

## Plan of the Day:

0) If you did NOT see me during HR regarding Unit 2, Lessons 1-4 QUESTIONS (check date: 2/17, A-day & 2/21, B-day), your grade remains what I recorded on the check date.

2) EXAMINE samples of IGNEOUS, SEDIMENTARY and METAMORPHIC rocks for defining characteristics.

3) Continue Unit 3, READ & ANSWER QUESTIONS in Lessons 2 & 3.

## Unit 2 Disciplinary Core Ideas

### ESS2.A: Earth's Materials and Systems

- All Earth processes are the result of energy flowing and matter cycling within and among the planet's systems. This energy is derived from the sun and Earth's hot interior. The energy that flows and matter that cycles produce chemical and physical changes in Earth's materials and living organisms.

### ESS1.C: The History of Planet Earth

- Tectonic processes continually generate new ocean sea floor at ridges and destroy old sea floor at trenches. (HS.ESS1.C GBE),(secondary)

### ESS2.B: Plate Tectonics and Large-Scale System Interactions

- Maps of ancient land and water patterns, based on investigations of rocks and fossils, make clear how Earth's plates have moved great distances, collided, and spread apart.

4) Three Tab Foldable: IGNEOUS, SEDIMENTARY & METAMORPHIC Rocks

Feb 7-6:18 AM

## CONTINUE working on Unit 3: Minerals and Rocks

### Lesson 2: The Rock Cycle

Pages 154-164 Questions 1-23 (omit 6, 18 & 19)

### Lesson 3: Three Classes of Rocks

Pages 170-180 Questions 1-20 (omit 9, 16)

**DUE DATE: Feb 28 (A-day) & Mar 1 (B-day)**

Feb 9-6:36 AM

## Three Tab Foldable:

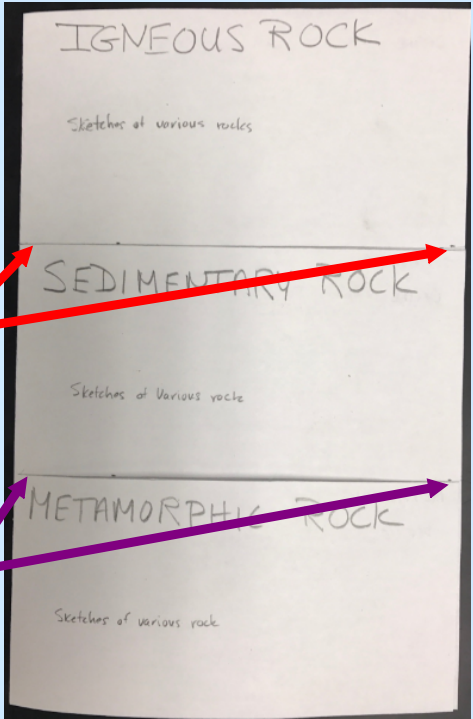
### IGNEOUS, SEDIMENTARY & METAMORPHIC Rocks

To make your 3 Tab Foldable, fold an 8-1/2" x 11" sheet of paper in half as shown.

Measure and use a pencil to mark along the fold and the opposite side 7.2 cm. Connect the marks with a line.

Measure and use a pencil to mark along the fold and the opposite side 14.4 cm. Connect the marks with a line.

Cut along each line to the fold only.

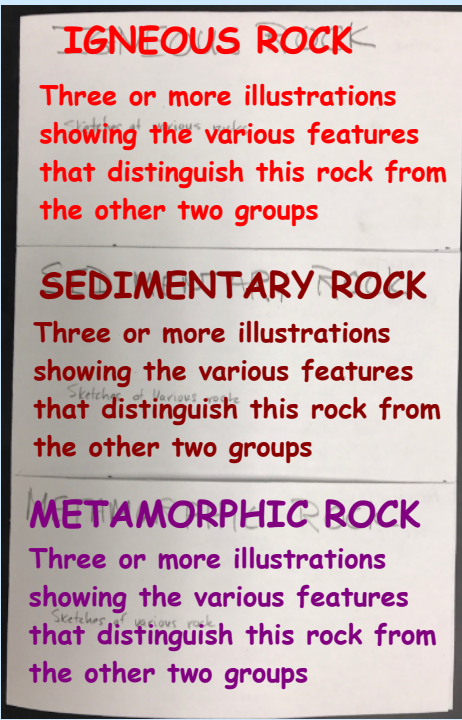


Feb 14-2:47 PM

ON THE FRONT, Label each tab, **IGNEOUS**, **SEDIMENTARY** and **METAMORPHIC**.

On EACH tab, sketch a few (3) representative depictions of each rock type. Use your book or the old **INSIDE EARTH** text, **Chapter 5**, for ideas for the illustrations required for all three rock types.

Then, **OPEN** your 3-Tab foldable to add information.

