



Section 10.1: The Earth's Structure and Composition

Section 10.2: Plate Tectonics



The Earth's interior is divided into several layers based on composition and mechanical behavior. The outermost layer is the crust, followed by the mantle, and the innermost is the core. The mantle is further divided into the upper mantle and the lower mantle. The core is divided into the liquid outer core and the solid inner core.

Plate tectonics is the theory that describes the movement of the Earth's lithosphere. The lithosphere is the rigid upper part of the Earth, consisting of the crust and the upper mantle. The lithosphere is broken into tectonic plates that move relative to each other.

Plate	Direction	Speed	Notes
North American	Westward	~1 cm/yr	Passing under the Pacific Plate
South American	Westward	~1 cm/yr	Passing under the African Plate
African	Northward	~1 cm/yr	Passing under the South American Plate
Indian	Northward	~1 cm/yr	Passing under the Australian Plate
Australian	Northward	~1 cm/yr	Passing under the Pacific Plate
Pacific	Westward	~1 cm/yr	Subducting under the North American Plate
Antarctic	Southward	~1 cm/yr	Subducting under the Australian Plate

The movement of tectonic plates is driven by convection currents in the mantle. These currents are caused by the uneven heating of the mantle, with the hottest material rising and the coolest material sinking.

# STATISTICAL ANALYSIS







# STUDYING WITH A GRAPHING CALCULATOR



Date	Description
1998-01-01	Initial setup and data collection.
1998-02-01	First major update to the system.
1998-03-01	Second major update and testing phase.
1998-04-01	Final review and deployment.
1998-05-01	Post-deployment monitoring and feedback.