A third grade investigation unit

ROCKS ROCK!!
Until will be handed in upon completion of the 27 hours.

Friday, August 10th - Any Last Tweaking.
Thursday, August 9th 8 am - 2:00 pm
Wednesday, August 8th 8 am - 3:00 pm
Tuesday, August 7th 8 am - 3:00 pm
Monday, August 6th 8 am - 3:00 pm

The team will meet all library locations and Saturdays in East Haven.

Meetings:

Taking into account the comprehensibility of input and the desired output, we need to revise our assessments and activities based on the strategies, when needed.

Team will modify the original lessons for ELs by creating text modifications.

Science class and to perform all grade levels' integrated lessons for ELs. On three different proficiency levels to ensure their success in

1. Team will identify the strategies needed to make these lessons readable and

grades (second marking period) on Rocks and Minerals.

2. Team will create and define a series of lessons for a unit to be used in the third

Work Week:

I. Team will create and define a series of lessons on Mohs hardness scale, identification tasks, etc.

and Minerals, including tests on Mohs hardness scale, identification tasks, etc.

in the younger grades on a consistent basis. We will create and modify a unit on Rocks

We will be working on curriculum for the 3rd grade because enough science is taught.

General Info:

Jen Brown (Science Teacher), Patricia Brown (Math Coach)

Team:

2012 Summer Curriculum Institute for TAT Alumni
7. Rock properties make them useful for different purposes. Rocks that can be split into regular shapes are useful for building and statues; rocks that are chiseled or shaped into small pieces are used to form tools.

6. Metamorphic rocks are formed when igneous or sedimentary rocks are heated or cooled or pressed into new forms. They often have bands.

5. Sedimentary rocks are formed underwater when small particles of sand, mud, or ooze accumulate. They are often layers of fossils, shells, or other remains of living things.

4. Igneous rocks are formed when melted rock cools. They are usually harder than sedimentary rocks.

3. Properties of rocks can be used to identify the conditions under which they were formed.

2. Rocks can be sorted based on properties such as shape, size, color, weight, or density. Similar rocks often form together, while other rocks are sorted out by rivers and streams.

1. Earth is made of rock. Rocks on the earth's surface are constantly changing.

GRADE-LEVEL EXPECTATIONS:

During their formation, relate the properties of rocks to the possible environmental conditions.

Describe the physical properties of rocks and relate them to their potential uses.

Identify through observation and testing, these properties determining how earth materials are used.

GRADE-LEVEL CONCEPTS: Rocks and minerals have properties that may be exposed to in-depth study in 5th grade.

Backround:

3rd Grade Science Unit: Rocks Rocks!
Before this week of lessons, students will have recorded ideas, questions and observations about rocks and will have observed three rocks and recorded their descriptions and properties. Students will also have identified and sorted rocks based on similarities and differences and properties. Students will also have learned that rocks themselves are made up of combinations of minerals. Students will also have learned that rocks, like grains of sand, are made of minerals.

Minerals are used in many ways, depending on their properties. For example, mineral properties include color, odor, streak, hardness and magnetism. Minerals are identified by testing for these mineral properties. Minerals that have properties that may break into tiny grains useful for making powders.

8. All rocks are made of materials called minerals.

9. Minerals are used in many ways, depending on their properties.
<table>
<thead>
<tr>
<th>PRE-PRODUCTION</th>
<th>Speech Emergent</th>
<th>Bridge</th>
<th>Domain/Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be able to orally discuss similarities and differences in minerals.</td>
<td>Students will be able to orally describe the textures of minerals.</td>
<td>Students will be able to orally discuss the similarities and differences among minerals.</td>
<td>Students will be able to orally describe the相似ities among minerals.</td>
</tr>
<tr>
<td>2. Students will be able to orally describe the textures of minerals.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Students will be able to orally describe the similarities and differences among minerals.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Content Objectives:**

Lesson One: Minerals: How do they compare?

