

A wide-angle photograph of a desert landscape. In the foreground, there is a rocky, arid slope with sparse, low-lying green and brown shrubs. The middle ground features a series of rugged, layered mountain ranges with distinct geological formations, including ridges and valleys. The mountains are bathed in warm, golden light, suggesting late afternoon or early morning. The sky is a clear, pale blue. Overlaid on the center of the image is the text "ROCK CYCLE" in a large, bold, black, sans-serif font, split into two lines: "ROCK" on top and "CYCLE" on the bottom.

ROCK CYCLE

What is a rock?

- Solid parts of the Earth
- Made up of minerals
- Humans use them to survive.



SEE
DISCOVERY
QUICK LIST

What processes change rock?

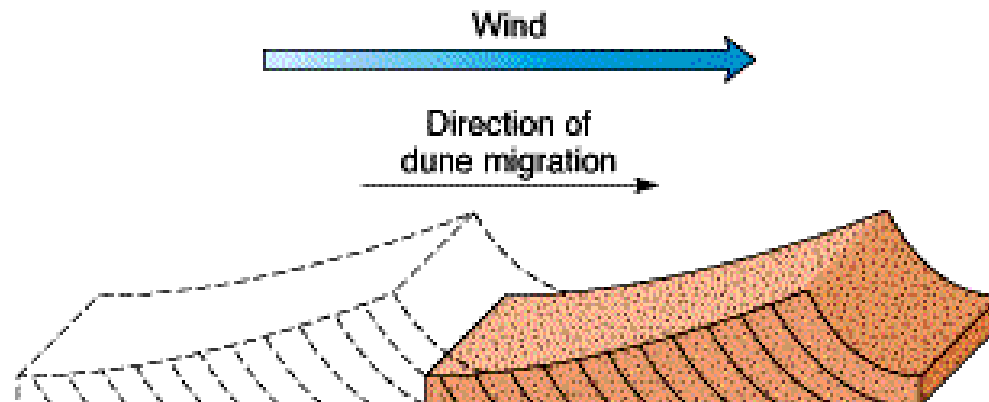
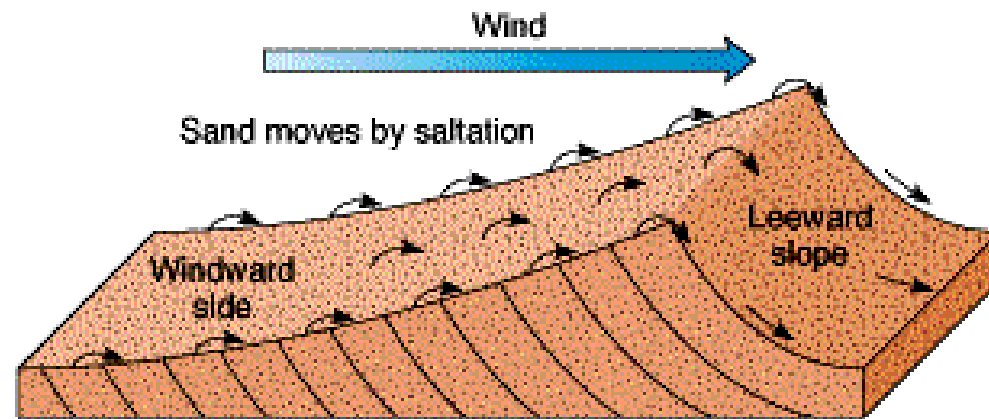
- Weathering, erosion, deposition



