

# Physical Geography of Southeast Asia

Creating an Annotated Sketch Map of Southeast Asia

By Michelle Crane

Teacher Consultant for the Texas Alliance for Geographic Education





## Guiding Question (5 min.)

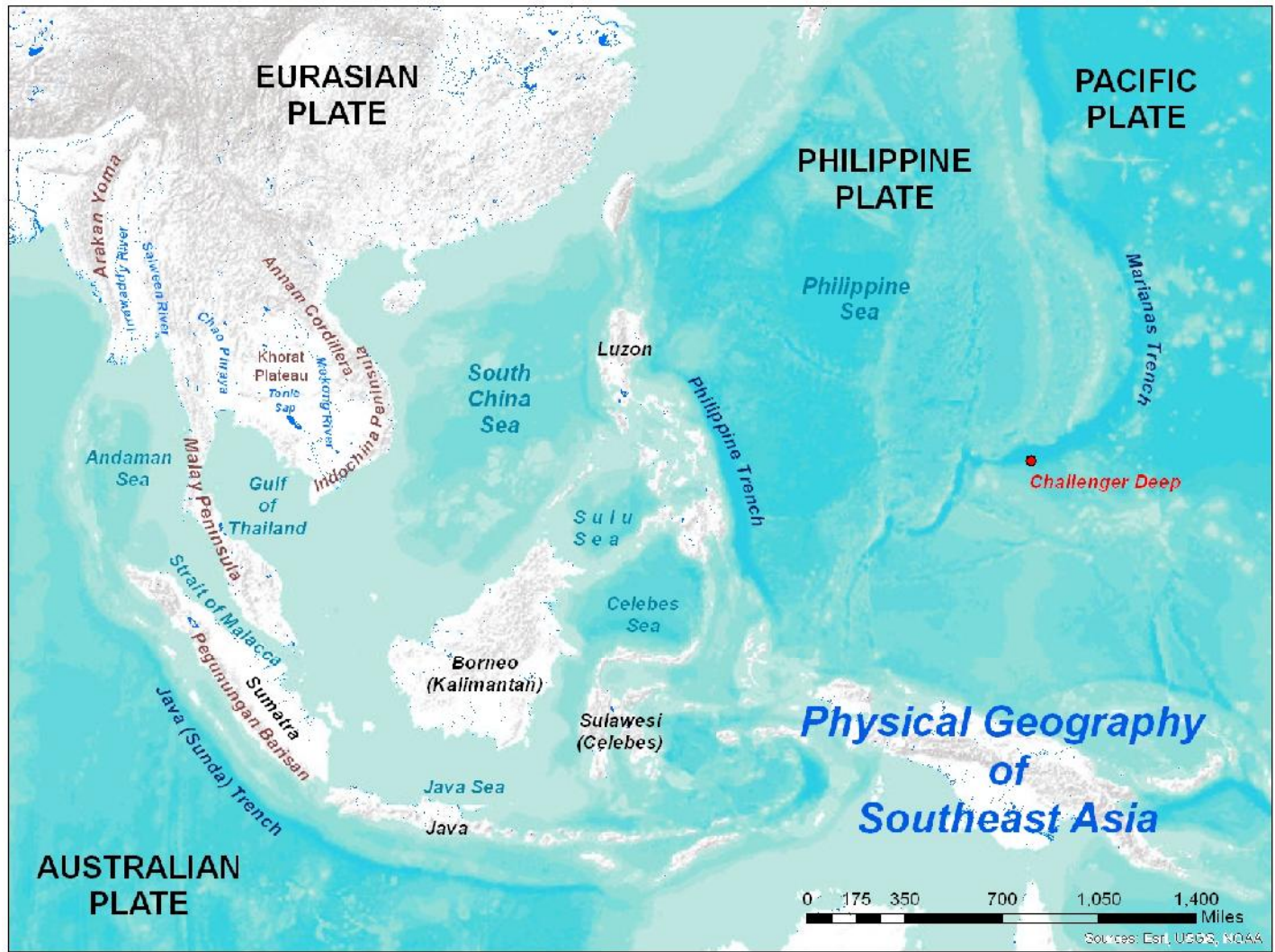
- What processes are responsible for the creation and distribution of the landforms and climates found in Southeast Asia?





