

## STAKE YOUR CLAIM!

### STANDARDS

See summary of National Science Education Standards.  
 Original: <http://books.nap.edu/readingroom/books/nses/>

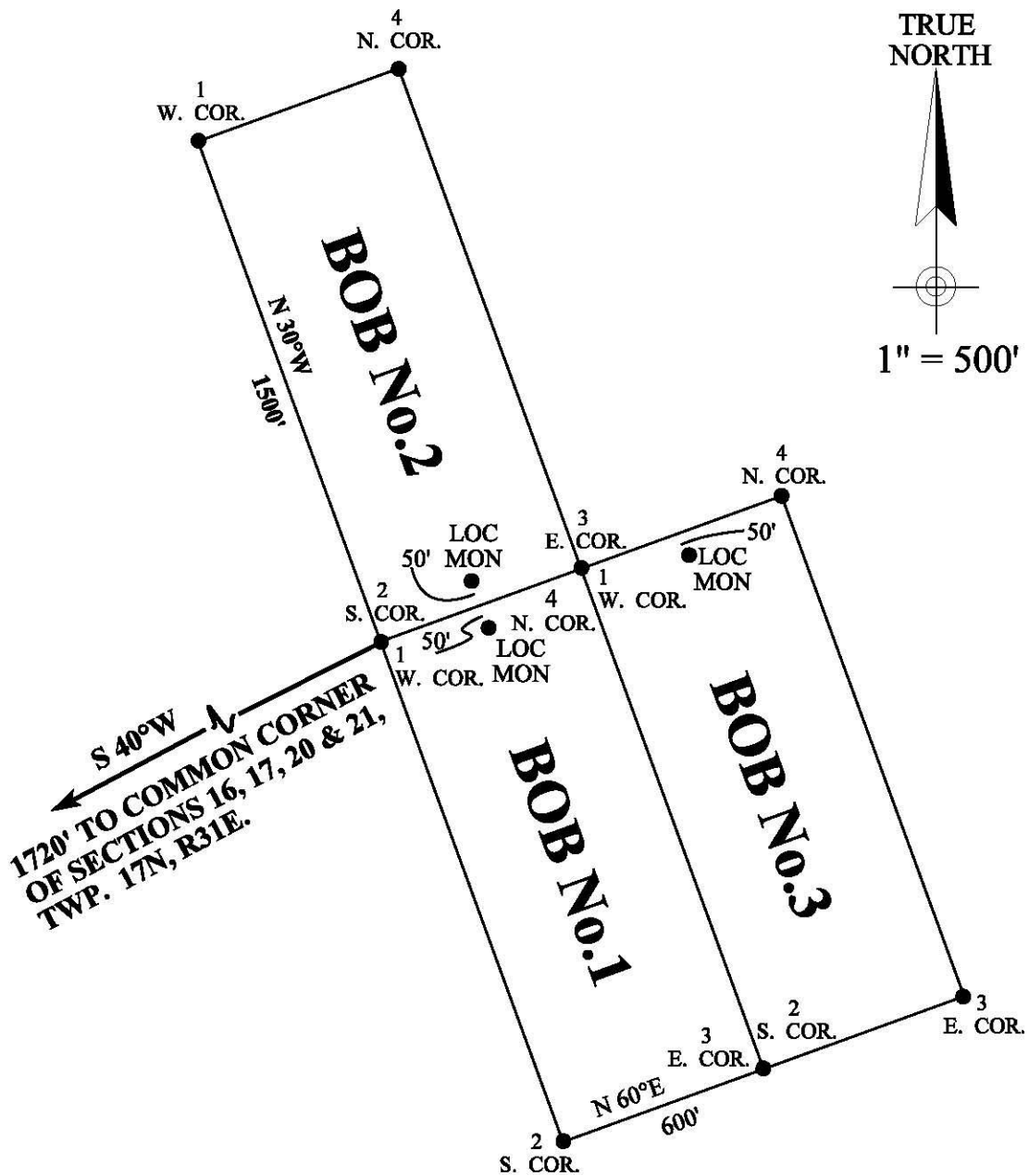
Standard Concept	General standard	Specific standard	General standard	Specific standard	General standard	Specific standard
Grade Level		K-4		5-8		9-12
Science in Personal and Social Perspective (F)	Type of resource	F.3.4.1			Natural Resources	F.3.12.1
		F.3.4.2				
					Science and Technology in ... Challenges	6.12.1
						6.12.2