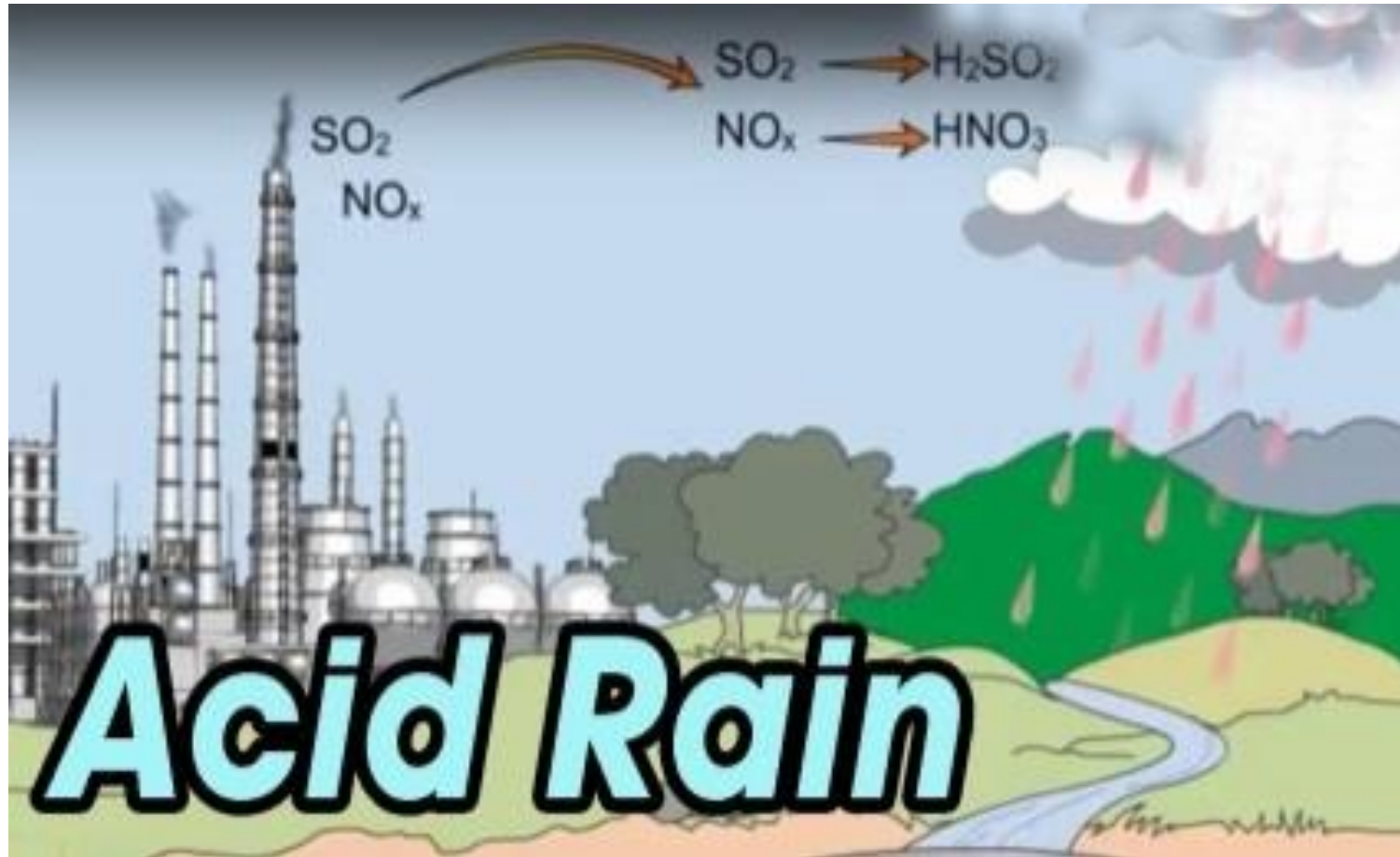
VOLCANIC DEPOSITION



MOVEMENT OF SAND BY WIND



ACID RAIN causes more weathering than normal rain water.



GRAND CANYON is a good example of erosion by water.

SEDIMENTARY
ROCK forms
when
deposited
sand and
minerals
harden over



EROSION caused by GLACIAL MOVEMENT.



What is causing these rocks to erode?



What are the classes of rocks?



Sedimentary

- Formed when the weight from above presses down on the layers of minerals or sediments.
- When minerals dissolve in water solidify between sediments and cement them together.

Igneous rock must first be broken down before it turns into sedimentary rock.

11. Shale



10. Slate



Igneous

- Forms when lava or magma cools and becomes solid.
- The longer the cooling process the larger the crystals.
- Intrusive rock forms beneath the Earth's surface; Extrusive rock forms on the Earth's surface.