## Draw a sketch map (10 min.)

- This should be a general sketch
  - do not try to make your map exactly match the book.
- Just draw the outline of the region
  - do not add any features at this time.
- Use a regular pencil first, so you can erase.
- Once you are done, trace over it with a black colored pencil.
- Leave a 1" border around your page.





Looking at your outline map, what two landforms do you see that seem to dominate this region?

Predict how these two landforms would affect the people who live in this region?



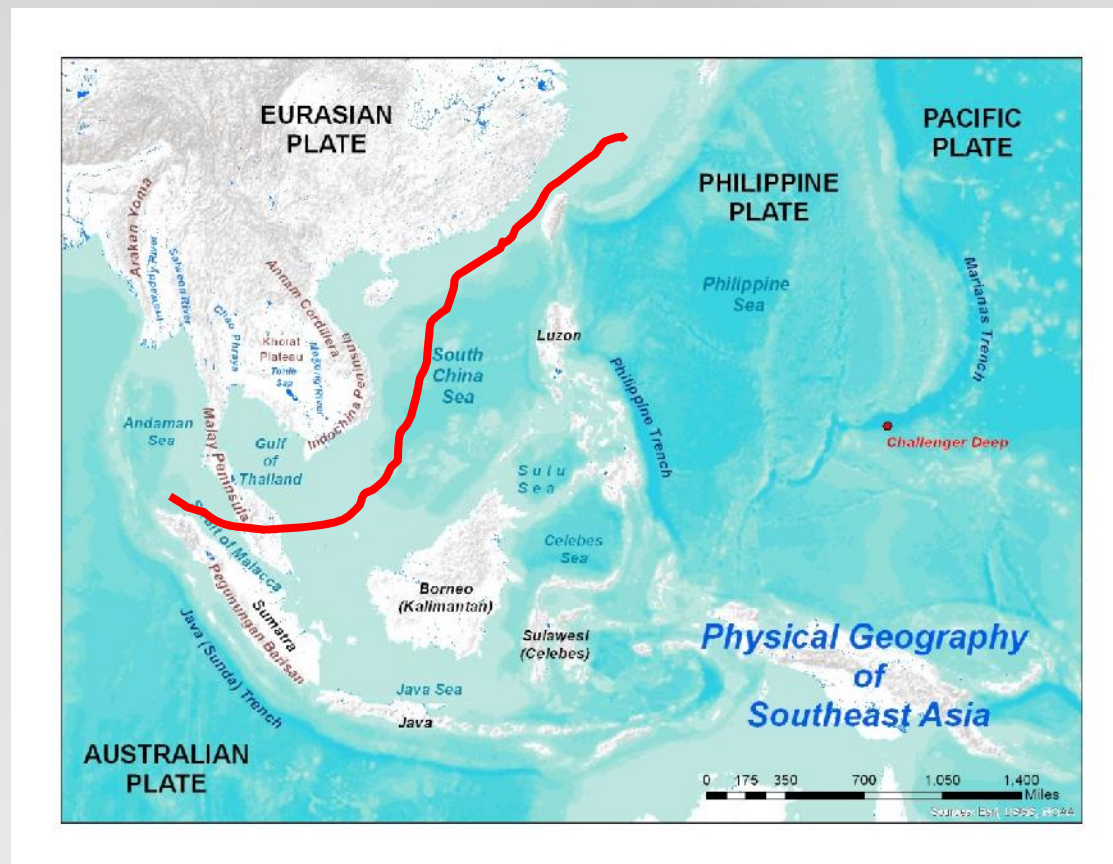


# Peninsulas & Islands

- **Mainland** SE Asia consists of two large **peninsulas**
  - Malay Peninsula
  - Indochina Peninsula
- Label these peninsulas in **brown**
- **Insular** SE Asia consists of thousands of islands
- Label these islands in **black**:
  - Sumatra
  - Java
  - Sulawesi (Celebes)
  - Borneo (Kalimantan)
  - Luzon



Draw a line on your map to indicate the division between insular and mainland SE Asia.