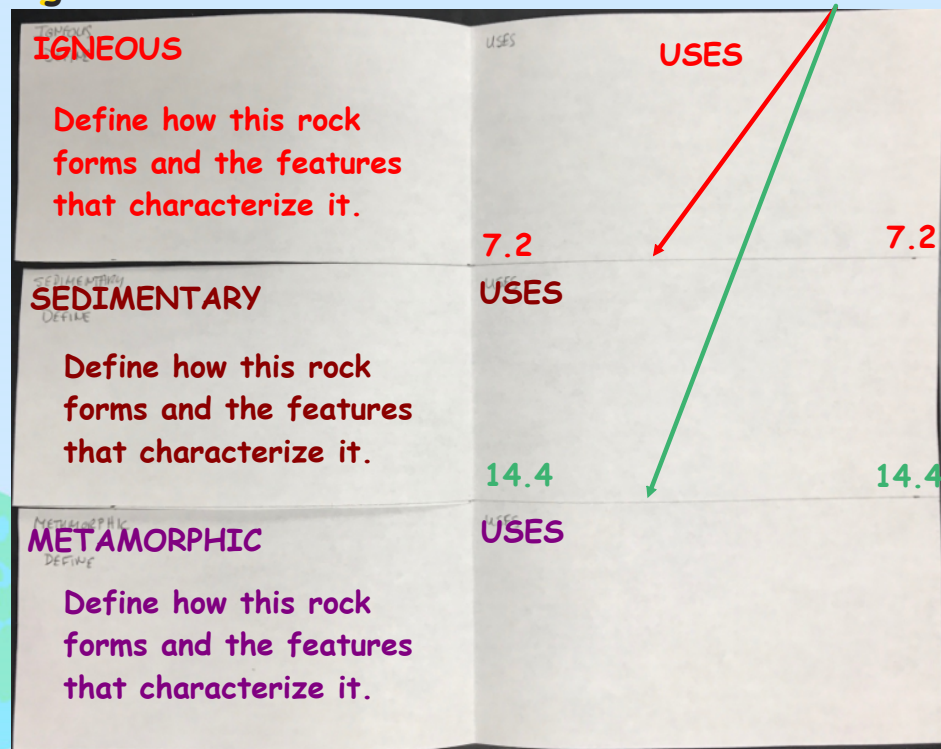


9 illustrations

Feb 14-3:03 PM

**OPEN** your 3-Tab foldable and mark each side at 7.2 cm and 14.4 cm making a mark at each measure. Connect with a line.

USE your text and/or the **INSIDE EARTH** text, Chapter 5, to gather information. Characteristics should include features that help you **IDENTIFY** the rock in a set of unknown rock samples.



This assignment will be a **PRODUCT GRADE**

Feb 14-3:18 PM

## **DUE DATE TO BE DETERMINED!**

The three (3) tab foldable on **IGNEOUS**, **SEDIMENTARY** and **METAMORPHIC** Rocks will be your **KEY** for distinguishing rock type in a future **Rock Identification Laboratory**.

I will post the due date once I know the date of the **Rock Identification Laboratory**. Both assignments will be collected concurrently (at the same time).

Feb 14-3:18 PM

You will need several pieces of paper and a pencil to **DRAW** sketches of the different representative **IGNEOUS**, **SEDIMENTARY** and **METAMORPHIC** rocks.

This task will help you develop an "eye" and understanding of the features (characteristics) you need to keep in mind as you construct your 3-tab foldable **ROCK KEY** you will use to determine the six (6) unknown rock samples you will identify in next week's lab.



Feb 23-6:25 AM

## Igneous

Extrusive:

Fine grain or no grain

Intrusive:

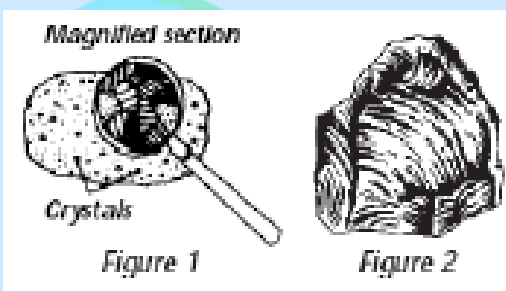
Course grains, randomly distributed

Igneous rocks often contain grains that can be seen with the unaided eye.

(See Figure 1.)

Some igneous rocks have no visible grain and appear glassy. (See Figure 2.)

Igneous rocks may be found in many different colors and often show different colored grains that are not in bands.

