

You will be given a map showing the tectonic plates of the Earth's surface. Do the following:

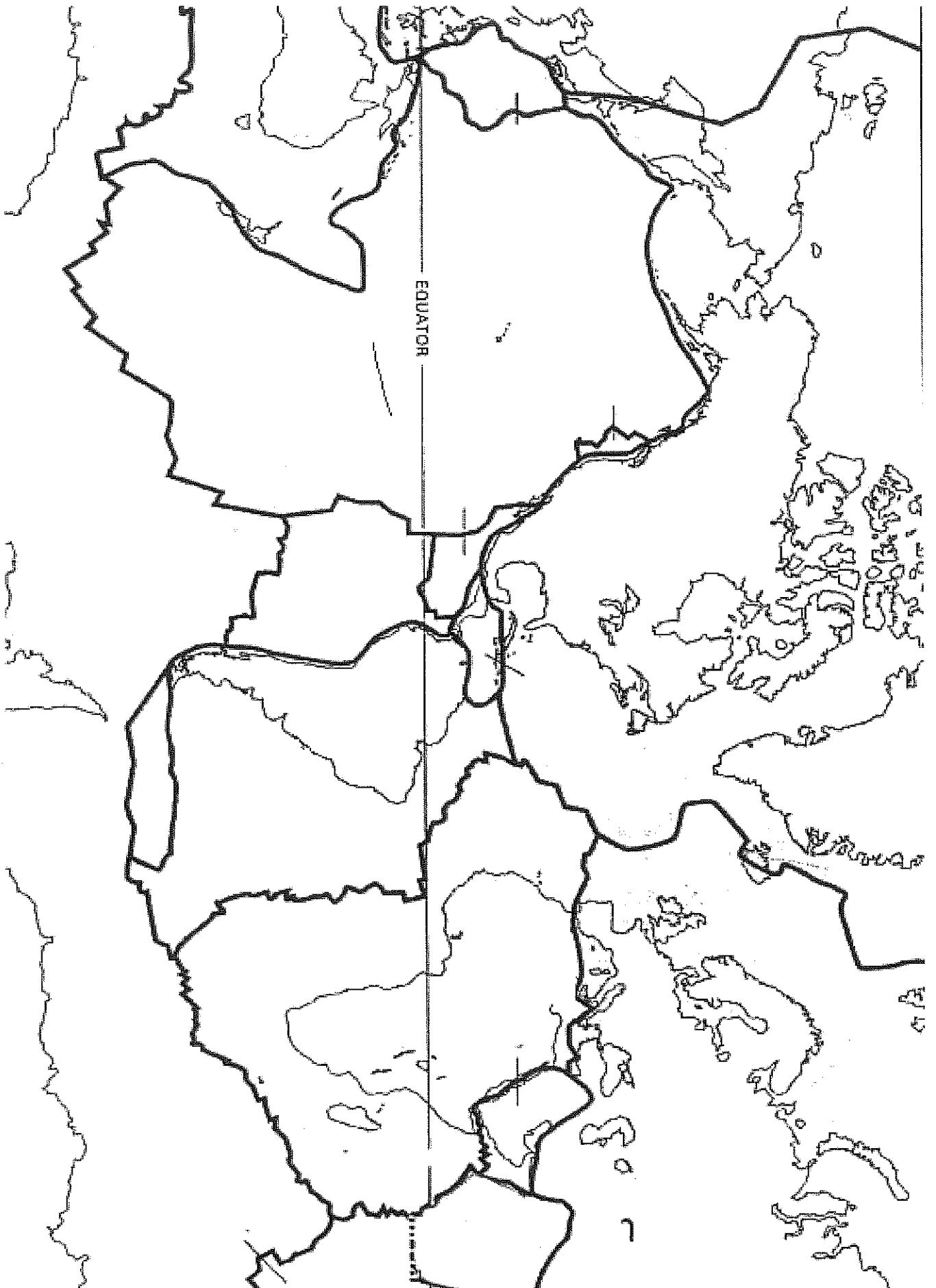
1. Color the land **green**
2. Color the water **blue**
3. Circle the "Ring of Fire" in red
4. Find and label Hawaii
5. Find and label the following tectonic plates:

- African Plate
- Antarctic Plate
- Arabian Plate
- Australian Plate
- Caribbean Plate
- Cocos Plate
- Eurasian Plate
- Indian Plate
- Juan de Fuca Plate
- Nazca Plate
- North American Plate
- Pacific Plate
- Philippine Plate
- Scotia Plate
- South American Plate