# Mountains & Plateaus

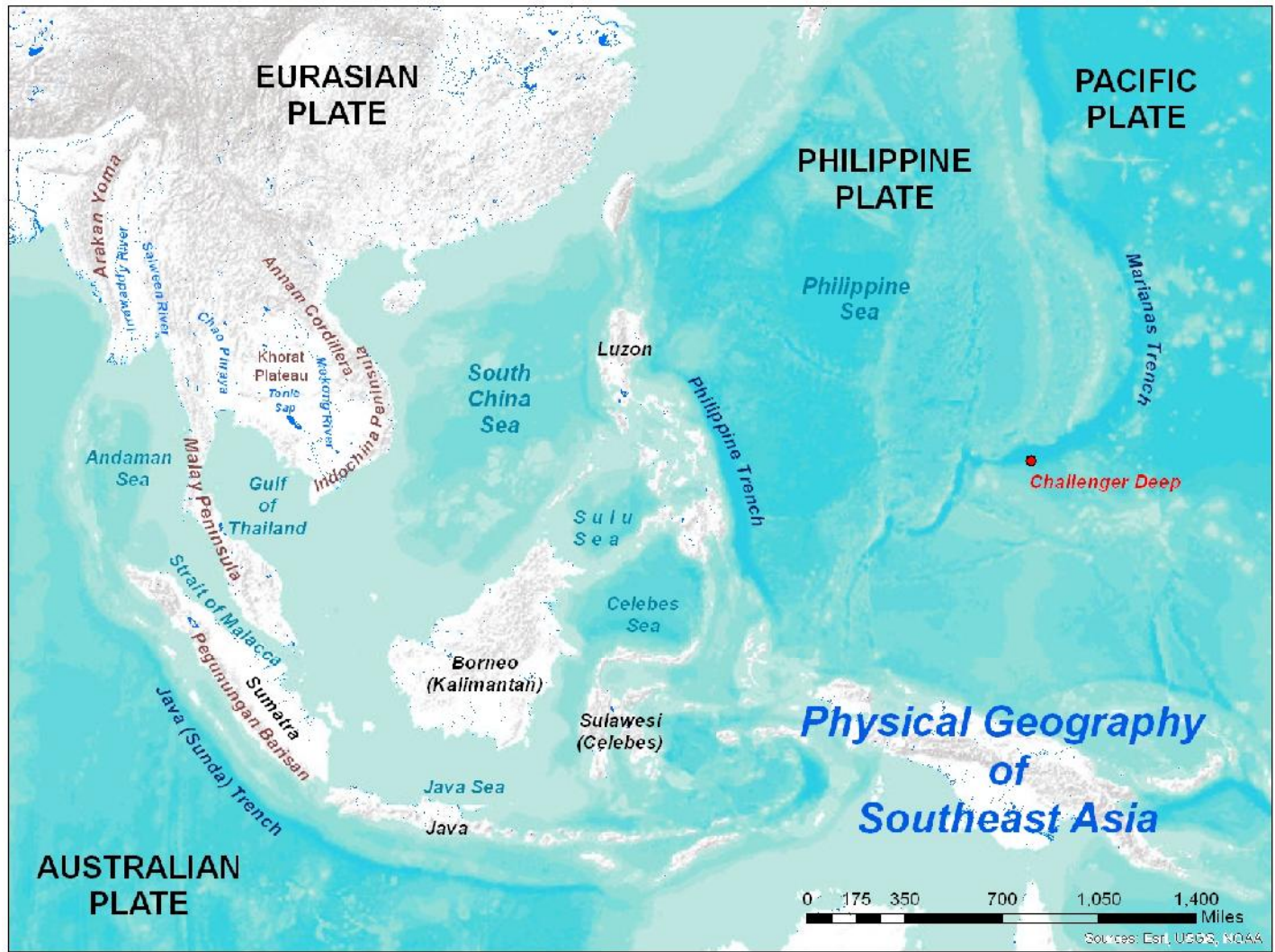
- **Mainland** ranges and those found on Borneo are **folded mountains** formed by the collision between the Indian subcontinent and Eurasia.
- These mountains tend to run in parallel chains.
- **Insular** mountains (except for Borneo) are formed by volcanic activity.





