

## Convergent Boundaries

- **Definition:**
  - Where two plates come together (converge) and the leading edge of one plate subducts below the other.

## Convergent Boundaries

- **Types and What happens**
  - C-C: Two continental crusts collide with each other, creating mountain ranges.
  - C-O: Oceanic crust subducts under the continental crust. This forms continental volcanic arc on land, and an ocean trench.
  - O-O: Denser, older oceanic crust subducts below the less dense, younger oceanic crust. This forms a volcanic island arc and an ocean trench.

## Convergent Boundaries

- **Constructive Effects:**
  - New land is formed by volcanoes.
- **Destructive Effects:**
  - Oceanic crust is destroyed as it is subducted.

## Convergent Boundaries

- **Are convergent boundaries primarily constructive or destructive?**
  - They are primarily destructive because most of the oceanic crust is subducted.

## Divergent Boundaries

- **Definition**
  - A location where two plates move away (diverge) from each other. New crust is formed.

## Divergent Boundaries

- **Types and What Happens:**
  - C-C: Two continental crusts spread apart from rising magma. The land above sinks, forming a rift valley. The crust begins expanding as new continental crust is created. Volcanoes appear. A linear sea can form in the valley.
  - O-O: Two oceanic crusts spread apart, creating an oceanic ridge. This is caused by rising, cooling magma.

## Divergent Boundary

- **Constructive Effects:**
  - New crust is formed.
- **Destructive Effects:**
  - None.

## Transform Boundaries

- **Definition:**
  - A location where two plates slide/grind past each other.

## Transform Boundaries

- **Types and What Happens**
  - C-C: Plates grind past each other. Form ridges and faults.
  - O-O: Plates grind past each other. Form ridges and faults.

## Transform Boundaries

- **Constructive Effects:**
  - None.
- **Destructive Effects:**
  - None.

## Review (pp. 5-6)

- **1. Name the type of boundary that matches each alternative name.**
  - Subduction zone: Convergent.
  - Spreading Center: Divergent
  - Fault Boundary: Transform

## Review (pp. 5-6)

- **Name the type of convergent boundary shown.**
  - A: Convergent Continental-Continental
  - B: Convergent Oceanic-Oceanic
  - C: Convergent Oceanic-Continental

## Review (pp. 5-6)

Boundary type	Location:	Results in:
Divergent	in ocean	Oceanic Ridge
	on land	Cont. Rift Valley
Convergent	oceanic-continental	Cont. Volcanic Arc
	oceanic-oceanic	Volcanic Island Arc
	continental-continental	Mountain Belt
Transform	in ocean	Offset in Ridge
	on land	Fault on Land

## Review (pp. 5-6)

- **4. At divergent plate boundaries...**
  - B. new seafloor is created.
- **5. At convergent plate boundaries...**
  - A. old seafloor is destroyed.
- **6. At transform plate (fault) boundaries...**
  - C. seafloor is neither created nor destroyed.