Rock vs. Mineral Foldable North Carolina Geological Survey www.deq.nc.gov/geoscience-education



| Overview: | Foldables are a fun, interactive way for students to process, organize, and review information learned during lessons. | | |
|------------------------------|--|--|--|
| Target Grade Level: | 4 th grade | | |
| 2023 Science Standard(s): | ESS.4.2 – Understand patterns of change in the Earth's surface over time ESS.4.2.1 – Carry out investigations to classify minerals using tests for the physical properties of hardness, color, luster, cleavage, and streak ESS.4.2.2 – Carry out investigations to classify rocks as metamorphic, sedimentary, or igneous based on their composition, how they are formed, and the processes that create them | | |
| Objectives: | For use as a final wrap up of your minerals and rock lessons by having students decide which properties apply to rocks, to minerals, or to both. | | |
| Estimated Time: | 40 minutes | | |
| Teacher Prep & Instructions: | Download the example foldables with instructions that are attached to this packet. You can have students use this foldable or just use it as an instruction template and have them create their own version. Print the page with the rock/mineral characteristics and have students cut them out individually along the dotted lines. Have students work individually to organize the characteristics beneath the appropriate sections on the foldable. Discuss the answers as a class and once you're certain that all students have the correct characteristics placed in the appropriate section, they can glue or tape them onto the foldable. | | |

Table of rock and minerals characteristics. Students should cut out individual squares along the dotted lines.

| Made of one or more minerals | Can contain fossils | Usually the same color throughout | Naturally occurring | Hardness determined by Moh's Scale |
|---|--|---|--|---|
| No defined/definite shape | Definite internal crystal structure | Solid | Cannot contain fossils | Was never alive |
| May be one element or many elements | One example is igneous | One example is quartz | Could have been part of a living organism | Color varies from one sample to the next |
| One example is sandstone | Found all over the world | Definite chemical composition | Can be weathered & eroded | Has a defined shape |

This is an 8.5" x 11" sheet of paper

Cut along dashed lines

Fold paper in half "hamburger style" as shown below

(This side will become the back of the bottom half after folding)



This side will become the back of the bottom half after folding



This is an example of what students can do with their foldable

ROCK, MINERAL, OR BOTH?



GNEISS

A sample of a finished foldable