## Label the mountains and the plateau

- Draw a series of **^ ^ ^ ^ ^** in **brown** to indicate a mountain chain.
- Label these mountain chains in **brown**:
  - Arakan Yoma
  - Annam Cordillera
  - Khorat Plateau – you do not need a symbol





- Explain how the presence of so many mountains in this region might affect the people who live here.
  - Be sure to include how the volcanic mountains would affect people.



## Bodies of Water

- SE Asia is surrounded by water – the islands & peninsulas divide the water into bays, gulfs and seas.
- The rivers provide fertile soil for farming, transportation for inland trade, fresh water, and fish for food.



## Draw and label the waterways in **blue**:

- Andaman Sea
- Gulf of Thailand
- Strait of Malacca
- South China Sea
- Sulu Sea
- Celebes Sea
- Java Sea
- Philippine Sea
- Irrawaddy River
- Salween River
- Chao Phraya
- Mekong River
- Tonle Sap – draw lake and fill in





Looking at your map, predict which waterway you think would be the most valuable to control in order to control shipping in the region.

**Explain your answer.**



# Strait of Malacca

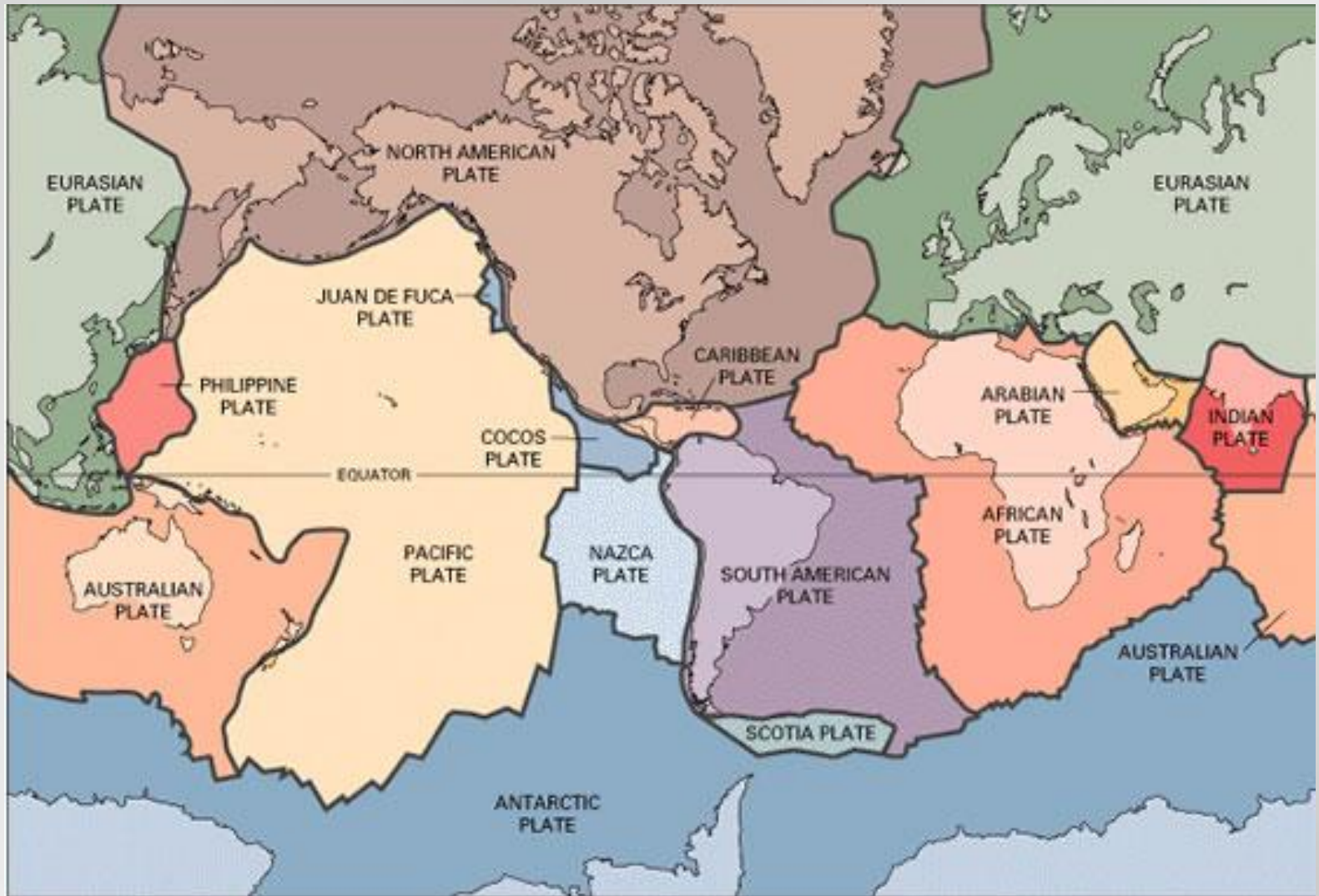
- The Strait of Malacca is one of the world's most important shipping lanes.
- The strait provides the quickest route between the countries which border the Indian Ocean and those on the Pacific.
- It is also an excellent example of a **choke point**
  - the states which control this strait control all shipping in the region.



