

Geology 12

Unit 0 – Introduction

Day 7 – Rock Deformation: Structural Geology

Name: _____

Date: _____

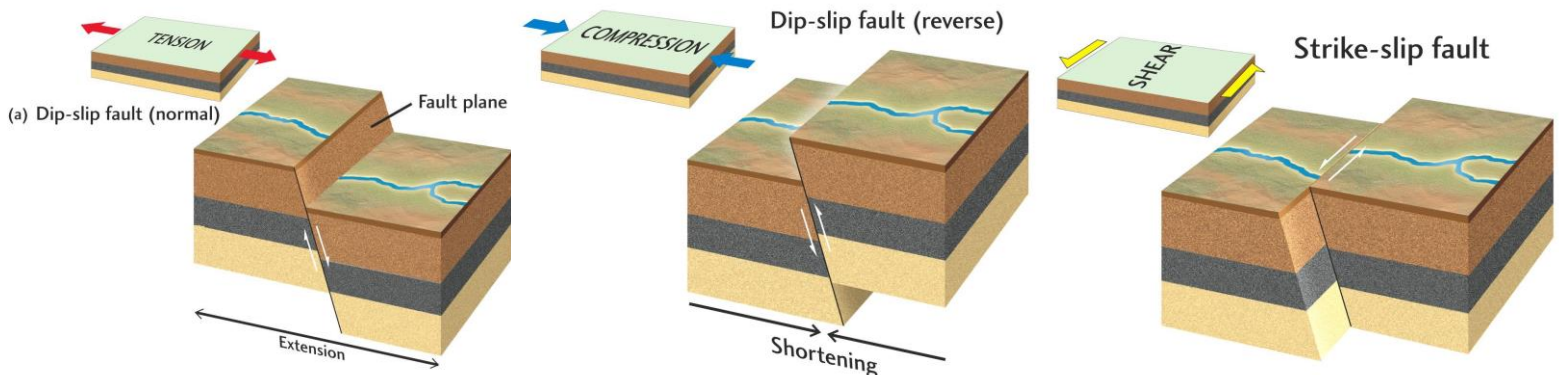
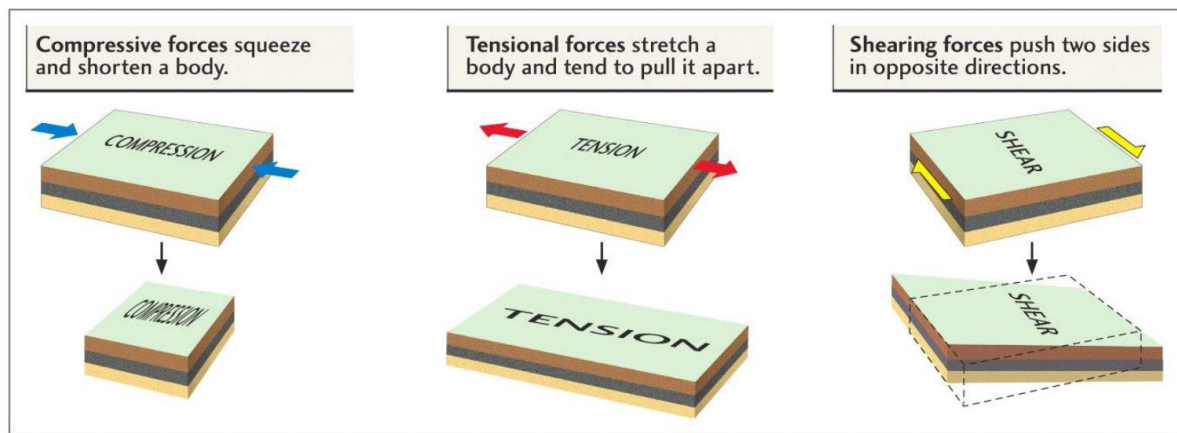
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3 Types of Stress:

Tension: a stretching stress. Rocks have very little strength under tensional stress and break apart easily

Compression: a squeezing stress. Rocks are relatively strong under compression

Shear: stress operates in opposite directions across the body



Strain: Deformation or change of shape a rock body experiences when under differential stress

3 Types of Strain:

Elastic Strain: recoverable strain

When stress is removed, object regains original shape. (Ex: rubber band).

Plastic strain: permanent strain. When stress exceeds the strength of the rock the rock will bend or fold
when stress is removed, object remains deformed by bending

Brittle Strain: permanent strain. When stress exceeds the strength of the rock the rock will break or fracture
(Ex: Chalk)

Rock Deformation Terminology:

Symmetrical folds