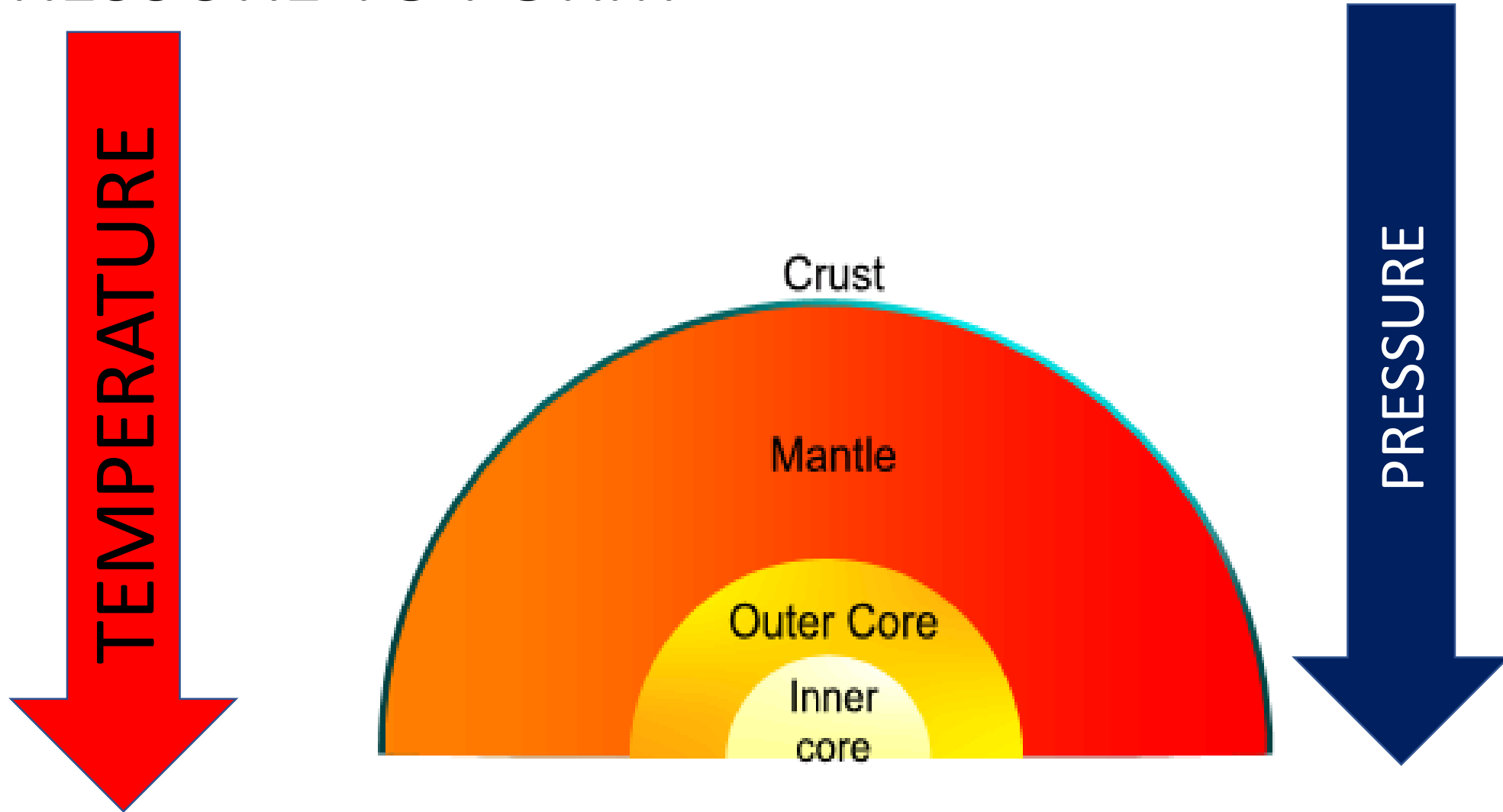
5. Basalt



8. Obsidian



METAMORPHIC ROCK NEEDS HEAT AND PRESSURE TO FORM



Metamorphic Rock

- Forms when high temperatures and pressure change the texture and mineral content of rock.