# Plate Boundaries

- One of the most important factors which affects the physical geography of Southeast Asia is that four different plates come together within this region.
- Using the map on the next slide – or one in your reference text,
  - lightly draw in the plate boundaries
  - You can use your regular pencil or a gray colored pencil for this.
- Label each plate in black, using all capital letters.



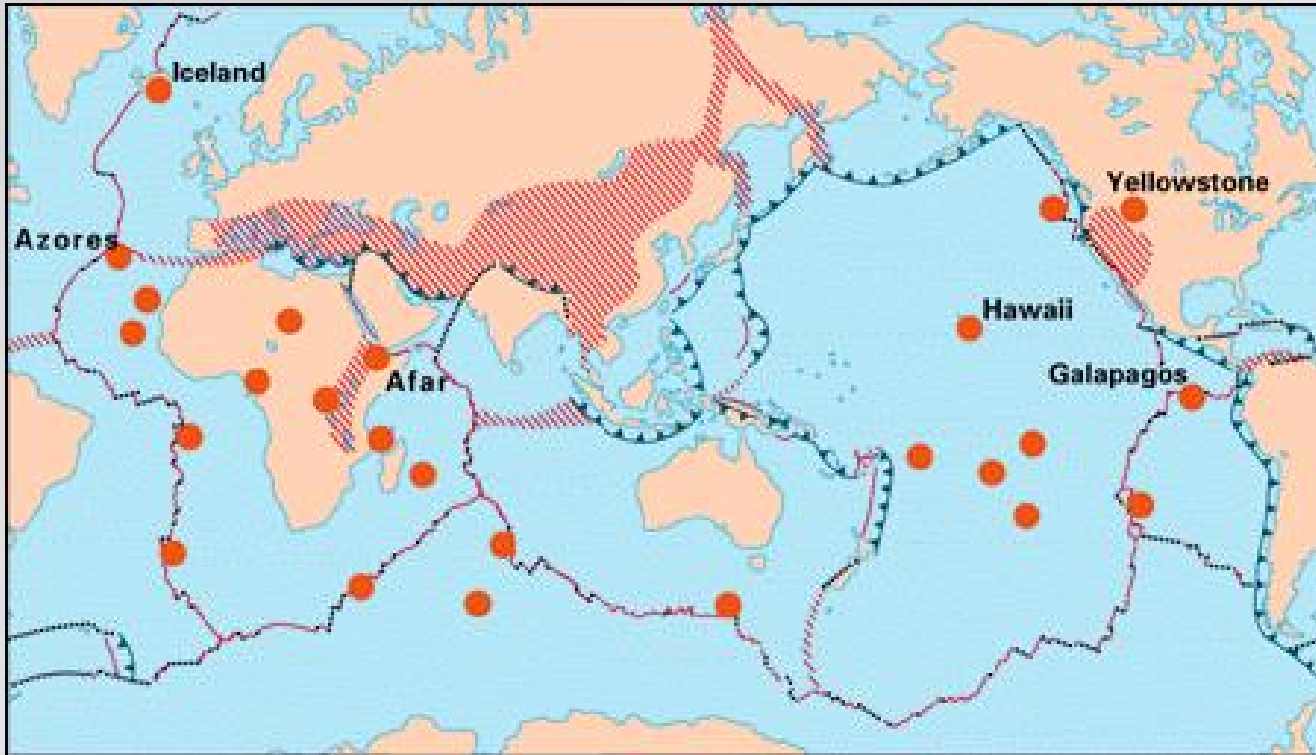




List the three types of plate boundaries and the features which are found along them.

