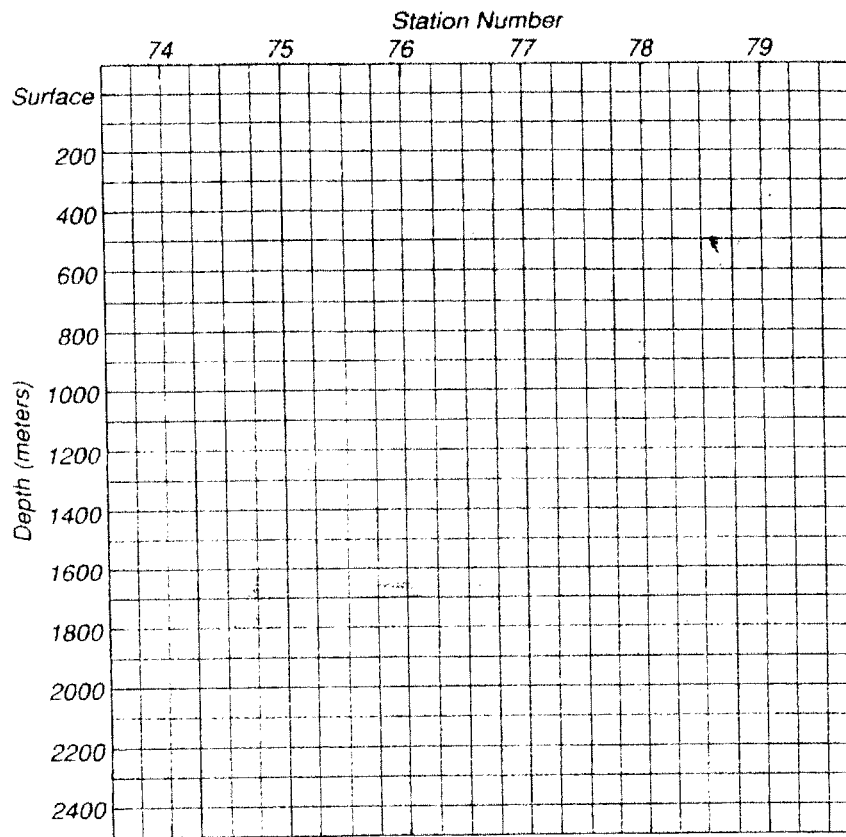


17.10 Grid for salinity profile



Set graph up like this, but don't use this... Put it on graph paper!

Analysis and Conclusions

1. What is the average salinity of ocean water? In what area of your profile is this average value found?
2. At which stations and depths are salinity values on your profile highest? At which stations and depths are salinity values lowest?
3. The cruise area from which these salinity values were taken is 36° N and 10° – 20° W. Turn to the Earth's Climates map on page 664 and locate the cruise area. Describe the climate of the land area nearest to the cruise area.
4. How would you expect the climate in the cruise area to affect the salinity at the ocean surface? How would you expect the climate to affect the deeper ocean levels? Does your salinity profile support your answer?
5. Describe the salinity profile at depths of 800–1200 meters. Can the characteristics of the profile be explained by the climate of the area?
6. Explain how the presence of the Mediterranean Sea east of the cruise area accounts for the salinity profile at 800–1200 meters.
7. Based on your answer for question 6, explain the likely depth and direction of ocean currents in the cruise area.
8. In some parts of the world, ocean water with above average salinity values sinks to deeper levels. Is there any evidence for such vertical movements of water in your salinity profile? Explain your answer.