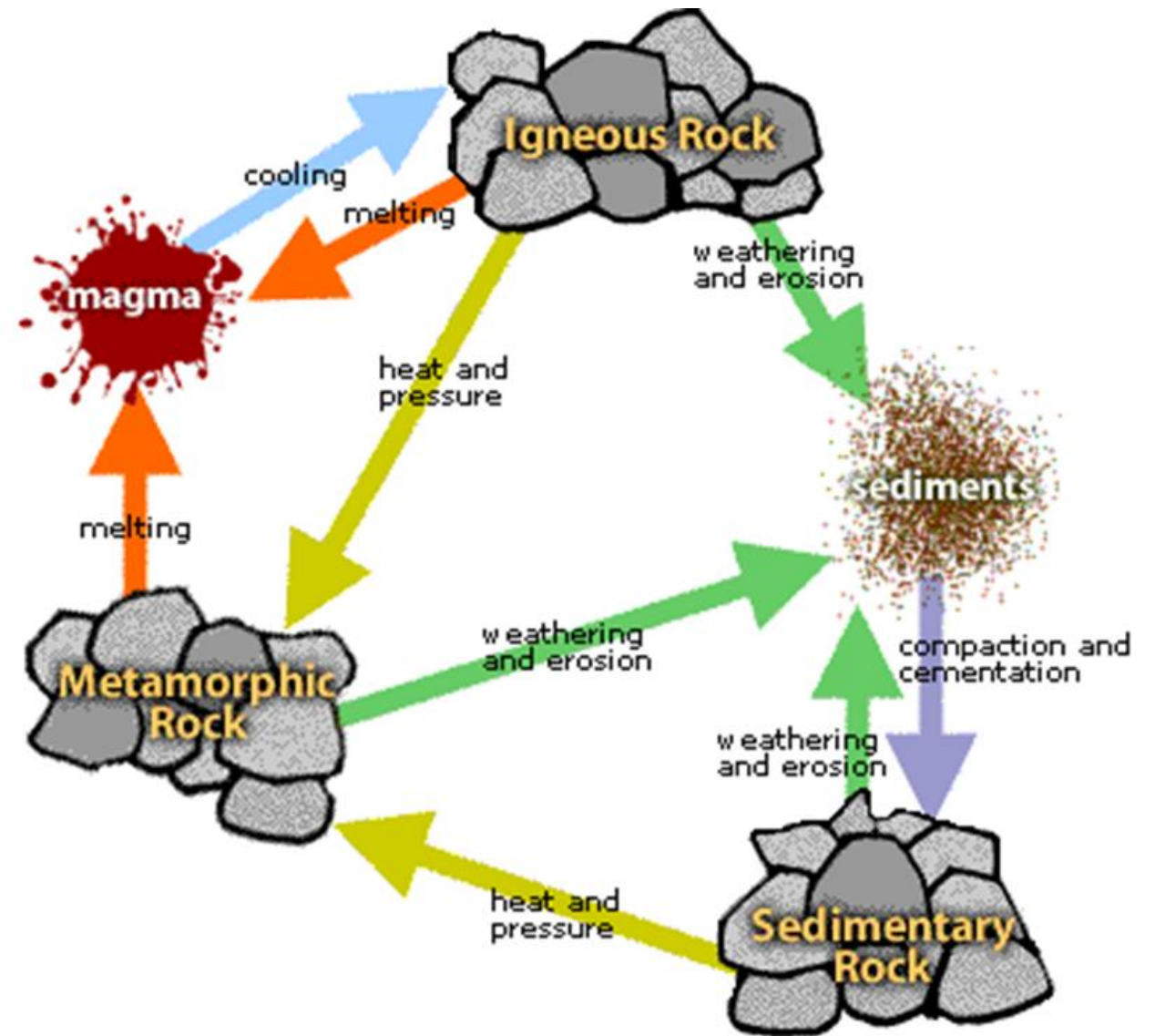
6. Gneiss



13. Marble



What is the rock cycle?