Based upon what you already know about the geology of Southeast Asia, which type of boundary would you most expect to find here?

Explain why.



### EXPLANATION

- |   |   |
|---|---|
| <p>— Divergent plate boundaries—<br/>Where new crust is generated<br/>as the plates pull away from<br/>each other.</p> <p>▲▲▲▲ Convergent plate boundaries—<br/>Where crust is consumed in the<br/>Earth's interior as one plate<br/>dives under another.</p> | <p>----- Transform plate boundaries—<br/>Where crust is neither produced<br/>nor destroyed as plates slide<br/>horizontally past each other.</p> <p>▨ Plate boundary zones—Broad<br/>belts in which deformation is<br/>diffuse and boundaries are not<br/>well defined.</p> |
|---|---|
- Selected prominent hotspots



Using the previous map as a guide,  
illustrate the type of plate boundaries on  
your map.



# Trenches

- Submarine **trenches** are formed along **subduction zones** - the area where one plate subducts under another along a **convergent plate boundary**.
- These trenches are among the deepest places on earth – in fact, the very deepest place on earth is located in this region.
- Label the trenches **blue**:
  - Java Trench
  - Philippine Trench
  - Marianas Trench



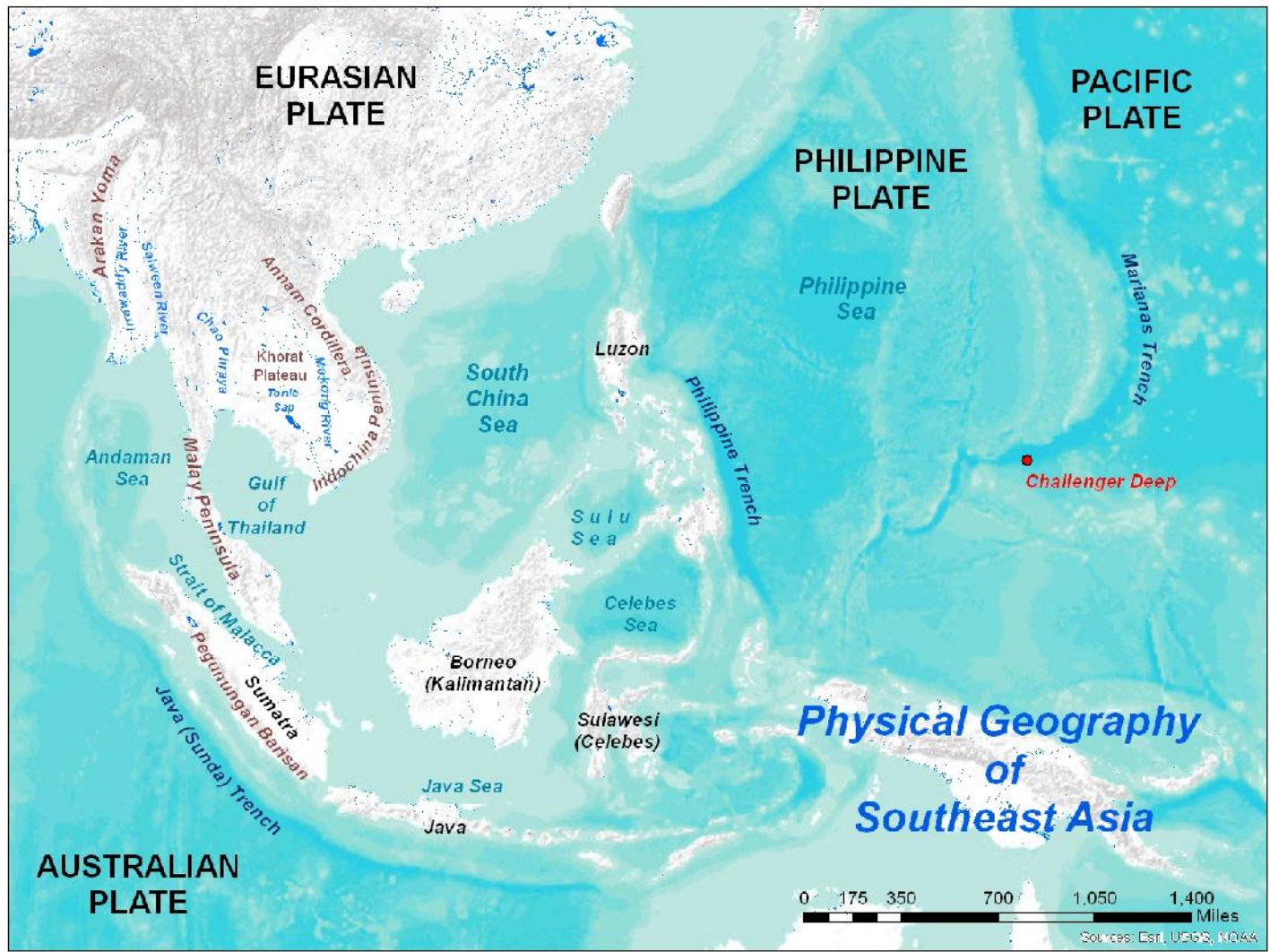
# Challenger Deep

- Deepest place on earth
- It is 35,755 feet below sea level
- Label Challenger Deep in red.



<http://channel.nationalgeographic.com/videos/the-challenger-deep/>





# Closing Question

Based upon your map, name the two landform features which dominate Southeast Asia.



# Summary

- Write a short (2 to 3 paragraphs) answer to the guiding question.
- Your answer should include the following:
  - List and describe the major features of the region.
  - Explain the factors which created these features.
  - Explain how these features interact with each other in this region.
  - Explain how these features may affect people in this region.



# Notes & Credits

- Slide 4
  - Display this map for students to use as a reference while drawing their sketch. Remind them not to add features in at this time.
- Slide 5
  - Southeast Asia is a region dominated by peninsulas and islands. These landforms tend to isolate groups of people, creating a wide variety of different culture groups in the region.
- Slide 6
  - Indicate to students that red, underlined words are vocabulary words, which should be included in their annotations.
