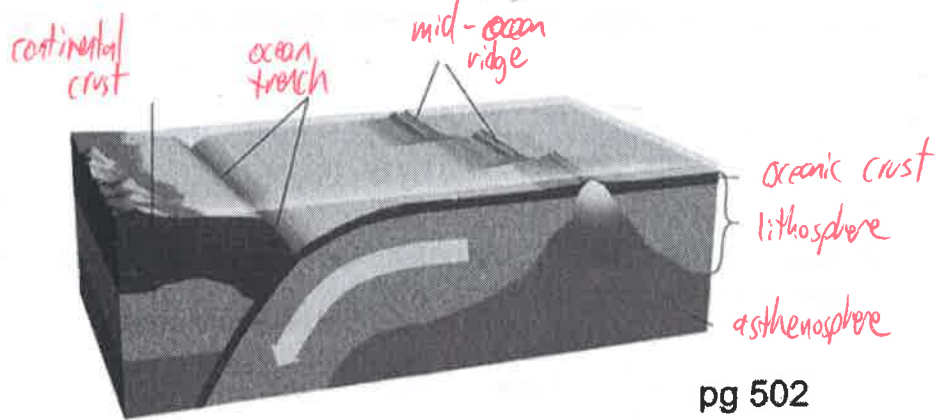


Warm up: Describe Continental Drift Theory and provide supporting evidence

Study Notes/Questions

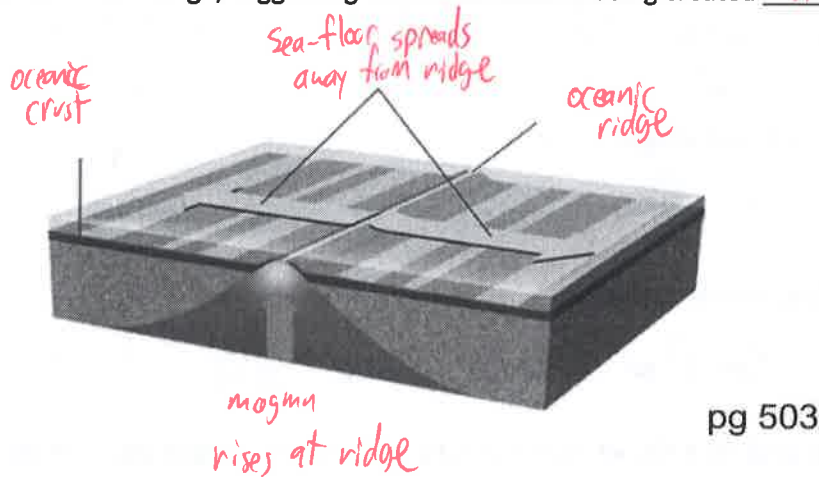
New technology available after WW II

Sea-Floor Spreading occurs at mid-ocean ridges and subduction occurs at deep ocean trenches



Radioactive dating of core samples confirmed evidence that the sea floor is older the further it is from the ridges

Magnetic striping (magnetic reversal) patterns in sea floor rock are similar on both sides of an oceanic ridge, suggesting new ocean floor is being created at the ridge



Self-Reflection Questions:

1. Describe one thing that you knew about this topic before today.
2. Describe one thing you learned about this topic today.

# 17.4 Theory of Plate Tectonics

Study Notes/Questions

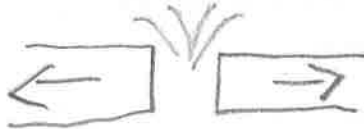
The theory of plate tectonics states that the lithosphere is divided into 12 large sections (plates) and about 20 smaller ones.

Three types of boundaries exist where tectonic plates meet.

These create Earth's geological features and events.

## Divergent Boundaries

Ridges, rifts, volcanoes and earthquakes are created at **divergent boundaries**, where plates are moving away from each other.



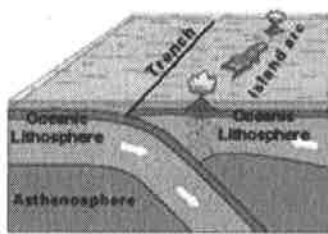
## Convergent Boundaries

At **convergent boundaries** (where plates move toward each other), we find mountains, trenches, subduction zones, earthquakes, volcanoes depending on the types of plates involved.

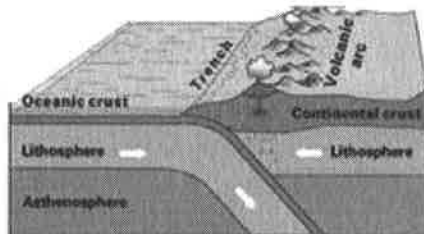


**Subduction Zone:** Areas where one plate is being pushed under another (large density plate goes under smaller density plate)

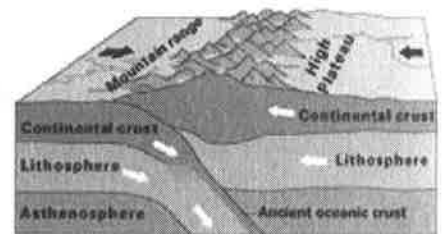
### Types of Converging Boundaries



oceanic - oceanic



continental - continental



continental - oceanic

## Transform Boundaries

Earthquakes and strike-slip faults are created along **transform boundaries**, where plates move past each other in opposite directions.

