

Grade 12 Earth and Space Science

SES4U

Qinghao Hu

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Chapter 3

Earth's Material & Geological Process

3.1 Rock cycle and Identification

3.1.1 Introduction to rock

Sedimentary Rock

Sedimentary Rock: Generally form from the compaction and cementation of sediments

Now here we have two different categories

Clastic: compacted sediments, classified by size. ex. Sandstone, conglomerate, siltstone

Organic or crystallite

- Evaporites
- Precipitates
- Biological matter ex. limestone

Metamorphic

Metamorphic Rock: Rocks that are changed as a result of intense heat and/or pressure

Contact metamorphism: Heat ex. schist, gneiss, marble

Regional metamorphism: Pressure

Igneous

Igneous Rock: Form from the cooling and solidification of lava or magma.

Intrusive: Formed from magma that cools and solidifies underground

- Magma cools slowly
- Large crystal formed

Extrusive: Formed on the surface of Earth from lava.

- Lava cools quickly
- small or no crystal
- May be vesiculars (Contains air bubbles)