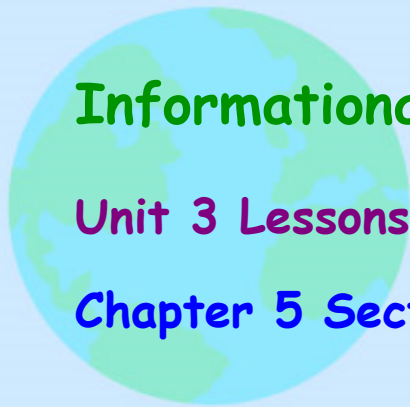


## Plan of the Day:

**MAKE a Three-Tab Foldable: IGNEOUS, SEDIMENTARY & METAMORPHIC Rocks.**

**Use the sketches you made from previous lessons to help with your illustrations.**



## Informational Resources:

**Unit 3 Lessons 1, 2 & 3 in your Dynamic Earth text.**

**Chapter 5 Sections 1, 2, 3, 4 & 5 in the Inside Earth text.**

## 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.

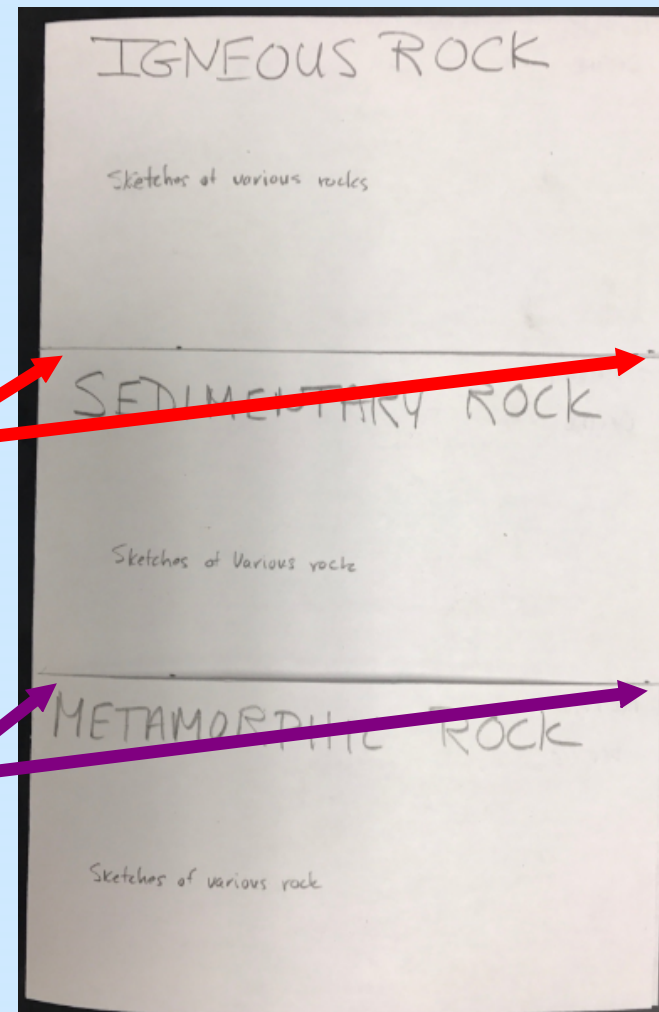
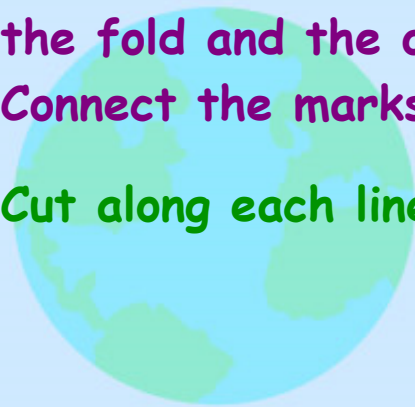
## Three Tab Foldable: IGNEOUS, SEDIMENTARY & METAMORPHIC Rocks

To make your 3 Tab Foldable, fold an 8-1/2" x 11" sheet of paper in half as shown. You should end up with an 8-1/2" tall by 5-1/2" wide foldable.

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.



**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. Your **FOLDABLE** will have **NINE (9)** illustrations, total, on the front.

