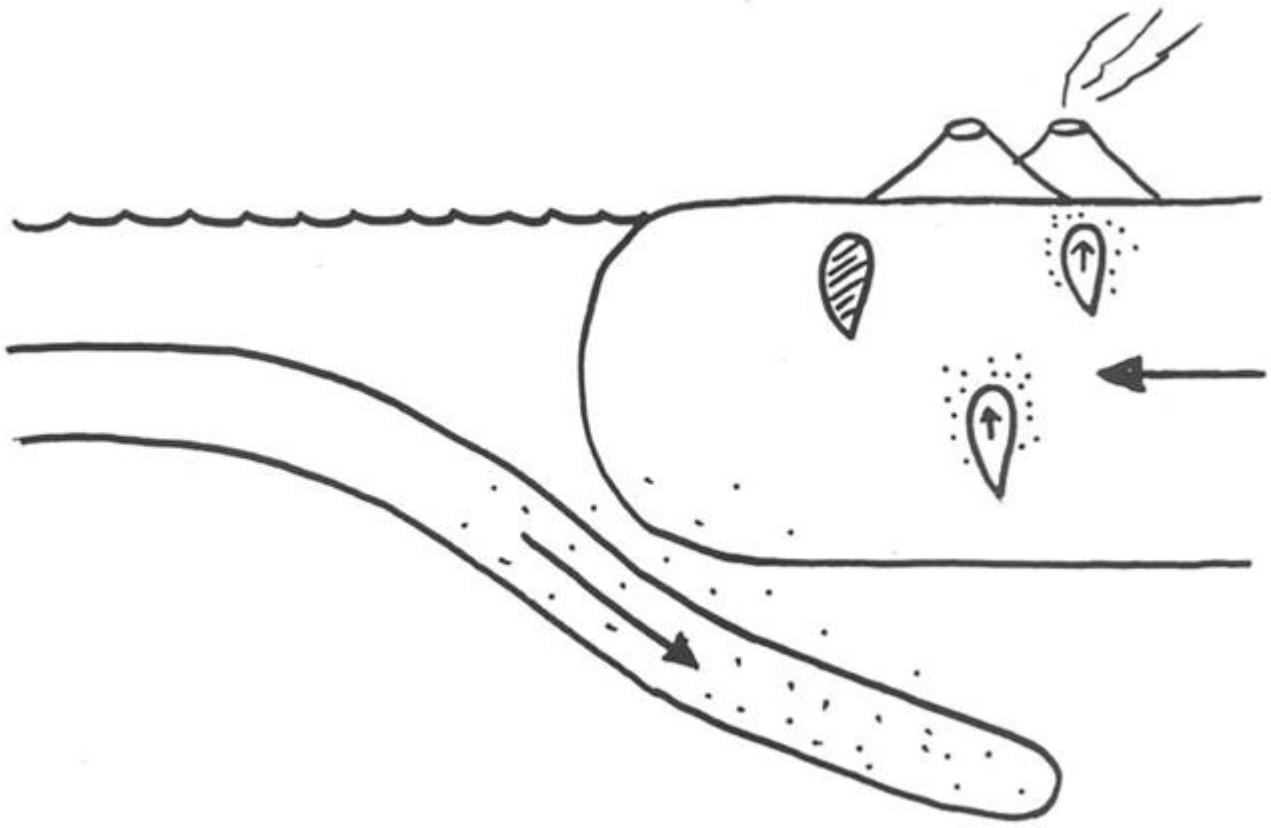
Using Easy-to-Draw Illustrations to Teach About Plate Tectonics



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Teaching Plate Tectonics
with Easy-to-Draw Illustrations

Next time you teach plate tectonics, consider a draw-with-me presentation that will engage your students and help them understand the spatial and movement aspects of plate boundary environments.

The process of drawing a picture involves students much more deeply than reading or discussion. This is because drawings give students an opportunity to visualize sizes, shapes, motions, and spatial relationships. Important facts can be added through annotations and captions.

Many students find a draw-with-me presentation an enjoyable experience. Drawing enhances their learning, understanding, and retention processes. And, at the end of the class session, they have a set of illustrations that can be used for study, reference, and communication purposes.

