in pairs within their state groups to create short fictional stories about a historic coal patch or camp. Encourage them to write about realistic characters and settings. They should rely on their research data to provide accurate locations, time periods, and ethnicities for their characters. Allow them to be creative about the plot of their story, but tell them they must include some authentic details about the characters' work and home life.

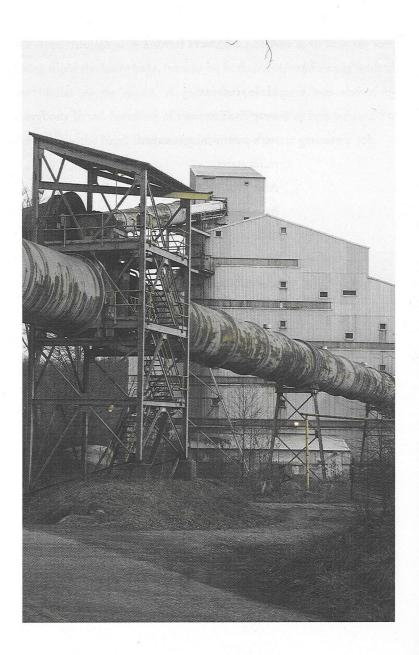
We went through a — kind of a work in progress as to how we were going to do the body bags, how to be as courteous and caring with all the bodies as we could. A great deal of respect was shown by everybody in the handling of these folks. We tried as best we could to get folks in the bags, because again, it was a pretty gruesome job.

### ASSESSMENT:

Have students
swap their stories
with pairs who researched
other states.
After sharing stories,
have them discuss
differences
in the mining history
and culture of the two states.

### **EXTENSION:**

Research can also be conducted on the coal camps of other mining states, such as Illinois, Virginia, Ohio, and Kentucky.



China's work safety chief has lambasted municipal officials over Sunday's Changyuan coal mine gas blast in Yunnan, saying their defiance of provincial government orders to close illegal collieries was "vicious in nature." The emotional message from State Administration of Work Safety director Li Yizhong was televised nationally on Monday on China Central Television. Sunday's blast occurred at an illegal mine in Qujing. "What power do Qujing city government officials think they possess to defy the Yunnan government's order to close down a coal mine?" Mr. Li asked at an urgent meeting convened by the government agency. "What kind of behaviour is this? I was told there was not only one illegal coal mine in Qujing city, but 23 of them. This is a completely grotesque tale."

#### DIFFERENTIATION:

In preparing to write

the short stories,

pair students

who have strong writing skills

with other students

who may be

more creative

but need help

in writing their stories.

Authorities focused today on placating relatives of 181 men trapped underground in a flooded coal mine with little hope of rescue after a clash between managers and anguished families demanding information. The miners have been trapped since Friday when a dyke burst in torrential rains, sending water rushing into the mine shafts in the eastern province of Shandong. "For those family members of miners who rushed to the site, the local government is actively working to settle them in accommodation and has brought people to greet and console them in order to safeguard order and stability in the coal mining area," said a notice on the central government's website. As hopes faded for the miners, relatives were disputing the government's view of the flood as a natural disaster as their anger mounted. "The weather is a factor, but man-made factors are also extremely large. Last year, there was also a leak in the mine, so I wouldn't want the government to jump to a conclusion about the cause," said Zhang Chunling, whose brother is one of the missing.

Well, the standard procedure if you have time to gather up the materials and do it is to get cinder blocks or stoppings and you find a suitable spot and you build a wall and plaster it air tight. Then you grab what's available, a curtain or anything, and you curtain off what you can and you try to seal it. If you can't find anything else, you use mud from the bottom. You're talking about desperate times there. I'm sorry. I was just —. Explaining that part of it. I was close to all them guys that got killed and I know what they went through. Men that got killed. That was my crew.