8/6/2012

Jen Brown and Patricia Brown
<table>
<thead>
<tr>
<th>Teacher</th>
<th>Students will be able to give written descriptions of the textures of the minerals they observe while using key vocabulary and descriptive words that go beyond just circling words provided on the worksheet. Students will choose from specific texture address lexicon options that don't fit. Teacher will then describe their mineral. Provided on a worksheet by the teacher.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items describing texture:</td>
<td>Students will be able to give written descriptions of the textures of the minerals they observe while using key vocabulary and descriptive words that go beyond just circling words provided on the worksheet. Students will choose from specific texture address lexicon options that don't fit. Teacher will then describe their mineral. Provided on a worksheet by the teacher.</td>
</tr>
</tbody>
</table>
Be sure to use the mineral identification chart for all procedures. Be sure to use group worksheets for all procedures. Be sure to use modified student recording sheets for all procedures.

Modifications:

Sample:

Finally, accurate recording of findings is crucial as they match pre-hiased descriptions for

Student identified one similarity or difference
Student responded positively and appropriately to others in group.

Group structure: 3 points
and discussion within group (see rubric).

Second, extract created and then described on their individual pages. Third, participation
was done by teacher attendance and inducing. Four descriptive words were filled in the sample.

Assessment: Students should be assessed in four ways. Accurate recording of visual
check their profile page against suggested descriptors for their mineral.
over mineral, and are given the name of the mineral they have assigned. Students
compare a mineral profile sheet with their own information on their
transformation area, then discuss possible categories for descriptors.
Assessment: Students will be assessed in four ways. Accuracy recording of visual
and differences for all members. Record observations, discussions in the
student will have students working in groups to identify similarities
The second half of the lesson will have students working in groups to identify similarities
minerals at the bottom of the worksheet.

Instruction: Teacher walks through the use of the distributed supplies (measuring glasses,
their pick and breathe their mineral, and compare the mineral piece, using pieces of
Teacher will draw a picture of the mineral in the space provided. Teacher will
Teach other words. Teacher will use many descriptors, words as possible from the
complete the first worksheet. Write as many descriptors, words as possible from the
recording sheet, pencil, colored pencils, ruler. Teacher will then open his box and
numeral inside (only for different mineral enough),

Steps for the lesson. Students will have colored boxes with mineral
Any of their words into common categories. Teacher will walk through the expected
describe the sample, Teacher will record all suggested words. Then, students will see if
op one large mineral, and all students will determine which words they would use to
Procedure: Teacher will begin class with a Do Now activity. Here the teacher will hold
Students will be able to describe the lexicon of minerals.
Students will be able to discuss the similarities and differences among minerals.

Objective:

Day 1 Lesson Plan—Minerals: How do they compare? (Lesson 6)
Write two sentences that describe your mineral below:

List five words that could help you to describe your mineral from what you see.

Realistic as possible!

Draw your mineral below. Use tools provided (ruler, colored pencils) to make it as realistic as possible.

Name:

Student Recording Sheet One: DRAWING and VISUAL DESCRIPTION LEVEL 2
Write two sentences describing your mineral and how it feels.

Write five descriptive words for your mineral based on what it feels like.

Paper: Tape this to the page below.

Lightly rub your pencil up and go back and forth until the texture has shown up on the paper. Use the piece of tracing paper in your mineral box to lay it on the side of your mineral.

Name:

Student Recording Sheet Two: Texture and Description Level 5
Write two sentences that describe your mineral below:

<table>
<thead>
<tr>
<th>Hard</th>
<th>Pie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chalky</td>
<td>Clear</td>
</tr>
<tr>
<td>Soft</td>
<td>Shiny</td>
</tr>
<tr>
<td>Pink</td>
<td>White</td>
</tr>
</tbody>
</table>

Choose from these words:

List five words that could help you to describe your mineral from what you see:

Draw your mineral below. Use tools provided (ruler, colored pencils) to make it as realistic as possible.

Name:

Student Recording Sheet ONE: DRAWING and VISUAL DESCRIPTION LEVEL 3
While two words describe your mineral and how it feels:

<table>
<thead>
<tr>
<th>Solid</th>
<th>Sharp</th>
<th>Heavy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flaky</td>
<td>Bumpy</td>
<td>Smooth</td>
</tr>
<tr>
<td>Light</td>
<td>Rough</td>
<td></td>
</tr>
</tbody>
</table>

Choose from the following words:

While five descriptive words for your mineral based on what it feels like:

---

Tape this to the page below.

Lightly rub your pencil up and go back and forth until the texture has shown up on the opposite side of your mineral.

Use the piece of tracing paper in your mineral box to lay it on the side of your mineral.