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

## **IGNEOUS ROCK**

Three (3) or more illustrations showing the various features that distinguish this rock from the other two groups

## **SEDIMENTARY ROCK**

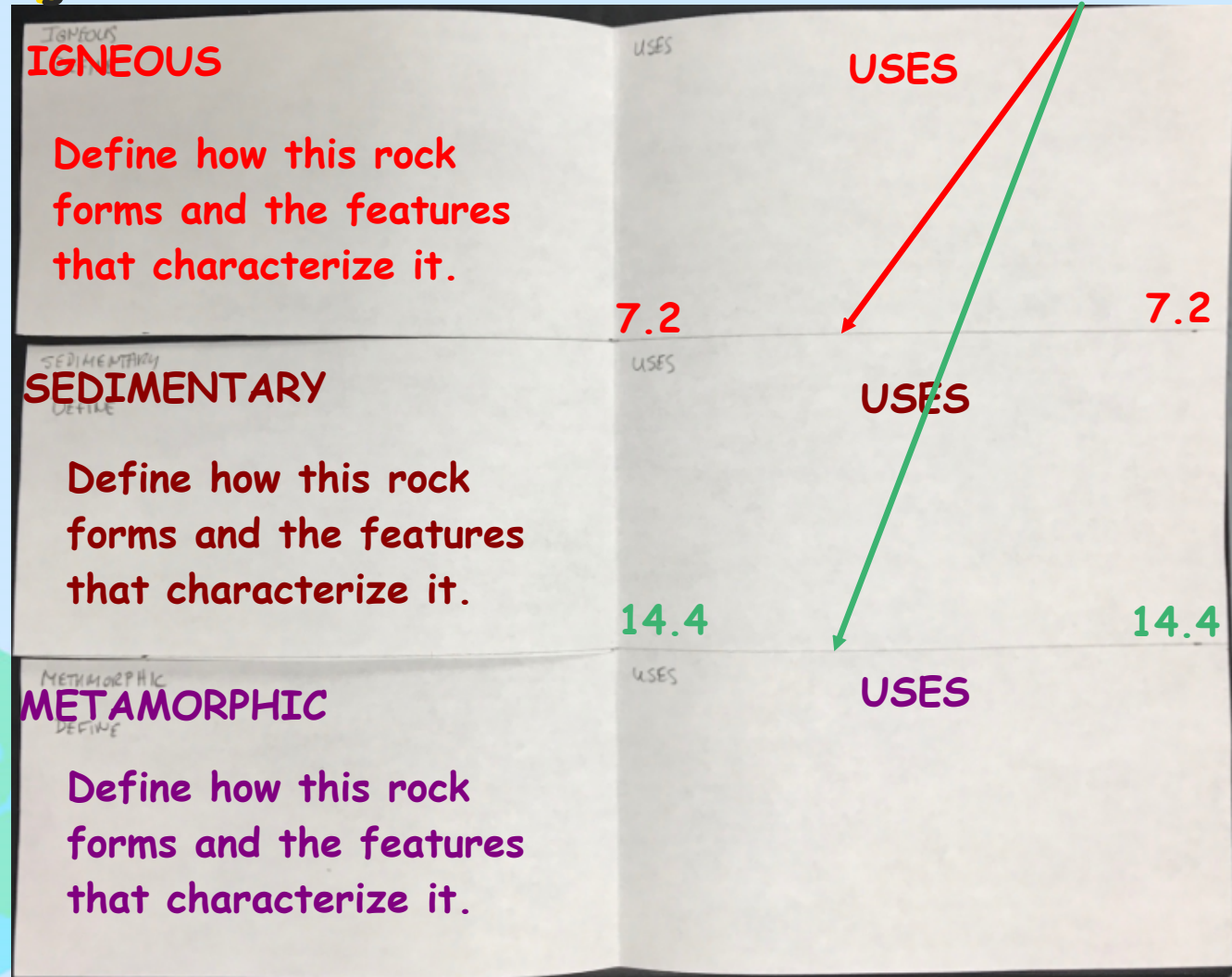
Three (3) or more illustrations showing the various features that distinguish this rock from the other two groups

## **METAMORPHIC ROCK**

Three (3) or more illustrations showing the various features that distinguish this rock from the other two groups

**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 **DYNAMIC EARTH** text Unit 3 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 IS a PRODUCT GRADE**

# Igneous

## Extrusive:

Fine grain or no grain

## Intrusive:

Course grains, randomly distributed

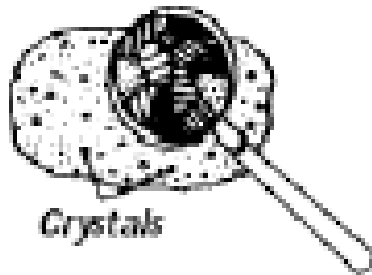
Igneous rocks often contain grains that can be seen with the unaided eye.

(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.

Magnified section



Crystals

Figure 1



Figure 2



# 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

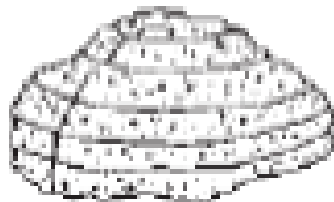


Figure 5



Many sedimentary rocks appear dull or earthy.

# 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.)

The **grains** in metamorphic rocks generally **appear to be flattened**.