- Slide 7
  - You may inform the students that since Malaysia straddles both the peninsula and islands, it could be considered both, or divided in two between mainland Southeast Asia and insular Southeast Asia. By convention, it is typically marked as part of insular Southeast Asia.
- Slide 10
  - Display this map for students to use as a reference while drawing their sketch. Remind them not to add features in at this time.
- Slide 11
  - Mountains would further isolate culture groups. While they may provide important mineral resources, they are difficult to farm. Volcanic mountains would provide fertile soil for growing food, but volcanic activity would threaten the lives of the people.
- Slide 14
  - Display this map for students to use as a reference while drawing their sketch. Remind them not to add features in at this time.



# Notes & Credits

- Slide 15
  - The Strait of Malacca is one of the world's most important shipping lanes. The strait provides the quickest route between the countries which border the Indian Ocean and those on the Pacific.
- Slide 18
  - Plate Tectonic Map used courtesy of the U.S. Geological Survey You might note to the students that while the region is almost entirely located on the Eurasian plate, the presence of the Australian, the Philippine and the Pacific plates significantly impact the people in Southeast Asia. You might also note that a fifth plate – the North American plate, also borders the Philippine plate.
- Slide 19
  - Convergent, Divergent, and Transform. The folded and volcanic mountains are both evidence of convergent boundaries.
- Slide 20
  - Since this is a world map, Southeast Asia might be hard to see. Hold a large sheet of paper or poster board about a foot away from the screen in front of the region. This will cause the region to “pop-out” and can make it easier for students to see. Illustration used courtesy of the U.S. Geological Survey
- Slide 23
  - Note: The video is NOT imbedded. You will need to be connected to the internet to view the video. Click on the picture to connect to the video. Screenshot taken from <http://channel.nationalgeographic.com/videos/the-challenger-deep/>
- Slide 24
  - Display this map for students to use as a reference while drawing their sketch. Remind them not to add features in at this time.
- Slide 25
  - From the notes, the students may recall that the answer is peninsulas and islands.