Name:

Student Recording Sheet. Two: Texture and Description Level 3
Write two words from the box that describe your mineral below:

ROUGH  PINK  WHITE
BIG
SMALL

Circle words about your mineral:

Level 1

Draw your mineral!

Name:
Brainstorming ideas for differences:

Categories used to tell differences:

Brainstorming ideas for comparisons:

Student names:

Group WORK SHEET: Share your mineral in groups! Discuss your ideas!
The color of feldspar tends to be pink. It tends to be fairly smooth or at least not jagged.

Feldspar

Quartz is usually white in color, but appears glassy and slightly reflective. The crystal structure is not cube-like.

Quartz

(Compare your work to this mineral information sheet: All)
Flourite is usually smooth. Flourite crystals tend to be cube shaped. It comes in many different colors.

Talc is the softest mineral. It feels soft and can be scratched by your finger. It is usually white in color. The color is often white.
<table>
<thead>
<tr>
<th>Domain/Topic</th>
<th>Level</th>
<th>Language Objectives</th>
<th>Content Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE-PRODUCTION</td>
<td>Level 1</td>
<td>Students will be able to apply a written description of a mineral and its identifying color in a written format.</td>
<td>Students will compare the streak to its identifying shear color.</td>
</tr>
<tr>
<td>SPEECH EMERGENT</td>
<td>Level 3</td>
<td>Students will be able to apply a written description of a mineral and compare the streak to its identifying shear color.</td>
<td>Students will compare the streak to its identifying shear color.</td>
</tr>
<tr>
<td>BRIDGE</td>
<td>Level 5</td>
<td>Students will be able to apply a written description of a mineral and make comparisons to the color of a mineral and make a written description of the color.</td>
<td>Students will compare the streak to its identifying shear color.</td>
</tr>
</tbody>
</table>

Worksheet format:
It’s identifying color in a written form. Students will make written descriptions of the color of a mineral and compare the streak to its identifying shear color. Students will make written descriptions of the color of a mineral and compare the streak to its identifying shear color.

Writing:
A written description of the color of a mineral in a written form. Students will make written descriptions of the color of a mineral and compare the streak to its identifying shear color.
Lesson Plan—Describing the Color of Minerals (Lesson 7)

Setup:
- Place colored tiles on the table to show the variety of colors minerals can have.
- Provide lined paper for students to record their observations.

Procedure:
1. Introduction:
   - Introduce the topic of minerals and their properties, focusing on color.
   - Discuss the importance of color in identifying minerals.

2. Guided Practice:
   - Distribute the worksheet on minerals.
   - Walk students through identifying the colors of different minerals using the colored tiles.

3. Independent Practice:
   - Students will work in pairs to identify the color of minerals.
   - Use color reference cards for guidance.

4. Assessment:
   - Observe students as they work and provide feedback.
   - Collect worksheets for review.

5. Follow-Up:
   - Review correct answers as a class.
   - Discuss common mistakes and how to improve.

6. Closure:
   - Wrap up the lesson by summarizing the key points.
   - Assign homework: pear identification practice sheets.

Objectives:
- Students will be able to identify the color of minerals.
- Students will understand the significance of color in mineral identification.

Expected Outcomes:
- Increased ability to recognize color differences in minerals.
- Improved understanding of the role of color in mineral identification.

Materials:
- Colored tiles
- Lined paper
- Color reference cards
- Pear identification practice sheets
Observations/Drawings about color of mineral and its streak:

Sample 3

Sample 4
Draw one mineral that was the same color as the streak.

EXIT SLIP: LEVEL 1

Name a mineral where the color and streak do not match.

EXIT SLIP: LEVEL 3

Why do you think it is important to streak a mineral?