## STAKE YOUR CLAIM!



EXAMPLE OF A MINING CLAIM MAP



**NOTE: ALL MONUMENTS ARE  
1 ½" x 1 ½" WOODEN POSTS 5' LONG**

**MAP OF BOB GROUP OF LODE CLAIMS  
CHURCHILL COUNTY. UNKNOWN MINING DISTRICT  
LOCATED SEPT. 16, 1995 BY G.W. SNOW,  
309 PIONEER ST., FALLON, NV. 89406.  
CLAIMS IN SW/4 SECTION 16. T17N. R31E.**



## STAKE YOUR CLAIM

### INTRODUCTION

In order for a geologist or mining company to explore and develop a mineral resource, that person or company must stake and register a claim.

### OBJECTIVE:

Students will explore the requirements that a geologist or mining company must comply with in order to gain a land position for exploration and development of a mineral resource. The activity will involve observation, measuring, simple map making, and accurate completion of required forms.

### MATERIALS (for each student)

- Stakes or posts
- Notice of Location form
- Certificate of Location form
- Pencil/pen
- Handout
- “Discovery” rocks painted with gold or silver enamel
- Rubber Bands
- Hammers
- Graph paper and rulers
- Optional materials
  - Brunton™ compass
  - Measuring tape
  - Containers (35mm film cans, prescription bottles, etc.)

### PROCEDURE (teacher instructions)

Each student will have the opportunity to stake a claim. The size of the claim to be staked will be 6' by 15' (a normal mining claim is 600' by 1,500' - see pp. 3-7 for background). The discovery monument and the four claim corners will be staked in this activity.

- 1) Take the group to an area that is open to staking claims (i.e., playground, empty lot, etc.). Rocks that were painted and placed in the staking area ahead of time will be the “discoveries” the students will stake.
- 2) Issue students their claim staking supplies.
- 3) Allow each student to make a discovery and place a discovery monument.
- 4) Each student will stake the corners of their claim. Remember each claim is 6' by 15'.
- 5) Complete the “Notice of Location” form. Name the claim and fill out all other sections of the form.
- 6) Attach the “Notice of Location” form to the discovery monument.
- 7) Using graph paper, ruler, and pen or pencil, prepare a claim map showing the position of the location monument relative to the claim corners. List the claim name, and owner(s) name(s) and addresses on the map.
- 8) Complete two “Certificate of Location” forms.
- 9) Turn in the map and the “Certificate of Location” forms to be checked.

Review: (10 minutes) -- Teachers: Review pp. 3-7 to obtain some background on the history of claim staking and develop some questions on the procedures used to stake mining



claims.

## TEACHER HINTS

- 1) In staking, Students may use a measuring tape or pace the distance. Have hammers available to pound stakes into the ground.
- 2) In order to attach the "Notice of Location" form to the discovery monument, place the Notice of Location in a small container and use rubber band to attach the container to the discovery monument.

## HISTORY:

American Mining Law as a branch of American law in general has a three-fold source:

1. The common law of England,
2. The laws of the various states and territories, and
3. The law and statutes of the national government.

In nearly all of the Crown Grants to the American Colonies, a stated proportion of gold and silver discovered was reserved for the sovereign (England's king or queen). The United States, in its first dealings with public lands, made similar reservations concerning lead, iron, copper, and zinc mined in the Northwest or Indian Territory. This is the area that now comprises Michigan, Wisconsin, Illinois, Iowa, Missouri and Minnesota.

France and Mexico had well-developed mining laws at the time of the Louisiana Purchase in 1803 and the Treaty of Guadalupe Hidalgo in 1848 at which time the United States acquired the land that makes up California, Utah, Nevada, New Mexico, Arizona, Colorado, and Wyoming. Many of these laws have influenced our present-day state and federal regulations. The Federal Government acquired no property rights within the original thirteen colonies (States), nor in Vermont, Kentucky, Maine, and West Virginia. As a result, federal mining statutes do not apply to these states.

The first early miners in Nevada, California, and other western states acted under district and state regulations. These early miners in reality were trespassers on public lands, and as such they appropriated minerals without the sanction of federal law. Because of the many different regulations that existed and by a need to control the development of minerals on federal lands, the need for federal laws became apparent.

