LAB HOMEWORK ASSIGNMENT #2
Rock Uses on Campus/Downtown

Name______________________________
Lab # ___________ TA Name_____________________

This assignment is DUE:

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This is a 2-part assignment. READ THE DIRECTIONS FOR EACH PART CAREFULLY! Questions for Part 1 will require you to visit a few locations on campus. Questions for Part 2 will require you go online to the UWM Department of Geosciences website to take a ‘virtual tour’ of downtown Milwaukee. So, you do need to take a walk to a few locations on campus, but you do not need to go to downtown Milwaukee.

Part 1: UWM campus ‘tour’ (8 pts.)

Go to the locations on campus, as noted in each question, to identify the rocks or building stones, and answer questions about each. (Note: There are many more uses of natural building stone, decorative stone and landscape stone around campus other than these four quick stops, so take notice of other uses of rock right here on campus!)

1-1. Go to the southeast entrance of Lapham Hall, (where you’ll see a construction site fence just outside the door). Just outside the building, you’ll notice large ‘tiles’ that look like concrete on the walls and on the column just inside the fenced area. It is not concrete, although you’ll notice exposed concrete at the base. Instead this wall façade is a common local sedimentary rock. (Hint: It fizzes strongly in acid.)
What kind of rock is it? ___________________________
What is the rock’s primary mineral? ___________________________

1-2. At this same entrance to Lapham Hall, you will notice several large boulders within the landscaped area to the east. Identify one of these boulders located just off the sidewalk.
What is the primary color of the rock you chose to identify? ___________________________
What kind of rock is it? ___________________________

1-3. Go to the sidewalk in front of the Physics Building (on Kenwood Blvd). Identify the shiny rock used for decorative stone in the wall along the sidewalk.
What kind of rock is it? ___________________________
Is this rock igneous, metamorphic, or sedimentary? ___________________________

1-4. Go to the front of the library (along Hartford Ave.) to observe the landscape stone used around the trees. This same rock is used in many landscape areas around trees on campus (e.g., just south of the Chemistry building) or maybe in your own yard! Identify this dark red-brown igneous rocks used here for landscape stone. (There is also a sample of this rock in lab class, too!)
What kind of rock is it? ___________________________
What primary characteristic did you use to identify this rock? ___________________________

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**Part 2: Downtown Milwaukee ‘virtual tour' (12 pts)**

Go to the Dept. of Geosciences website at [http://www4.uwm.edu/letsci/geosciences/](http://www4.uwm.edu/letsci/geosciences/), and click on the ‘Department Life’ tab, and then the ‘Field Trip Photos and Virtual Tours’ link on the bottom left. From here, click on the ‘Downtown Geology Virtual Tour’ link to take a virtual tour of the building and decorative stones used in some of downtown Milwaukee’s architecture. Click on the specific Walks and Buildings to answer the following questions. Note that questions that ask for the type of rock are asking for the specific geologic rock name (e. g., granite), not the trade name or quarry name (e. g., Bethel White).

2-1) The Milwaukee Public Library (Walk 4), Milwaukee County Courthouse (Walk 4) and the Northwestern National Insurance Co. Bldg. (Walk 1) at 526 E. Wisconsin Ave. are constructed of a very common building stone from Indiana. What specific type of rock is it? ________________ How old is the rock (in millions of years)? ________________ What is this rock almost entirely composed of? ________________ What makes this rock such a preferred building stone? ________________

2-2) The Milwaukee Club (Walk 1) and the Button Block Building (Walk 1) (and Holton Hall on campus) are constructed of a red sedimentary rock quarried from here in Wisconsin. What specific type of rock is it? ________________ What dominant mineral in the rock gives it its unique red color? ________________ (This same rock is used for building stone here on campus in Mitchell and Holton Halls!)

2-3) The historic Pfister Hotel (Walk 1) is constructed of a sedimentary rock from a former quarry in Wauwatosa. This rock’s trade name is a bit of a misnomer. What specific type of rock is it actually? ________________ This rock formation is found throughout much of eastern Wisconsin. What does the presence of numerous fossils and fossilized coral reefs in this rock formation suggest about the geologic history of eastern Wisconsin? ________________

2-4) The Milwaukee Journal-Sentinel Building (Walk 2), located at 333 West State Street, was built in 1924. It is a steel frame building clad in pinkish-yellow Mankato-Kasota Limestone. What state is the Mankato-Kasota Limestone from? ________________ Compared to other limestone, the Mankato-Kasota Limestone is relatively resistant to weathering. What characteristic gives it this quality? ________________ How old is this limestone (in millions of years)? ________________

2-5) Part of the facing stone at the Marcus Center for Performing Arts (Walk 2) was originally clad in 1969 with marble from Italy. However, differential weathering and warping of the marble panels lead to their replacement in 1994 with panels of two different rock types from Minnesota, a dolomite known as Winona Travertine and a granite known as Diamond Pink Granite. Despite its trade name, Diamond Pink Granite does not contain diamonds. Instead, the unique appearance of this decorative stone lends itself to its porphyritic texture and large phenocrysts of what mineral? ________________