

NAME: _____

Review Outline: Minerals and Rocks Test

1. Minerals

A. What is a mineral?

- Definition of a mineral (5 requirements that define minerals)
- 3 main ways minerals can form (example → solidification of magma)

2. Mineral Identification

Mineral Properties

- color
- luster
- streak
- hardness
- cleavage
- fracture
- acid test

3. Earth Science Reference Tables Page 16 – Properties of Common Minerals

A. Know how to use page 16 of the ESRT

4. 3 Types of Rocks

A. What is a rock?

- Definition (One or more minerals grouped together)
- 3 main types defined by origin – Igneous, Sedimentary, and Metamorphic
- Know how to classify by origin, mineral content, and texture

B. What is the rock cycle?

- How do the 3 rock types form, change, and get recycled?
- Know how to use the Rock Cycle diagram from ESRT page 6

5. Igneous Rocks

A. What is an igneous rock?

- Formation from felsic or mafic magma/lava by extrusive and intrusive processes.
- Conditions that existed when a rock formed can be inferred from the rock's mineral content and texture. (Example → small crystals = extrusive rock)
- Classification and description (formation environment, texture, composition, etc...)
- Know how to use the Igneous Rock diagram on ESRT page 6.

6. Sedimentary Rocks

What is a sedimentary rock?

- Formation – burial, compaction, cementation, precipitation of sediments
- 3 types of sedimentary rocks – clastic, chemical, organic
- Know how to use the Sedimentary Rock diagram on ESRT page 7.

7. Metamorphic Rocks

A. What is a metamorphic rock?

- Definition of Metamorphism
- Metamorphic rocks and their parent rocks
- Formation of metamorphic rocks – regional (high heat and pressure) vs. contact (high heat and low pressure)
- Classification and description (texture, grain size, degree of metamorphism, etc...)
- Grade of Metamorphism (low to high)
- Know how to use the Metamorphic Rock diagram on ESRT page 7.

8. Density

A. Know how to calculate density using ESRT page 1.

B. Know that for any uniform substance, if you change its volume (cut it in half), its density will not change.