EXIT SLIP: LEVEL 5

LEVEL 1: EXIT SLIPS DAY TWO
<table>
<thead>
<tr>
<th>Domain/Topic</th>
<th>Pre-Production</th>
<th>Speech Emergent</th>
<th>Bridging</th>
<th>SPEAKING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level 1</td>
<td>Level 3</td>
<td>Level 5</td>
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<tr>
<td>Students will be able to compare mineral hardness and discuss the terms like relative hardness.</td>
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<tr>
<td>Students will be able to compare and discuss relative hardness.</td>
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**Content Objectives:**

1. Students will be able to compare and discuss minerals according to their hardness.

2. Students will be able to compare and discuss the hardness of minerals.

3. Students will be able to compare mineral hardness and discuss the terms like relative hardness.

**Materials:**

- Soft, wood, etc.
- Vocabulary like hard and soft be inviga to utilize
- Skills of setting and list for them to no questions and list for them to minerals using a checklist of yes or no
- Students will be able to compare and orally discuss the hardness of minerals.
Day 3 Lesson Plan—Exploring the Hardness of Minerals (Lesson 10)

**Objectives:**
Students will be able to compare and discuss the hardness of minerals.

**Instructions:**
Students will be given a sample set of four different minerals, each labeled with a sticker indicating their hardness. Students will be asked to compare and discuss the hardness of minerals.

**Assessment:**
Students will be given a copy of a recording sheet to record their observations. Students will be asked to rank the minerals according to their hardness.

**Modifications:**
- Be sure to use the leveled exit slips (for all, leveled groups).
- Be sure to use the mineral information sheet for all.

**Additional:**
- Take quiz at:
  - Completed chart with indentifiers, correct ranking, successful exit slip.
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<th>Calcite</th>
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<th>Quartz</th>
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<td>6.5</td>
<td>5</td>
<td>Knife</td>
<td>3</td>
<td>2</td>
<td>Pocket</td>
<td>FILE</td>
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<td>5</td>
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<td>2</td>
<td>FILE</td>
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<td>7</td>
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<td>2</td>
<td>FILE</td>
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<tr>
<th></th>
<th>Quartz</th>
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<td>Knife</td>
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<td>7</td>
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<td>2</td>
<td>FILE</td>
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</tbody>
</table>

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Hardness for the three minerals tested:

Scraping the object indicates the hardness of the given mineral. Record the observed point where the specimen shifts over from being scratched by the object to

Then use this information to try to identify a mystery mineral.

Fill in the boxes with "YES" or "NO" to identify the characteristics of these minerals.

Name of three group members:

Date:

Student Worksheet
2. Using the techniques that you have so far, test the unknown and record the hardness.

- Quart 7
- File 6.5
- Knife 5
- Penny 3
- Fingernail 2

<table>
<thead>
<tr>
<th>Scatches object</th>
<th>Is scratched by object</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz</td>
<td>7</td>
</tr>
<tr>
<td>File</td>
<td>6.5</td>
</tr>
<tr>
<td>Knife</td>
<td>5</td>
</tr>
<tr>
<td>Penny</td>
<td>3</td>
</tr>
<tr>
<td>Fingernail</td>
<td>2</td>
</tr>
</tbody>
</table>

3. Using the table below, identify the unknown mineral.

<table>
<thead>
<tr>
<th>HARDNESS</th>
<th>MINERAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Dolomite</td>
</tr>
<tr>
<td>5.5</td>
<td>Galena</td>
</tr>
<tr>
<td>6.5</td>
<td>Spodumene</td>
</tr>
<tr>
<td>8</td>
<td>Topaz</td>
</tr>
<tr>
<td>6</td>
<td>Magnetite</td>
</tr>
</tbody>
</table>

UNKNOWN
<table>
<thead>
<tr>
<th>HARDNESS</th>
<th>COMMON SUBSTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Quartz</td>
</tr>
<tr>
<td>6.5</td>
<td>Steel file</td>
</tr>
<tr>
<td>5.5</td>
<td>Glass plate (window glass)</td>
</tr>
<tr>
<td>5</td>
<td>Knife blade</td>
</tr>
<tr>
<td>3</td>
<td>Copper penny</td>
</tr>
<tr>
<td>2</td>
<td>Finger nail</td>
</tr>
</tbody>
</table>

A mineral of a given hardness will scratch a mineral of a lower number.

10. Diamond
9. Corundum
8. Topaz
7. Quartz
6. Orthoclase
5. Apatite
4. Fluorite
3. Calcite
2. Gypsum
1. Talc

Standard minerals, from 1 (softest) to 10 (hardest):

Mohs Hardness Scale

Ranking of minerals from softest to hardest:

Mineral Information Sheet:

MINERAL INFORMATION SHEET: ALL STUDENTS DAY THREE
LEVEL 1

Draw your mineral. Draw a second mineral that is the same hardness.

