

Ocean Current Activity Model Worksheet

Part I. Effects of Temperature on the Circulation of Water Observations

Discussion Questions

1. Describe the movement of the red and blue liquids in the Ocean Current Activity Model.
2. What type of current does the red liquid represent?
3. What type of current does the blue liquid represent?
4. Given your observations, which is less dense, cold water or warm water?
5. Which type of ocean current—warm surface or deep cold water—moves more rapidly? Why?

Part II. Salinity of Water Observations

Discussion Questions

6. Describe the movement of the blue saltwater solution.
7. Which solution is more dense the blue saltwater solution or the colorless freshwater solution?
8. List two ways ocean water may increase in density.
9. What areas of the Earth contain ocean waters of very high density? Why?
10. What is the rising to the surface of deep cold ocean currents called? Describe the benefits of this phenomenon.