WAYFINDER Describing Earth Materials

The following North Carolina State Science Standards are relevant to this Wayfinder:

Grade 1	**2.01, 2.02**

Introduction

The Museum of Life and Science has an entire exhibit dedicated to the study of geology. It holds a collection of rocks and minerals from all over the world, each with their own unique properties. There are numerous minerals to marvel at in this exhibit. Students can also explore and compare common rocks that make up each of the three rock categories – igneous, metamorphic and sedimentary. Observing and interacting with these rocks and minerals will help students begin to consider what makes each special.

Before your visit

Set up a rock observation table with different rock samples and magnifying glasses. Over the course of the week, allow time for students to observe these rocks and write or draw their observations.

Gather rocks of many kinds. As a class, brainstorm different ways to sort these rocks. Split your classroom into groups each with their own collection and have each group sort their pile in their own way. Explore how many different ways a single group can sort their rocks. Challenge groups to find rules for sorting that result in two, three, or multiple piles.

During your visit

Head to the geology exhibits on the first floor of the main Museum building. In small groups visit each of the stations below and examine the following:

Igneous Rock

1) Find the granite sample near the sign “Which Rock Weighs the Least?”. Describe what it looks like. Describe what it feels like. Looking at the drawers of rock samples below this display find another rock that looks similar to this granite sample. How is this sample different from the granite above? How is it the same?

2) Find the lava rock near the sign “Which Rock Weighs the Least?”. Describe what it looks like. Describe what it feels like. Find another rock that looks similar to the lava rock sample in the drawers below. How are these samples different from each other? How are they the same?

Metamorphic Rock

1) The rocks in this section all were made when rocks of a different kind were pushed together by a lot of pressure and heat over a long period of time. Can you find a rock (on display or in the drawers below) that looks like it may include some flattened pebbles inside of it?

2) Sometimes rocks with large crystals are put under a lot of pressure and the crystals become much smaller. Can you find a rock like this with tiny, shiny crystals? You

can also look in the drawers below the display.

Sedimentary Rock

1) Open a drawer under the display of sedimentary rocks. As a group, discuss ways that you might sort this drawer of rocks? Can you come up with a rule that would make only two piles of rocks? Three piles? More?

2) Choose one or two rocks from the display. Can you match your chosen rock to a similar rock in the drawers below?

Pass out a copy of the Geology Bingo sheet provided below. Give students a chance, in pairs or individually, to explore the exhibit and mark off items on their Bingo sheets that have the attributes listed. Challenge them to make at least one Bingo (four boxes on a row).

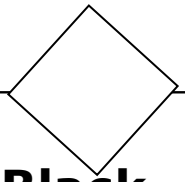
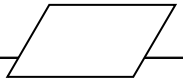
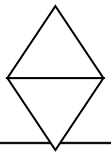
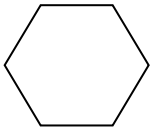
After your visit

In the classroom have each student draw one or two of their favorite rocks or minerals that they saw at the Museum. Have a few volunteers share their drawings and describe why their choice is special to them.

Please see Geology Bingo Activity on next page…

Geology Bingo

Look for a rock or mineral that matches a box.
Put an X in the box.
Try to make a Bingo!

 **Fossil**	**Pink and White**	**Shiny**	
Magnetic 		**Purple**	**Black and White**
Blue	**Green**		**Heavy** 
	**Light** 	**Gray**	**Clear**