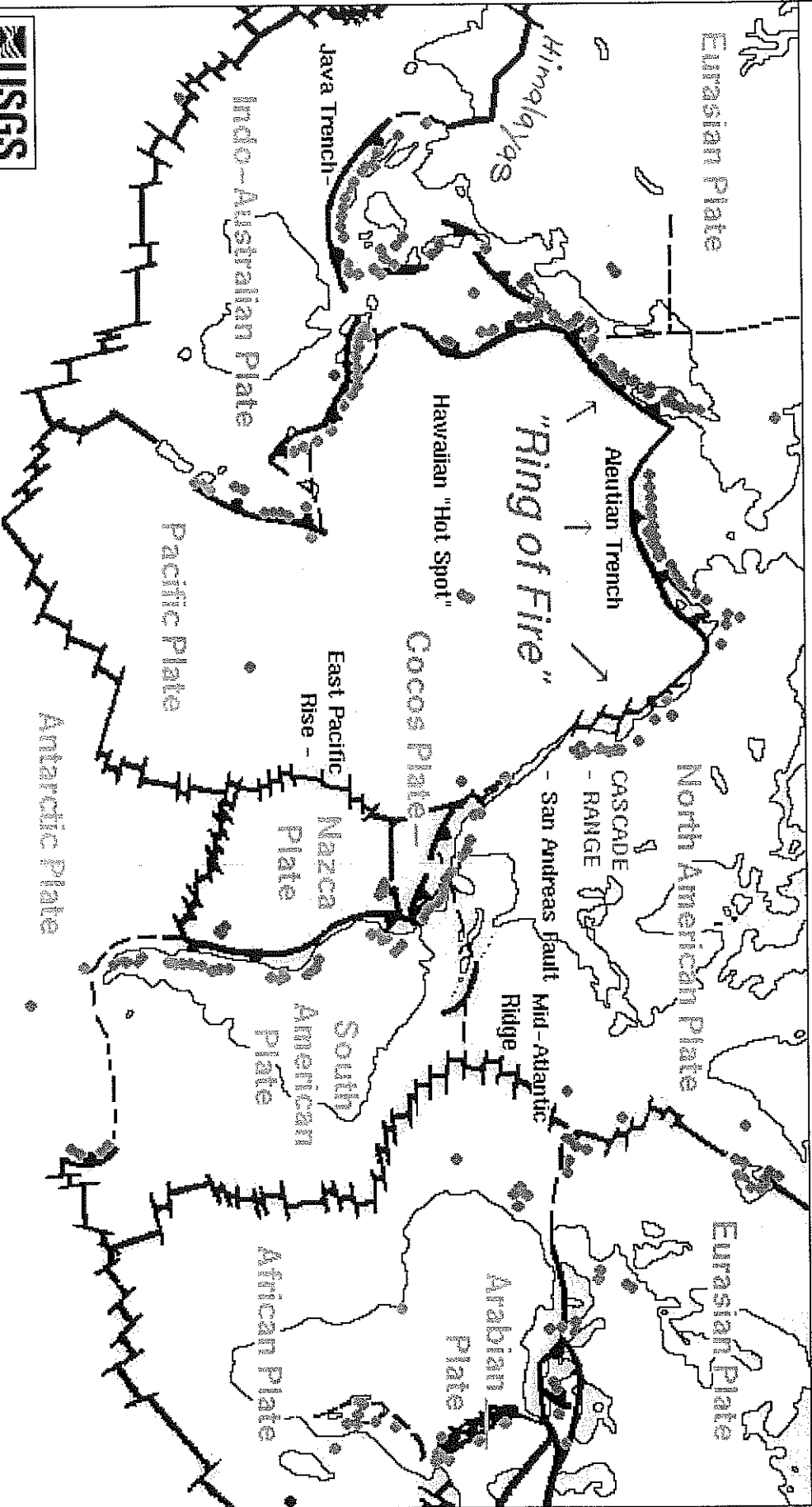
6. Find and label the following landforms:

- Hawaiian Hot-Spot
- Cascade Range
- San Andreas Fault
- Mid-Atlantic Ridge
- Aleutian Trench
- Himalayan Mountains
- Java Trench