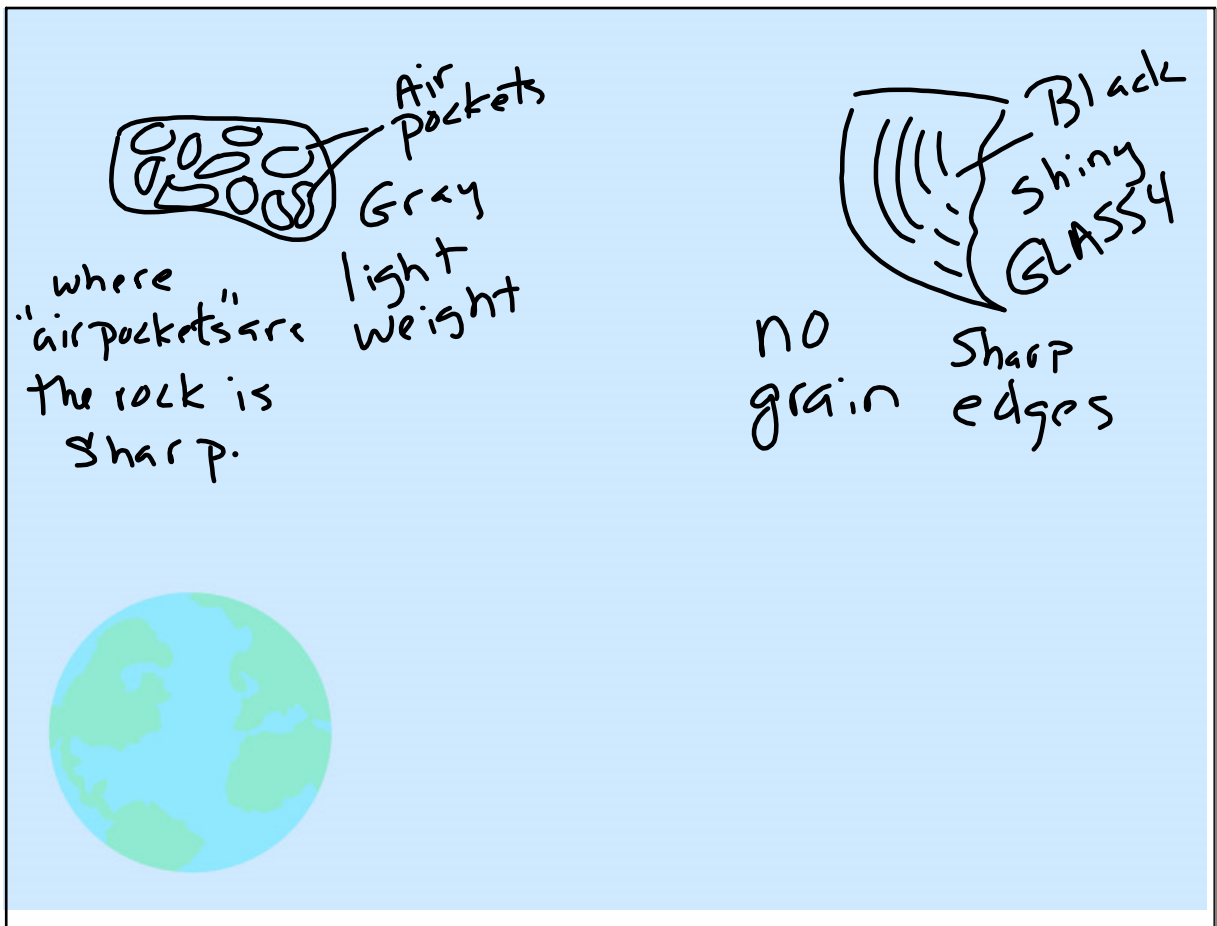


Feb 21-2:14 PM





Feb 23-7:42 AM



Feb 23-9:24 AM



Feb 23-7:42 AM

no grain  
shiny  
glassy

air packets (HOLES)  
Light weight  
Sharp edges

123

Feb 23-7:42 AM

no grain

Shiny glassy black

Obsidian

Holey



holes "air pockets"

Dark gray

light weight

Pumice

Extrusive Igneous Rock

Feb 22-12:35 PM

air pockets

light (weight)

Dark gray

glassy

no grain

black





Feb 22-9:18 AM

# Sedimentary

Clastic sedimentary rocks are made up of fragments of other rocks and look very much like rocks or particles cemented together.

Some sedimentary rocks have a range of grain sizes, while others consist mainly of one grain size. (See Figure 3.)

Organic sedimentary rocks are made up of plant and animal products or remains. Such rocks may contain fossils. (See Figure 4.)

Sedimentary rocks often have distinct parallel layers. (See Figure 5.)



Figure 3



Figure 4



Figure 5



Many sedimentary rocks appear dull or earthy.

Feb 21-2:31 PM



A-day ENDED HERE



Feb 22-8:48 AM



## Metamorphic

Metamorphic rocks often look like igneous rocks except that they are foliated, showing bands of different mineral grains. (See Figure 6.)

Metamorphic rocks may show signs of bending or distortion. (See Figure 7.)

(See Figure 7.)

The grains in metamorphic rocks generally appear to be flattened.

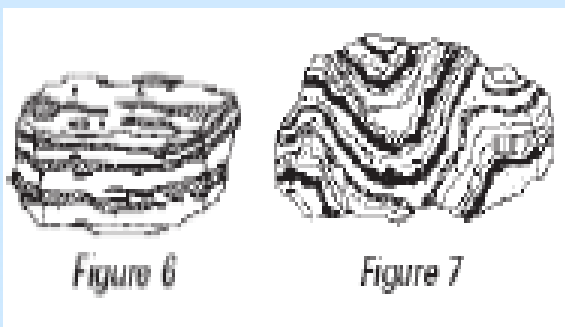


Figure 6

Figure 7



Feb 21-2:31 PM