

**Test 3. Physical Geology Final Exam. Important study terms. Do not use this solely as a definition sheets. Each one of these terms may represent not only definitions, but may also represent geologic processes, and the results of those processes. Make sure you study everything associated with the term below.**

### **SEDIMENTARY ROCK & PROCESSES**

- Bedding
- Bedding Structures
  - Ripple marks
  - Graded bedding
  - Mud cracks
  - Cross-bedding
- Naming Sedimentary Rocks: Formations, Groups
- Missoula Floods- How/when/why/what/where. Be able to explain our local geology in context of Missoula floods.

### **METAMORPHIC ROCK & PROCESSES**

- Metamorphism, definition, factors controlling metamorphism, why study
- Contact metamorphism vs. Regional metamorphism (temp, pressure, causes, resulting rocks)
- Progressive metamorphism
- Metamorphic grade & index minerals

### **GEOLOGIC TIME**

- Relative vs. Absolute (Numerical) Age
- Relative Age
  - Principle of Uniformitarianism
  - Law of horizontality
  - Law of superposition
  - Principle of Cross-cutting relationships
  - Lateral continuity of layers
  - Correlation
- Absolute Age: isotope dating/isotope clock. How used, what is it useful for?

### **STRUCTURAL GEOLOGY**

- Structural Geology, definition
- Stress = Strain. What does this mean?
- Types of stress, types of strain (structures)
- Deformation types & associated structures
  - Brittle, Ductile, elastic
- Types of stress associated with folding & different types of faults (i.e. what types of structures are produced with each type of stress)
- Folds & Fold terminology-limb/hinge/fold axis
  - Anticline
  - Syncline
  - Monocline
  - Dome
  - Basin
- Fractures
- Joints
- Faults
  - Dip-Slip: Normal, Reverse/Thrust
  - Strike-Slip (left lateral vs right lateral)
  - Oblique-slip
- Strike & dip measurements