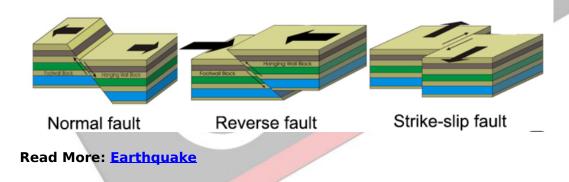


Denali Fault

A new research has revealed the origins of the **Denali Fault**, the <u>tectonic boundary</u> that gave rise to **Denali mountain in Alaska**, North America's highest mountain.

- The **Denali fault** was formed from the **collision** of an **oceanic plate** called the **Wrangellia Composite Terrane with the <u>North American plate</u>** between **72 million and 56 million years ago.**
 - The study also found evidence of inverted <u>metamorphism</u>, where high-pressure rocks are positioned above low-pressure ones due to tectonic activity.
- About Fault: Fault or crack gives rise to Block mountains. E.g., <u>Satpura and Vindhya</u> mountains.
 - Block mountains are formed when large areas of land are broken and displaced vertically. They are also known as fault-block mountains.
- Types of Fault:
 - Strike-Slip Faults: These faults occur when tectonic plates slide horizontally with minimal vertical movement. E.g., Denali Fault.
 - Normal Faults: These faults occur when one rock block slides downward, separating from the adjacent block. E.g., East African Rift Valley.
 - Reverse Faults (Thrust Faults): These faults occur when the upper block moves up and over the lower block.



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