Name: ____________________________

Date: ____________________________

LEVEL 2

Using Mohs scale, which mineral is harder, quartz or calcite?

Name: ____________________________

Date: ____________________________

LEVEL 3

Identify other minerals.

If you know the hardness of one mineral, for example quartz, how can that help you to

Why is it important to know the relative hardness of a mineral?

Name: ____________________________

Date: ____________________________

LEVEL 5

LEVELLED EXIT SLIPS: DAY THREE
<table>
<thead>
<tr>
<th>Domain/Topic</th>
<th>Speaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be able to orally analyze characteristics and narrow down choices in a game of twenty questions using properties of no answers. Students can ask classmates a game of twenty questions to distinguish characteristics of minerals and then ultimately correctly answer the Yes or No question in order to repeat the process. In case of no language and parts of animals in pictures and parts of animals in pictures, help identify and narrow down the choices. Students will be able to orally analyze characteristics (by using a game of 20 questions about an animal) with support from visuals. Students will be able to orally analyze characteristics</td>
<td></td>
</tr>
</tbody>
</table>

| Level 3 | Level 5 |
| Speech Emergent | Breeding |
| Pre-Production | Level 1 |

<table>
<thead>
<tr>
<th>Content Objectives:</th>
<th>Language Objectives:</th>
</tr>
</thead>
<tbody>
<tr>
<td>From a sample mineral set, 1. Students will be able to orally analyze and identify minerals by writing about them. 2. Students will be able to orally analyze and identify minerals by narrowing down choices.</td>
<td>Lesson Four: Minerals: Why You Know to Identify Rocks and Minerals 8.9.2012</td>
</tr>
</tbody>
</table>
accompanied by the mineral sample set
are provided for the matching to
cannot and can be filled along so they
seem to be what is required.
Here is Level 1's will be provided with
them from a mineral sample set.

Students will be able to analyze and

words from their

They should be able to fill in
narrow down the mineral
or cannot be in order to
in terms of what it could be
unknown mineral.

Students will answer

Each student will be expected
to narrow down the mineral
could be or cannot be in order
in terms of what it is.

Students will answer

by matching about
minerals by matching about

analyzing and identify

Students will be able to

mineral sample set
by matching about
identify minerals

able to analyze and

W R I T I N G :
Questions: (P. 28-30)

1. Form a team of 3-4 students. Each student may use a guide to help them identify minerals. The guide should include a list of characteristics for each mineral. The team will then use a set of twenty cards available with pictures of different minerals of each group. Each team will then fill out a data sheet and a chart of the minerals they identified. The team will then write their conclusions on the board.

2. Be sure to use the Level 2 Mineral Identification worksheet.

Modeling:

Identification of given minerals

Successful participation in discussion by contributing, completing, and explaining steps of identification:

Assessment:

Eliminating possibilities for each of their choices:

Successful participation in discussion by contributing, completing, and explaining steps of identification:

Instruction:

Eliminate possibilities for each of their choices:

Successful participation in discussion by contributing, completing, and explaining steps of identification:

Evaluation:

Successful participation in discussion by contributing, completing, and explaining steps of identification:

Objective:

Day 4 Lesson Plan: Using What You Know to Identify Rocks and Minerals (Lesson (P. 31-37)}
CARDS TO HELP GUESS
These modifications support the completion of the recording sheet because there are no C's (crystals) cannot be calcite because ... (and allow the student when the teacher should fill in cannot be sapphire because color is ... Cannot be quartz student based upon the chosen mineral. For example, if the chosen mineral is feldspar, potentially, the teacher will need to modify an individual recording sheet for a particular...
<table>
<thead>
<tr>
<th>Mineral #3: Observable qualities:</th>
<th>Cannot be</th>
<th>Cannot be</th>
<th>Cannot be</th>
<th>Cannot be</th>
<th>Might be</th>
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<tbody>
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<td>because</td>
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<table>
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<tr>
<th>Mineral #4: Observable qualities:</th>
<th>Cannot be</th>
<th>Cannot be</th>
<th>Cannot be</th>
<th>Cannot be</th>
<th>Might be</th>
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<tr>
<td>Level</td>
<td>Name</td>
<td>Mineral #1 Observable Qualities</td>
<td>Mineral #2 Observable Qualities</td>
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<tr>
<td>SIZE</td>
<td></td>
<td>Shiny: Cannot be</td>
<td>Shiny: Cannot be</td>
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<td>because</td>
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<td></td>
<td></td>
<td>Might be</td>
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<td>COLOR</td>
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</tbody>
</table>
Identifying Minerals Worksheet!

