1. What causes ocean surface currents and what determines their direction of flow?

2. What is a geostrophic gyre; how many are there; what currents are found in them?

What is the largest western boundary current and who first described it?

3. What is upwelling and how does it affect productivity in the euphotic zone?

4. What is ENSO and how does El Niño affect the ocean surface temperature in the eastern Pacific?

5. How are thermohaline currents different from surface currents; how do they distribute heat?

6. How would the Earth’s climate be different without currents?

7. How are ocean current measurements made? Describe the Lagrangian and Eulerian methods of studying current flow.