How do tectonic plate motion affect the rock cycle?

- Uplift – the rising of regions of the crust to higher elevations
- Subsidence- the sinking of regions of the crust to lower elevations.

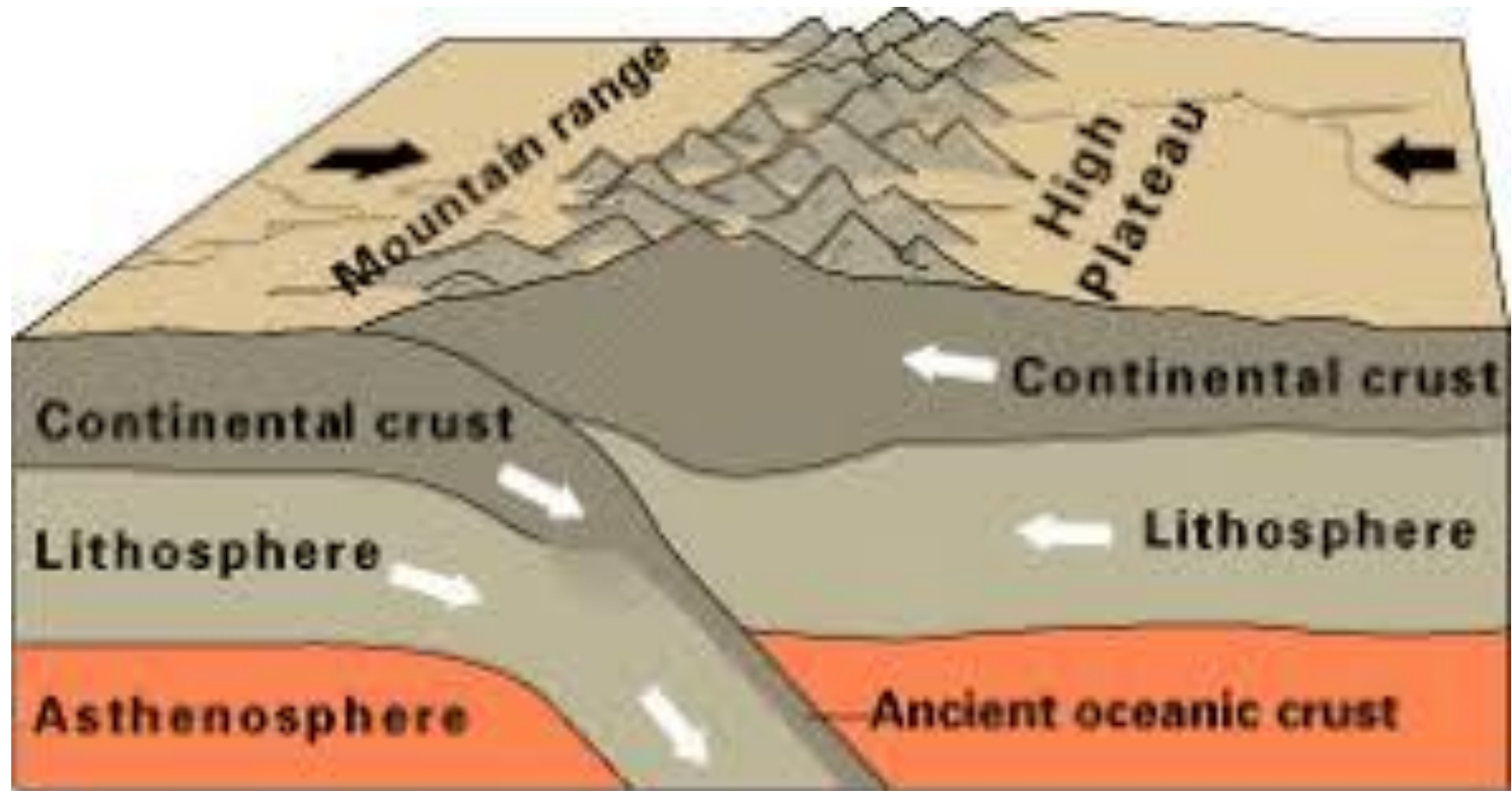


Uplift- Mountain
formation

Subsidence

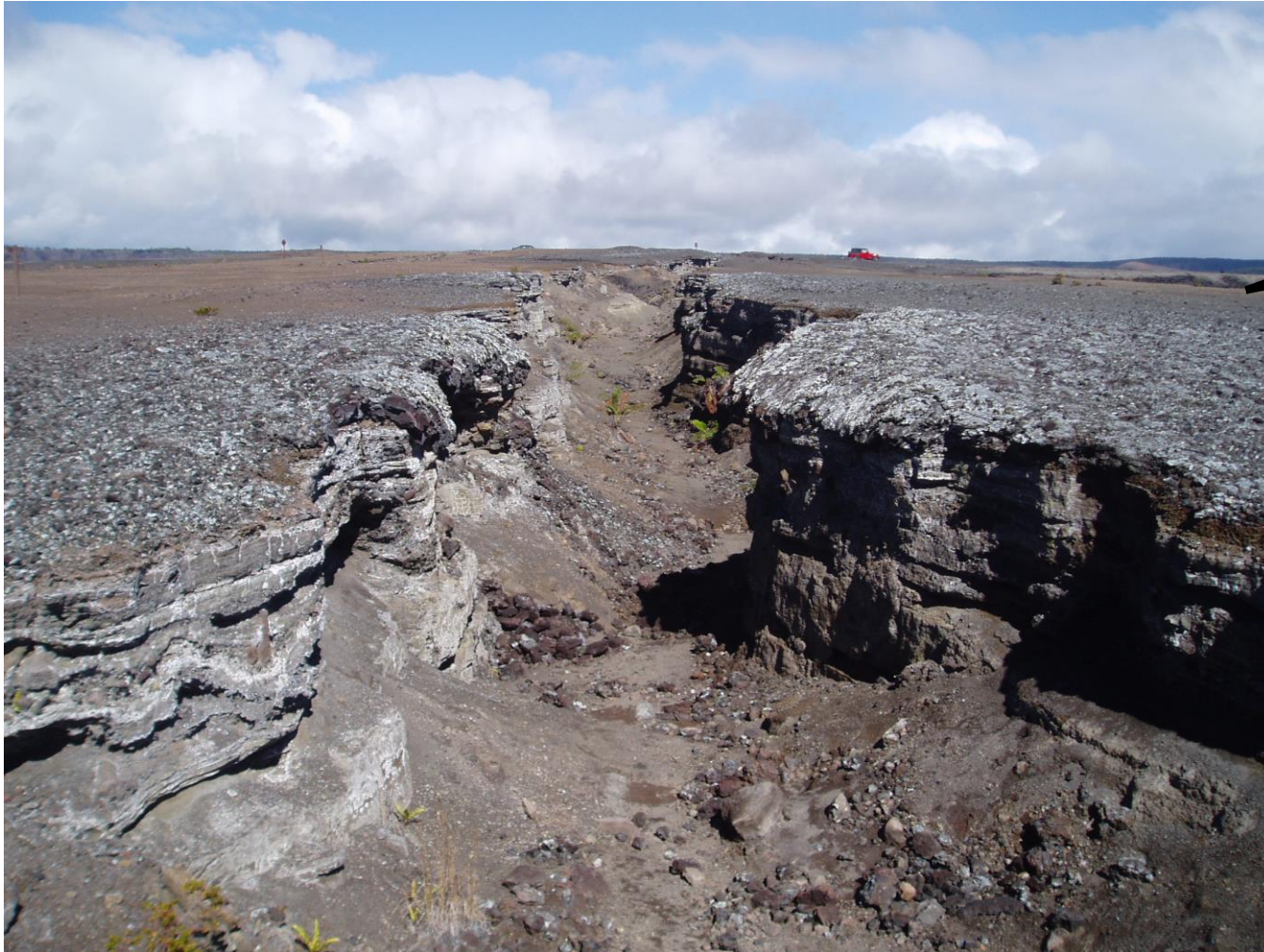


MOUNTAIN FORMATION