I have used the illustrations in this booklet, with only minor modifications, to lead students from primary grades through graduate school in lessons about plate movements, volcanoes, earthquakes, and the rock cycle. When time allows, I always opt to draw these illustrations step-by-step with my students. It's fun that way!

When time is short, presenting the illustrations on an overhead projector can be a good alternative, especially if your students have photocopies of the illustrations to which they can add important details and annotations.

Please feel free to use the illustrations here in any way that will enhance your teaching. And, if you have time, draw them once for me.

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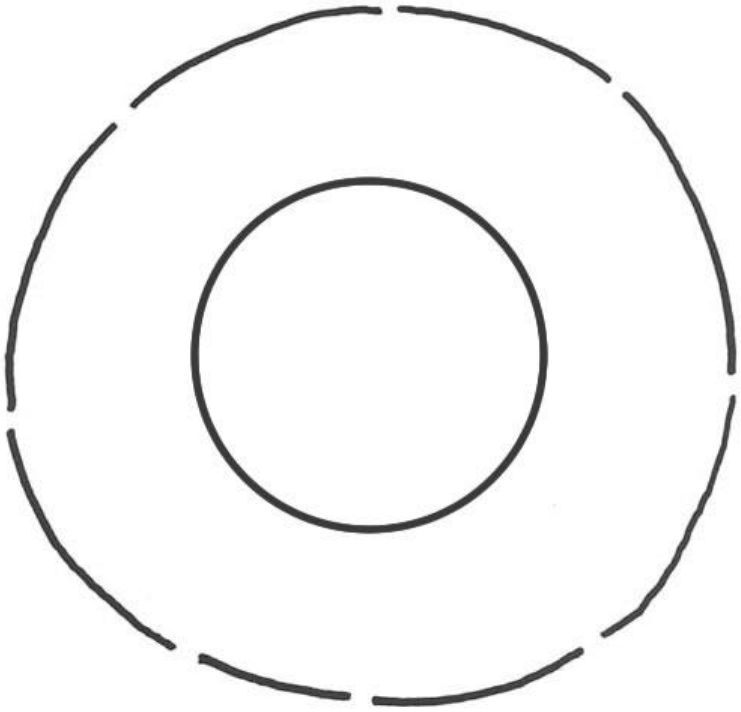
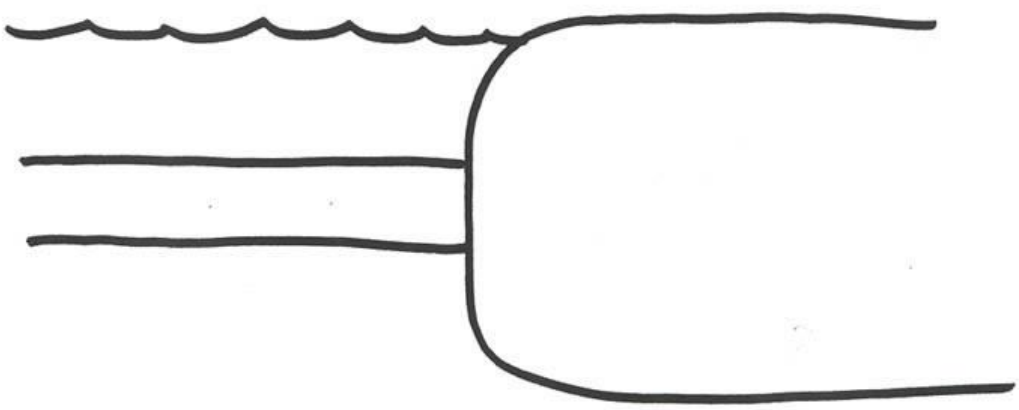
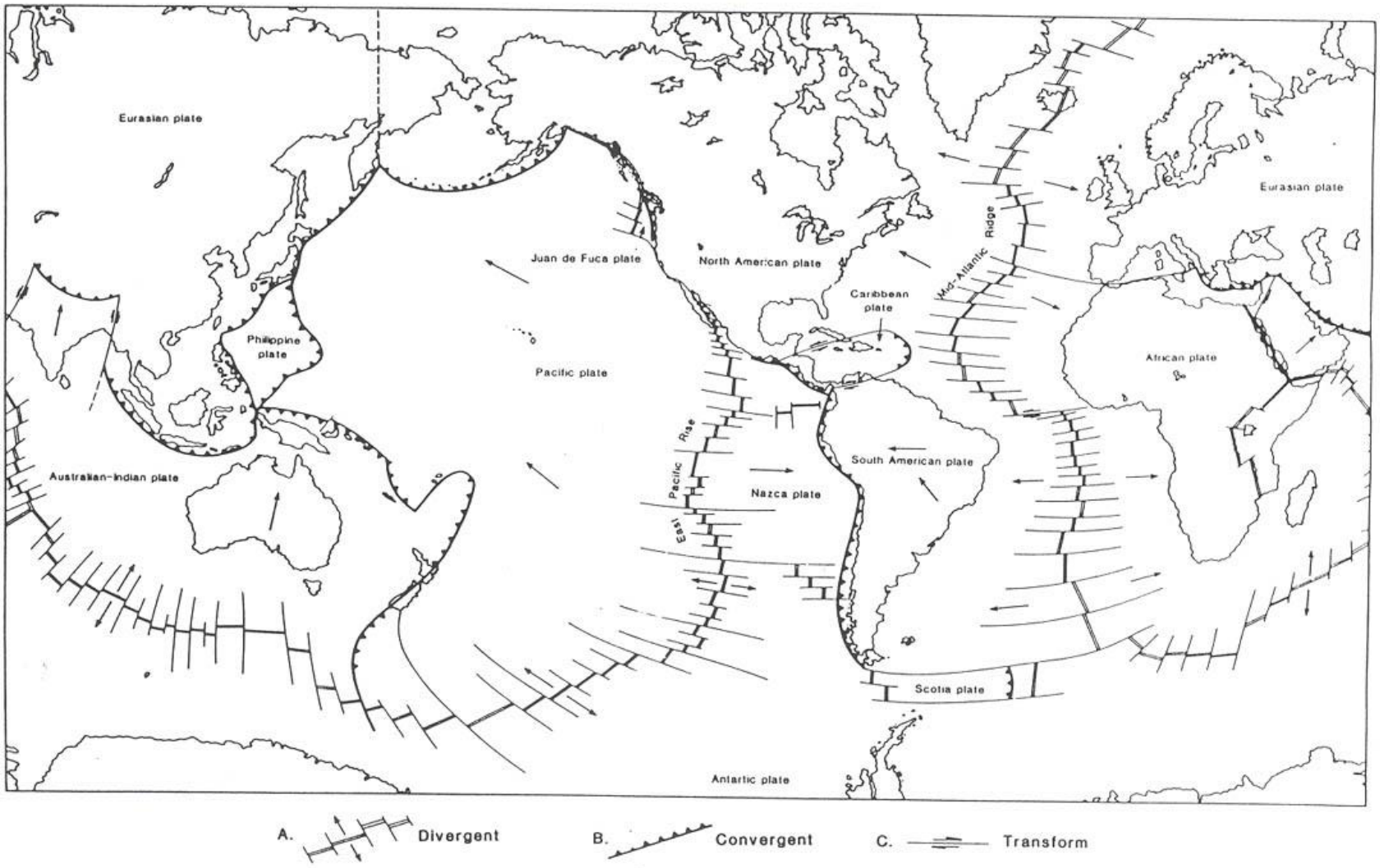
LITHOSPHERIC PLATES