The first federal statute by which title could be acquired to any public mineral land was passed on July 26, 1866. This statute established three important principles:

1. All public mineral lands should be open to exploration,
2. The rights acquired under the local system or rules should be recognized, and
3. The titles to certain classes of mineral deposits might be obtained.

On May 10, 1872, Nevada Senator William Stewart's bill was passed and became law. This law was entitled "An Act to Promote the Development of the Mining Resources of the United States", or more commonly the "Mining Law of 1872". The "Mining Law of 1872" and its subsequent modifications are the laws presently in place that govern the exploration for and mining of mineral resources.

The "Mining Law of 1872" is based on two principles:

1. One can acquire mineral rights to land by making a discovery of valuable minerals thereon, and
2. One must continue to develop the minerals on the land to retain possession.

Some of the amendments to the Mining Law are:

1. Mineral Leasing Act of 1920: This Act provides that oil, gas, coal, potassium, sodium,



phosphate, oil shale, native asphalt, solid and semi-solid bitumen and deposits of sulfur in Louisiana and New Mexico can only be acquired by lease.

2. Multiple Mineral Development Act of 1954: This Act authorized the location of mining claims on lands which at the time of location are included in a permit or lease issued under the Mineral Leasing Laws.
3. Submerged Lands Act of 1953: Gives coastal states ownership of all lands lying within three geographical miles of their coastline.
4. Multiple Surface Use Act of 1955: This Act was enacted to curtail non-mining use of the surface of mining claims. As a result, the owner of a mining claim subsequent to July 23, 1955, is entitled to the surface only as necessary for the mining operation and the claim is subject to surface-management activities of the Federal Government until patent. Under this Act, discoveries of common varieties of sand, stone, gravel, pumice, cinders, and clay cannot be located as mining claims.
5. Geothermal Steam Act of 1970: An act (30 USC 23) which provides for the leasing of geothermal resources.
6. Federal Land Policy and Management Act (FLPMA) of 1976: Grants the Secretary of the Interior broad authority to manage public lands (BLM) including regulations concerning mineral resource location, exploration, and development activities.

#### STAKING A CLAIM;

Provisions of the Mining Law of 1872 allow land to be "claimed" for minerals by marking boundaries on the surface.

1. **Locators**: Any citizen of the United States or any alien who has declared his/her intention to become a citizen can stake a claim. Corporations organized under the laws of the United States or any state are considered and can locate claims. There is no age limit for persons staking mining claims.
2. **What can be claimed**: Only vacant public lands, surveyed or unsurveyed, can be claimed. Private lands, wilderness areas, withdrawn federal lands or public lands with existing claims are types of land **not** open to claim staking. Before staking a claim, a thorough check of available records is necessary to insure the land is open. County records, state records and Bureau of Land Management (BLM) records should be reviewed to determine land status. Also, a check of the surface, for evidence of existing claim markers should be conducted.
3. **Types of claims**: The law allows for the staking of four types of claims:
  - a. **Lode**: Lode claims are the most common and were designed to be used to claim "upon views or lodes of quartz or other rock in place bearing gold, silver, cinnabar, lead, tin, copper, or other valuable deposits."
  - b. **Placer**: "All forms of deposits, excepting veins or quartz, or rock in place" must be located as placers.
  - c. **Millsites**: Millsites may be located on nonmineral bearing ground for any purpose related to the mining and production of ore. Millsites cannot be used for active mining activities, but may be used for milling and processing facilities.
  - d. **Tunnel Sites**: These sites give the locator of the tunnel site the right to all veins cut by the tunnel with 3000 feet of its portal, not previously known to exist.
4. **Size of claims**:
  - a. **Lode**: maximum size is 600' by 1500' per claim.
  - b. **Placer**: maximum size is 20 acres per claim.
  - c. **Millsite**: maximum size is 5 acres per claim.



d. Tunnel Site: maximum size is 3000' square from the face of the tunnel.

#### LOCATION PROCEDURES: STAKING A LODE CLAIM

1. Discovery: According to the law, a claimant is required to find a valuable mineral in-place as a condition before making a claim.
2. Size of claim: Once a discovery is made, the next step is to stake a claim. The maximum size of the lode claim is 1500 feet in length and 300 feet on each side of the middle of the vein (i.e.; 600' x 1500'). As many claims can be staked as wanted, as long as they aren't over 600' x 1500'.
  - a. Marking the location:
    - i. Discovery monument: A post or monument is required to be placed at the point of discovery
    - ii. Location notice: A location notice must be posted on the claim.
    - iii. Claim posts: Posts or monuments must be placed at each corner of the claim boundary.
  - b. Recording notice: Copies of certificate of location are filed with local, state, and federal agencies, as required by law.
  - c. Filing the claim:
    - i. The requirements for filing a claim in Nevada are:
    - ii. Notice of Location must be completed and put with the discovery monument.
    - iii. Within 60 days from the date of location, the locator must define the boundaries of the lode claim by placing monuments. Monuments may be:
      1. A wooden post, 1-1/2" x 1-1/2"; or a capped steel post, 2" diameter, 4' long set 1 foot in the ground.
      2. A rock in place capped by smaller rocks not less than 3' high.
      3. A blazed and marked tree with the top removed and not less than 3' high.
      4. A stone 6" (not a rock in place) diameter by 18" long with two-thirds of its length in a mound of earth 3' in diameter by 2-1/2' high.
    - iv. All monuments must be marked to designate their positions on the claim.
    - v. Within 90 days after posting a Notice of Location, 2 copies of a map showing the claim must be prepared and filed with the county recorder. Maps must be filed with duplicate copies of a Certificate of Location. The Certificate of Location must be complete with all requested information.
  - d. Pay a certificate filing fee of \$14.00 plus a \$15.00 filing fee of the claim map, Division of Minerals fees of \$6.50 per claim, a \$1.00 per claim recordation fee, and a \$4.00 per document fee.
  - e. The requirements for filing with BLM are:
    - i. Copy of the Certificate of Location and a map, sketch or description of the claim location must be filed within 90 days of the date of location with the local BLM office.
    - ii. Pay maintenance and service fees totaling \$140.00 per claim.
  - f. The markings on the ground that outline a mining claim's boundaries establish the claim's location. These markings take control over descriptions given in location notices or deeds. As such, it is very important that the markings adequately define the limits of the claim.
  - g. Claims can be staked over parts of other claims. In the case of "overstaking" claims, the existing claim is the senior claim and the new claim is the junior claim. As long as the senior claim is valid, only the parts of the junior claim not contained within the limits



of the senior claim are valid for the new claimant.

5. Maintaining the claim:

- a. Discovery work: If required, discovery work must be completed within a certain amount of time after locating the claim. The type of allowable discovery work is defined by law.
- b. Claim maintenance and annual assessment work: In 1992, major changes were enacted by the Department of the Interior (BLM) for maintenance of mining claims.
  - i. For companies or individuals holding more than 10 claims, the BLM requires payment of an annual rental fee (now known as a maintenance fee) of \$100 per claim.
  - ii. For companies or individuals holding 10 or fewer claims, the BLM has initiated a "small miner exemption" which allows the claimant to perform \$100 of assessment work per claim. [If you hold 10 claims, you must do \$1000 in assessment work (10 claims x \$100 per claim) per year to maintain the claims.]

Annual assessment work is labor that is performed in good faith for the purpose of development of the mineral resource on the claim and to facilitate the extraction of those mineral resources.

Type of work that are considered valid include: drilling, geophysical and geochemical surveys and testing, mapping and sampling, construction of mining excavations, improvement of access, and replacement of machinery and equipment.

The assessment year commences on 12 noon, local time, September 1st. The work may be done on one claim within a group, part of the group, or on each claim separately.

- c. Affidavit filing: Claim holders with more than 10 claims who pay the \$100 per claim maintenance fee to BLM must file an "Affidavit or Notice of Intent to Hold Mining Claims or Sites" with the county recorder in the county where the claims are located. This notice must be filed within 60 days after September 1st. Recording fees total \$12.50 per claim.

Claim holders who perform annual assessment work must file an "Affidavit of Annual Assessment Work" with the county recorder in the county where the claims are located. The affidavit describes the nature of the assessment work done. This notice must be filed within 60 days after September 1. Recording fees total \$12.50 per claim. A copy of the affidavit of annual assessment work must be filed with BLM before December 30 of each year.

6. Patenting: Once a discovery is made and \$500.00 worth of work (5 years) has been expended on a claim, it is possible to apply for and receive title to the claim from a federal public lands agency. This process is called "patenting". The patenting process will give ownership of the land to the claimant. After a patent is granted, annual assessment work is no longer required, but property taxes must then be paid. The patenting process is documentation of the geology, mineral values, ore reserves, and size of the deposit. The type of data is obtained through exploration and/or development drilling, mapping and sampling of underground workings, and actual



production information. The claimant must have a clear presentation of the mineral deposit as it is known in three dimensions. This mineral resource is studied in detail and must be verifiable by government geologists or their representatives. The land must be surveyed by licensed professional land surveyors. The economics of the deposit are studied and calculations of the value of the minerals obtained versus the cost of producing them are critical factors. Failure to comply with any of the steps may not only result in not obtaining the patent, but may also invalidate the existing claims.

BLM issued a report in 1992 which stated that the minimum cost of patenting a single claim is \$1,895.00 per acre \$37,900 per 20-acre claim). Most mining companies do not seek to patent their mining claims until after they have actually started to extract minerals from the ground.

**NOTE: There is, for the present time, a moratorium on patent applications until congress completes debate on mining law reform.**

#### REFERENCES:

- 1 Mining Claim Procedures; Papke, Keith G. and Davis, David A., Nevada Bureau of Mines and Geology Special Publication 6, 2002.
- 2 Elements of Mining; Lewis and Clark, John Wiley & Sons, Inc.
- 3 SME Mining Engineering Handbook; Cummins and Given, SME.
- 4 43 CFR 3720, et al, Mining Claims, Final Rule; Federal Register; US Department of the Interior, Bureau of Land Management, Part IV, August 30, 1994.
- 5 Assembly Bill 592; Adjusts Fees Charges by Local Governments for Certain Services -- Committee on Taxation, May 6, 1993.
- 6 Assembly Bill 2; Revises Certain Requirements Concerning Marking of Boundaries of Lode Mining Claims -- Committee on Natural Resources, Agriculture, and Mining, January 18, 1993.

Other information sources:

State and Federal Permits Required in Nevada Before Mining or Milling Can Begin, Doug Driesner, Special Publication L-6, Nevada Bureau of Mines and Geology, February 2003.



## NOTICE OF LOCATION

### LODE MINING CLAIM

#### TO ALL WHOM IT MAY CONCERN:

The undersigned hereby certifies that he has caused to be located the Lode Mining Claim in the following quarter sections(s): 1/4 Section Township Range Meridian in County, Nevada, on the day of , 20 . Name and mailing address of locator is:

The Claim is approximately feet long and feet wide, such that feet are claimed in a direction and feet in a direction from the point of discovery (monument of location), at which the Notice of Location was posted, together with feet on each side of the monument of location and center line of the Claim. The general course of the lode or vein is from the to the direction.

The number, location and markings on each corner monument are as follows: Location  
Markings Description

<b>No. 1:</b>	_____	_____	_____
<b>No. 2:</b>	_____	_____	_____
<b>No. 3:</b>	_____	_____	_____
<b>No. 4:</b>	_____	_____	_____

As erected on the ground, each corner monument is marked as described above by

(e.g. metal tags, paint on posts). The work of location consisted of making a claim map as provided in NRS 517.040. Dated this day of , 20 .  
SIGNATURE OF LOCATOR: By

Owner, Claimant, or Agent Signature

Owner, Claimant, or Agent Name (printed)



**CERTIFICATE OF LOCATION  
LODE MINING CLAIM**

**TO ALL WHOM IT MAY CONCERN:**

The undersigned hereby certifies that he has caused to be located the Lode Mining Claim in the following quarter sections(s): 1/4 Section Township Range Meridian in County, Nevada, on the day of **RECORDER'S STAMP** , 20 .

Name and mailing address of locator is:

The Claim is approximately feet long and feet wide, such that feet are claimed in a direction and feet in a direction from the point of discovery (monument of location), at which the Notice of Location was posted, together with feet on each side of the monument of location and center line of the Claim. The general course of the lode or vein is from the to the direction.

The number, location and markings on each corner monument are as follows: Location  
Markings Description

**No. 1:**

\_\_\_\_\_

**No. 2:**

\_\_\_\_\_

**No. 3:**

\_\_\_\_\_

**No. 4:**

\_\_\_\_\_

As erected on the ground, each corner monument is marked as described above by

(e.g. metal tags, paint on posts). The work of location consisted of making a claim map as provided in NRS 517.040. Dated this day of , 20 .  
SIGNATURE OF LOCATOR: By

Owner, Claimant, or Agent Signature

Owner, Claimant, or Agent Name (printed)