Continental-continental convergence

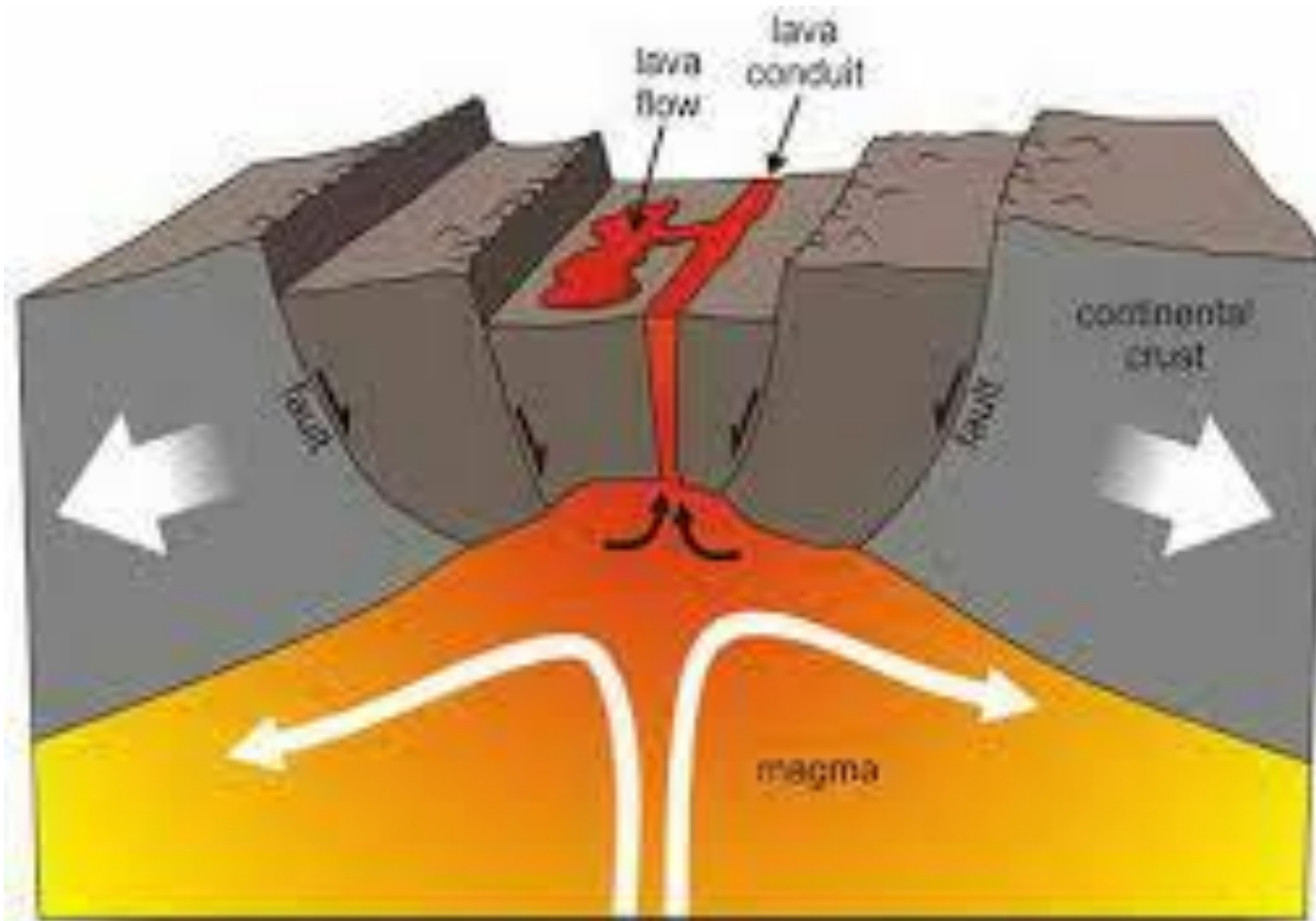
Pulling apart Earth's surface



RIFT
ZONES



RIFT ZONE



When rocks melt it becomes MAGMA