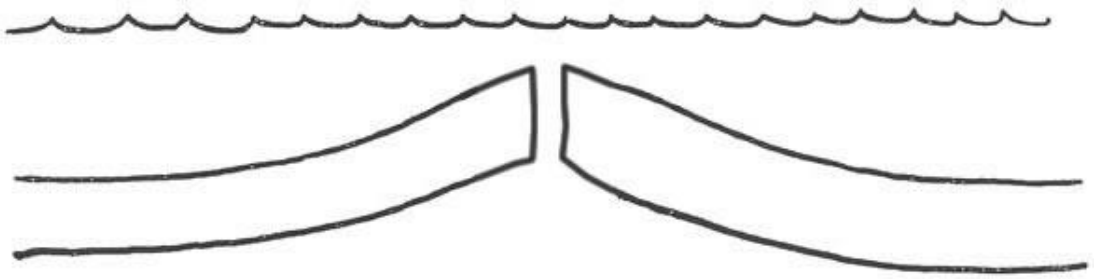
TWO TYPES OF CRUST




Eurasian plate
Juan de Fuca plate
North American plate
Mid-Atlantic Ridge
Eurasian plate
Caribbean plate
Philippine plate
Pacific plate
African plate
East Pacific Rise
South American plate
Australian-Indian plate
Nazca plate
Scotia plate
Antartic plate
A. Divergent
B. Convergent
C. Transform

Divergent Boundary – Oceanic

Example:



Effects:

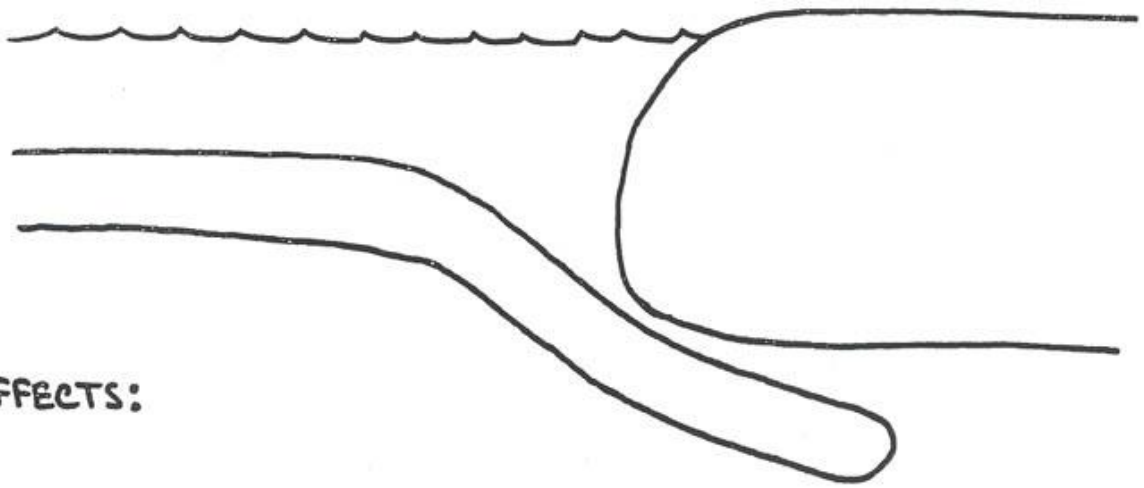
Divergent Boundary – Continental

Example:

Effects:

CONVERGENT BOUNDARY – OCEANIC / CONTINENTAL

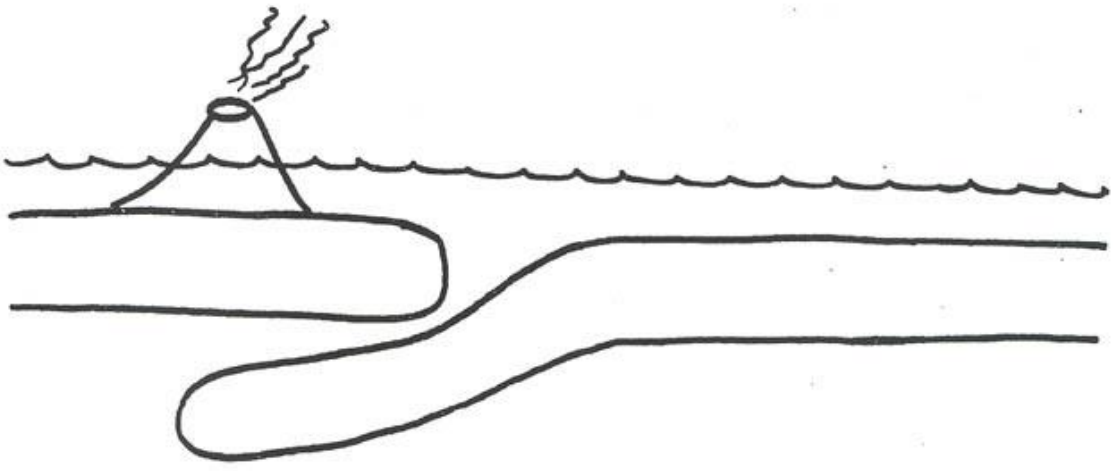
EXAMPLE:



EFFECTS:

CONVERGENT BOUNDARY – OCEANIC / OCEANIC

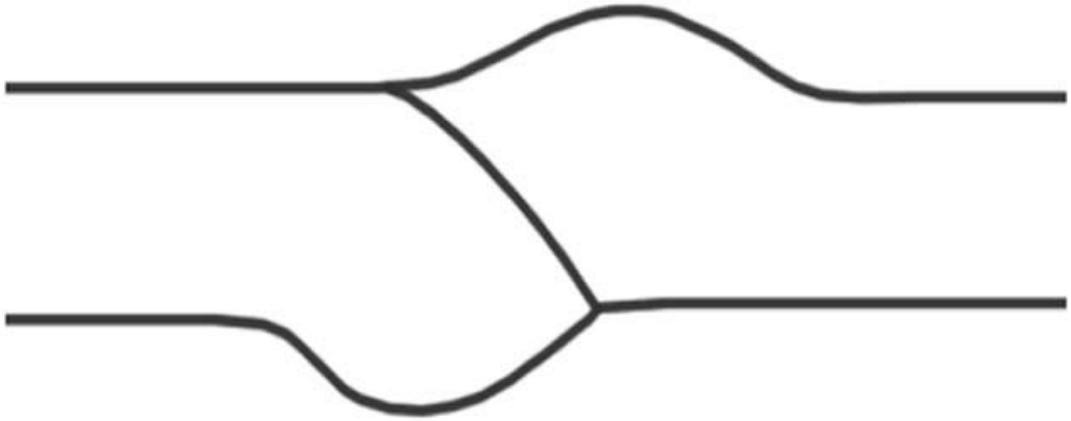
EXAMPLE:



EFFECTS:

CONVERGENT BOUNDARY - CONTINENT / CONTINENT

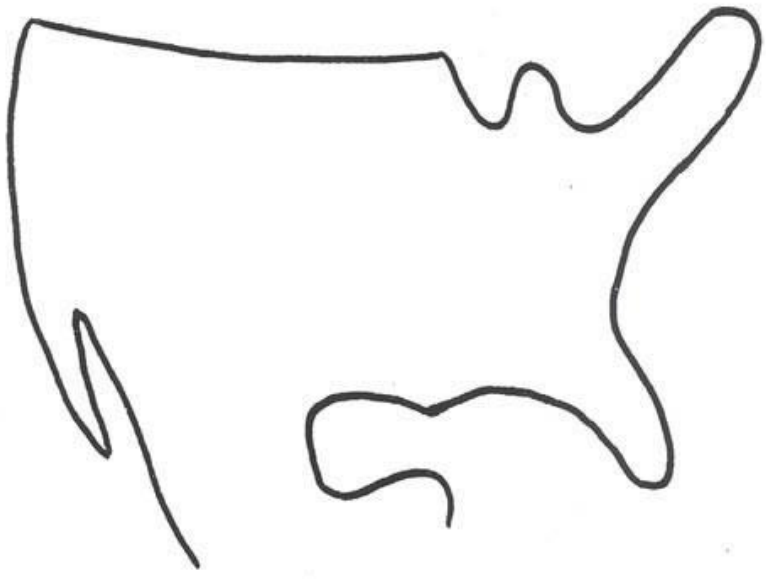
EXAMPLE:



EFFECTS:

TRANSFORM BOUNDARY - CONTINENTAL

EXAMPLE:



EFFECTS: