

# Grading Checklist

## Learning Assessment #2 – The Rock Cycle

Speta, M.<sup>1</sup>, Cubley, J.F.<sup>2</sup>, Reid, L.F.<sup>3</sup> (2010)

<sup>1</sup>*Department of Earth & Atmospheric Sciences, University of Alberta*

<sup>2</sup>*School of Mining & Technology, Yukon College*

<sup>3</sup>*Department of Geoscience, University of Calgary*

Learning assessments are graded using a checklist-style rubric. The purpose of the checklist is to clearly and concisely show students where they lost marks on the assignment and why. When students are reviewing their work they initially focus on the areas they got incorrect as identified on the checklist.

The checklists also help to ensure that grading is transparent to the students. They help maintain consistency amongst graders, which may be a challenge in large courses with multiple instructors/teaching assistants marking the same assignment.

*Corresponding author:*

Dr. Leslie Reid  
Associate Dean (Teaching and Learning)  
University of Calgary Faculty of Science  
lfreid@ucalgary.ca

## LEARNING ASSESSMENT #2 (Rock Cycle) GRADING CHECKLIST

### *Part 1: Sedimentary Cycle (2 pt each)*

- weathering/erosion of rock at the surface of the Earth to form sediment
- unconsolidated sediment is transported to depositional environment (i.e. ocean basin)
- lithification: compaction, cementation of sediment

### *Part 2: Metamorphic Cycle (1 pt each)*

- increased P/T conditions
- brief description of rock types that would form (slate-schist-gneiss; to indicate the types of metamorphic rocks that may form and demonstrate understanding of metamorphic grade)
- describe changes in mineralogy (neo and re-crystallization)
- describe changes in texture (foliation AND grain size increase – 0.5 each)
- mention of changes occur in solid state

### *Part 3: Igneous Cycle (1 pt each)*

- partial melting / melting occurs
- magma solidifies / freezes
- describes melt that forms as silicic or felsic
- resulting rock type name: granite, rhyolite or migmatite
- rock name is consistent with where it solidifies (i.e. granite – subsurface, rhyolite – surface)

### *Part 4: Return to Sedimentary Cycle (1 pt each)*

- exhumation (include examples of processes that may cause this, e.g. faulting)
- erosion/weathering of newly exposed rock to form unconsolidated sediment

### *Organization and Clarity (2 pts)*

- assessment was easy to read and answers were well organized, if figures were used they were well labeled and clearly linked to answering the question

TOTAL FOR LEARNING ASSESSMENT #2: \_\_\_/20