**Faults**

**The Creation of Faults:**

**Fault:** A straight fracture with displacement

**Joint:** A straight fracture without displacement

Faults are created when stress acts on brittle material. They are classified depending on the type of movement which depends on the stress caused by the type of plate boundary nearby.

**Divergent Boundaries:**

Type of stress present: tension

Type of fault created: Normal

Diagram:

Near divergent boundaries crustal rock thins

**Convergent Boundaries:**

Type of stress present: compression

Type of fault created: reverse (more vertical) or thrust (less vertical)

Diagram:

Near convergent boundaries crustal rock thickens

**Transform Boundaries:**

Type of stress present: shear

Type of fault created: transform

Diagram: (map view)

|  |  |
| --- | --- |
| **Left lateral** | **Right lateral** |

Imagine looking at the fault which way is the other side moving

**Putting together:**

The strike tells us about horizontal behavior (what’s going on at the surface)

The dip tells us about vertical behavior (what’s going on below the surface)

For this reason:

Transform faults are called strike slip faults

Normal, reverse and thrust faults are called dip slip faults