



MINING UTAH'S HERITAGE WORKBOOK NEWS STAY OUT and STAY ALIVE!

Abandoned Mine Reclamation Program

January 2019

Check us out on the web! <http://ogm.utah.gov/amr>
Our website contains more resources for teachers and current information about mineral production in Utah.

Follow us on:

-  <http://www.facebook.com/utahoilgasandmining>
-  twitter.com/utahogm

About the Workbook

Mining Utah's Heritage, designed by AMR Program staff and the State Office of Education, satisfies portions of the social studies core curriculum for the fourth grade. Let us know what you think by writing to us at amrinfo@utah.gov

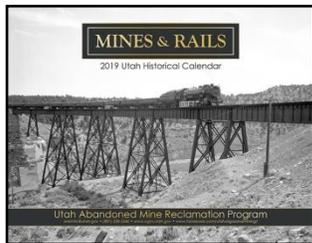
Stay Out and Stay Alive!

The abandoned mine safety DVD should be available in your school's media center, or access the 25-minute video on YouTube in English (Stay Out and Stay Alive, Abandoned Mine Safety) and Spanish (Mantengase Afuera y Mantengase Vivo, SEGURIDAD EN MINAS ABANDONA). This video about abandoned mine hazards is a good way to introduce the workbook to your class! Don't miss the bonus material on the DVD and on our website under the "Education" tab. Look for:

- a PDF file of the workbook
- answer sheet and teacher newsletter
- a teacher's guide to the video
- a script for a skit illustrating the dangers of abandoned mines.

2019 Calendar

You have already received a copy of the Abandoned Mine Reclamation Program's calendar for 2019. It highlights railroads and how they contributed to the development of the mining industry in Utah.



You can find the calendar in PDF format on our website. Feel free to use it to display, print, or otherwise share the historic photos it contains.

If you have historic mining photos that we could scan and use for future calendars, please contact us.

Oral History

AMRP conducted 19 oral history interviews from 2013-2017. They tell some great stories about Utah's mining history. Find video and transcripts of the interviews on our website at <https://www.ogm.utah.gov/amr>.

This is an ongoing project and we are always looking for folks to interview. We would like to talk to people who have worked in the mines in Utah, grew up in mining areas, or worked with the mining industry in other ways. Please contact us if you know of someone we could talk to.



Mining Heritage Web App

Also on our website, you can find the Mining Heritage and Tourism web app. Take a look at the interactive map and read more about sites in Utah where significant events in mining history took place. Included are mining museums and monuments you can visit to learn more and see some cool mining artifacts.

Mining Is Now Safer and Better for the Environment

Mining can't occur without impacting the environment, and so great steps have been taken in recent decades to minimize its effects. Mines in the 19th through the mid-20th centuries caused pollution and deforestation in addition to being extremely hazardous workplaces. Thousands of these mines were never reclaimed and are still very dangerous. Today, when mining ends, laws and regulations require operators to seal mine entrances, reshape the ground, and plant new vegetation to restore the area to its original condition.

In 2017, mining contributed \$5.8 billion to Utah's economy, and provided the raw materials we need to have phones, cars, plumbing, electricity, and just about everything else we enjoy in our modern lifestyle. Think about this:

If it isn't grown, it has to be mined.

Even growing food requires machines or tools made of steel, fertilizer containing mined minerals, and trucks to bring it to market. To learn more about the economic value of Utah's mining, visit the Utah Geological Survey at <https://geology.utah.gov>.

For information on field trips, websites, classroom presentations, and materials, contact:

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MINING

UTAH'S HERITAGE

Answers

UNIT 1. MINING

We depend on mining every day

GAME 1 (Page 3)

- Answers will vary
- Gas, gallium, germanium, gold, gilsonite
- Sand
- Answers will vary
- Nickel
- Petroleum

GAME 2 (Page 5)

- Farmers use: fertilizer, irrigation systems, tractors.
- Construction workers use: concrete, tools, bricks, lunch buckets, hard hats
- To travel around the world and into space, we use: seat belts, trucks, trains, rocket ships, cars
- To play music, we use: French horns, cymbals, trumpets

UNIT 1 HISTORY (Page 6)

- farm tools
- Alta
- taco - Mexico; gyro - Greece; sushi - Japan; spaghetti - Italy (other answers will vary)

UNIT 1 SAFETY (Page 8)

- Killed
 - Danger
 - Breathe
 - Poisonous
 - Abandoned
 - Hurt
 - Lost
- Secret Message: KEEP OUT

UNIT 2. MINING (Page 10)

Word Mine

Across: 1. lead 4. molybdenum 7. gold 8. salt 9. clay 10. topaz 13. uranium 14. iron 15. copper

Down: 2. dinosaur 3. coal 4. beryllium 6. steam 7. gilsonite 11. zinc 12. silver

UNIT 2. HISTORY (Page 11)

Meet some famous miners.

- c
- a
- d
- b
- b
- d
- a
- c

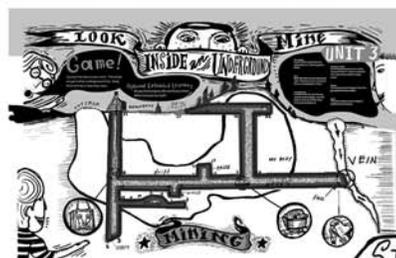
UNIT 2. SAFETY (Page 13)

Danger lurks at old mines



UNIT 3. MINING (Page 15)

Look inside an underground mine.



UNIT 3. HISTORY (Page 18)

How did Carbon County get its name?

- Rains
- Peerless
- Sweet
- Scofield
- Spring Canyon
- Castle Gate
- Sunnyside
- Latuda

UNIT 3. SAFETY (Page 19)

Old dynamite can blow up!

Scrambled word: Sheriff

UNIT 4. MINING (Page 20)

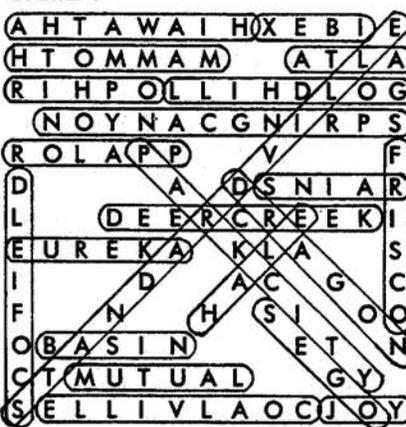
Surface mines are replanted.

- Grass on after image should be colored
- Dragline bucket is on the during image
- The nest is on the before image

UNIT 4. HISTORY (Page 21)

Can you find Utah mining towns?

GAME 1



GAME 2

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UNIT 4. SAFETY (Page 24)

Stay away from old mine shafts!

- mountains
- snowmobiles
- ☑
- skiing
- hiking
- bike
- pictures

UNIT 5 MINING (Page 25)

Find what minerals you use everyday!

All listed items should be colored.

UNIT 5. HISTORY (Page 26)

Significant Events in Utah's Mining History

1862-5 1869-7 1883-4 1896-8 1900-9

1914-2 1945-3 1952-1 2010-6

UNIT 5. SAFETY (Page 27)

ATVs and abandoned mines don't mix

- Some shafts were dug from the bottom up
- bigger, hole
- True
- unstable
- False
- Private Property