LEVEL 1

Name ___________________________ Date ___________

Mineral #1

Observable qualities:

SIZE: Big medium small

SHINY: yes no

COLOR: 

DRAWING: 

Might be Comic #2:

because
DRAWING:

COLOR:

SHINY: yes no

SIZE: big medium small

Observable qualities:

Mineral #3:

Because
Might be  because

Mineral #4:
Observable qualities:
SIZE: Big  medium  small
SHINY: yes  no
COLOR:
DRAWING:
### Content Objectives:
1. Students will be able to orally discuss possible uses for rocks and minerals.
2. Students will be able to complete a Venn diagram showing the similarities and differences between the rocks and minerals they have studied.
3. Students will be able to orally discuss possible uses for rocks and minerals.
4. Students will be able to write similarities and differences between the rocks and minerals they have studied.

<table>
<thead>
<tr>
<th>Level</th>
<th>Domain/Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Production</strong></td>
<td>Students will be able to orally discuss possible uses for rocks and minerals by looking at visuals of shape and textures and pointing to or using certain words to show differences and similarities in a Venn diagram.</td>
</tr>
<tr>
<td><strong>Emergent</strong></td>
<td>Students will be able to orally discuss possible uses for rocks and minerals using key words from the word wall and discussing ideas they might have about minerals found in the home.</td>
</tr>
<tr>
<td><strong>Bridge</strong></td>
<td>Students will be able to orally discuss possible uses for rocks and minerals, using key vocabulary about size, texture, shape, etc. in order to discuss what minerals might be used for building materials, countertops, clothing, etc.</td>
</tr>
<tr>
<td><strong>Speaking</strong></td>
<td>Students will be able to orally discuss possible uses for rocks and minerals.</td>
</tr>
</tbody>
</table>

---

### Language Objectives:
1. Students will be able to orally discuss possible uses for rocks and minerals.
2. Students will be able to write similarities and differences between the rocks and minerals they have studied.

---

### Notes:
- 8.9.2012
- Jen Brown and Patricia Brown
- Lesson Five: Everyday Uses Rocks and Minerals
Students will write similarities and differences between the rocks and minerals they have studied by completing a worksheet.

Decide which parts of rooms could be modified. Students will write.

Real world exercises might be useful in the house and what minerals might be used in the real world.

Writing:

Students will write similarities and differences between the rocks and minerals they have studied by completing a modified worksheet on rooms in a house and what minerals could be used. Deciding which parts of rooms could be modified. Students will write.
Modeling:

Better choice minerals or other.

Computerized with another possible material. Students should then determine which is a

Student must determine a mineral that could be used in the areas suggested, and

Each group will be given a picture of a room with labels on five different elements.

Assessment:

Groups to find two for each other category on their own.

To compare them. Teacher will give first example for the first category, then allow

Teacher will present each group with two minerals to compare, and multiple areas to use

Instruction:

useful in the real world.

ability to compare and contrast minerals, and the ability to determine if minerals are

Teacher will explain their today's lesson has two different parts: the

Student will be given one choice item, deeskops, and be asked if they are made of

Teacher should list those items a potentially being made of a mineral

(earrings), deeskops, chalkboards, erasers (rubber), etc. Each section will have a number.

have to create this, of their own classroom but be sure on poster to include:

Teacher will take use a poster of the classroom that shows various items. (Teacher will

options that trial: the desk, and then the other you don't. Teacher will show how to compare and contrast two

Teacher will explain how to compare and contrast two

Teacher will walk throughout the classroom showing the similarities and differences

between the rocks and minerals they have studied.

Students will be able to compare a vein diagram showing the similarities and differences

Students will be able discuss possible uses for rocks and minerals.
### Mineral 1 Versus Mineral 2: Compare!

<table>
<thead>
<tr>
<th>Property</th>
<th>Mineral 1</th>
<th>Mineral 2</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likely Harbness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unique to Mineral 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unique to Mineral 2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The same color, only fill in the middle column, etc.