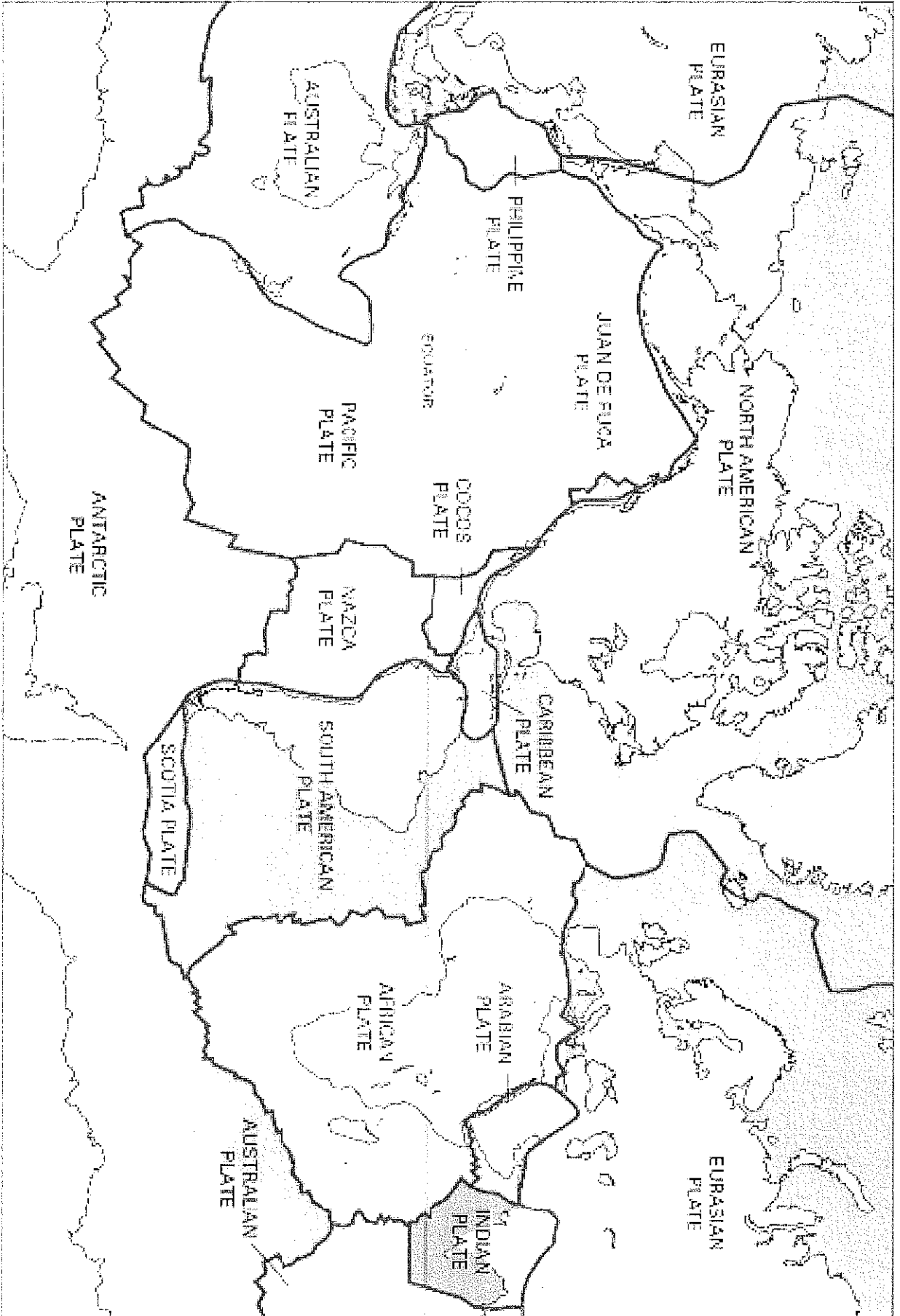
7. Draw arrows on your map showing the direction of movement for each plate.
8. Add your earthquake and volcano plotting locations to your Tectonic Plates Map.
9. Title it "Tectonic Plates and Landforms" at the top in the middle.
10. Complete your response questions in your journal using complete sentences.

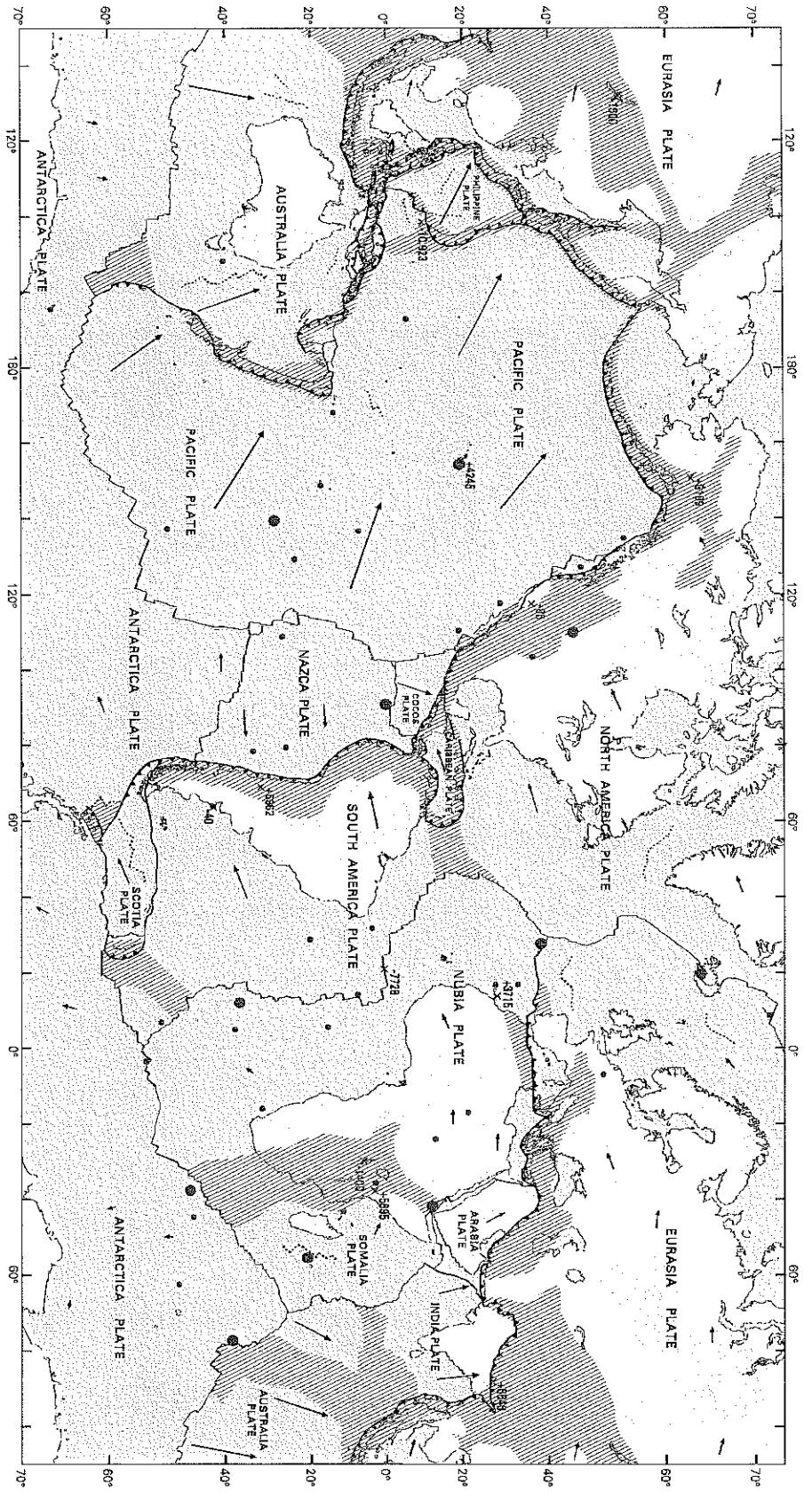


Active Volcanoes, Plate Tectonics, and the "Ring of Fire"



Topinka, USGS/CIVD, 1997, Modified from: Tillig, Heikler, and Wright, 1987, and Hamilton, 1976





INTERPRETIVE MAP OF PLATE TECTONICS

- Divergent plate boundary—Where new crust is generated as the plates pull away from each other
- Convergent plate boundary—Where crust is recycled as one plate dives under another (in the direction shown by sawteeth)
- Transform plate boundary—Where crust is neither produced nor consumed as plates slide horizontally past each other
- Selected fossil boundary—Former plate boundary, now inactive; evidence that plate boundaries are not permanent
- Diffuse boundary zone—Broad belt in which deformation occurs over a wide region (from Gordon, 2000); may encompass one or more smaller plates
- Selected hotspots—Larger symbol indicates major hotspot; smaller symbol indicates minor hotspot
- Plate motion—Length of arrow is roughly proportional to the rate of plate motion (longer=faster; see main map for details)
- ▲ Elevation—Highest (+) and lowest (-) points, in meters, on four largest continents and in two oceans



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