Fill in the columns as they help with identifying your minerals. If both minerals are

<table>
<thead>
<tr>
<th>Date</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Worksheet One: Ven Diagram/Column Chart LEVEL 5
<table>
<thead>
<tr>
<th>Different</th>
<th>Same</th>
<th>They are the:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soft</td>
<td>Hard</td>
<td>Mineral 2 is</td>
</tr>
<tr>
<td>Soft</td>
<td>Hard</td>
<td>Mineral 1 is</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Different</th>
<th>Same</th>
<th>They are the:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smooth</td>
<td>Rough</td>
<td>Mineral 2 is</td>
</tr>
<tr>
<td>Smooth</td>
<td>Rough</td>
<td>Mineral 1 is</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Different</th>
<th>Same</th>
<th>They are the:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dull</td>
<td>Shiny</td>
<td>Mineral 2 is</td>
</tr>
<tr>
<td>Dull</td>
<td>Shiny</td>
<td>Mineral 1 is</td>
</tr>
</tbody>
</table>

**Complete Circle:**

Name: __________________________

Worksheet One: Level 1
I think that item #5 would be a better choice because different material would be better.

Choose three of the above items, and tell whether a mineral would be a good choice or a

Item #5: Sink basin

Item #4: Tile floor

Item #3: Cabinet

Item #2: Kitchen window

Item #1: Counter top

Room assigned: Kitchen

Name:

Worksheet 1:

LEVEL 1 ALL
I think that Item # would be a better choice because different material would be better.

Choose three of the above items, and tell whether a material would be a good choice or a

Item #5: Coffee Table

Item #4: Milling

Item #3: Fireplace Hearth

Item #2: Artwork

Item #1: Hoofing

Room Assigned: Living Room

I think that Item # would be a better choice because
Choose three of the above items, and tell whether a material would be a good choice or a different material would be better.

Item #5: Door

Item #4: Sink top

Item #3: Bath tub

Item #2: Mirror

Item #1: Flooring

Room assigned: Bathroom
Different material would be better.

Choose three of the above items, and tell whether a mineral would be a good choice or a

Item #1: Floor

Item #2: Headboard

Item #3: Window

Item #4: Wall paper

Item #5: Mirror

Room assigned: Bedroom
Choose two of the above items, and tell whether a material would be a good choice or a different material would be better.

Item 1: Countertop
Item 2: Kitchen window
Item 3: Tile floor

Would they be better than glass? Why?
Are any minerals see through?
Which is better, a mineral countertop or wood? Why?

Room assigned: Kitchen
Name:
Worksheet: Level 3
Any minerals that would be good for that? Which would be more important for the flooring in the bathroom to do or be? Are there different materials that would be better? Choose two of the above items, and tell whether a mineral would be a good choice or a tool.

Room assigned: Bathroom

Item #1: Flooring

Would be a better choice because I think that

Item #1: Flooring

Would be a better choice because I think that different material would be better. What can a coffee table be made of? Can you think of a mineral that would be good? Of which would be better in your opinion? Why?

Item #2: Artwork

What could artwork be made of? Can you think of a mineral that you could make art out

Item #2: Artwork

Which is better, a floor made of a mineral, or a floor made of wood? Why?

Room assigned: Living Room
Item #2: Bath tub
What is most important about the surface of the material for a bath tub? Would a mineral be good for that? Why?

Item #3: Sink top
Would it be better to have a mineral for a sink top, or one made of a man made material like plastic? Why?

Choose two of the above items, and tell whether a mineral would be a good choice or a different material would be better.

Item #  I think that would be a better choice because

Item #  I think that would be a better choice because
Item #2: Fireplace hearth

DO you like artwork that is like a painting, or sculpture made out of gold? Tell why?

Item #1: artwork

Room assigned: Living room

Which is a better material for a tile floor, a material like ceramic, or a mineral like Feldspar?

Item #3: Tile floor

Which is better for a kitchen window, glass or a mineral such as mica?

Item #2: Kitchen window

Which is better for a countertop, wood or a mineral like quartz?

Item #1: Counter top

Room assigned: Kitchen

Name:

Worksheet Two:

Modiied L'Vel One
Additional Resources for Minerals

Rock Stars (Famous People and their Birthstones)
Make a Pet Rock

Additional Activities:

Minerals at Home
Minerals in Sports
Minerals in everyday applications in the workplace

Additional Sheets for Use With Unit: