

Word	Definition	Example Sentence	Picture
ocean current			
deep current			
surface current,			
convection current			
Coriolis effect			
upwelling			

Directions: Define density, then decide which picture shows greater density and why.

## Density Preview

Density is:

Remember that the more closely packed particles are, the more dense they are. Particles that are at a colder temperature are more dense and do not move away from each other.



More dense or less dense?

Why?



More dense or less dense?

Why?



More dense or less dense?

Why?



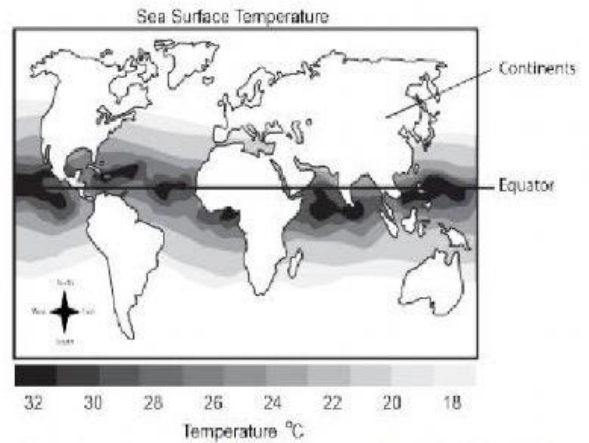
1 Differences in water temperature in the ocean create movement because—

- A as water heats up, the atoms of water move faster.
- B warm water is pulled more by gravity than cold water is.
- C warm and cold water mix and reach the same temperature.
- D bodies of water at different temperatures have different densities.

3 One of the characteristics of ocean water that causes ocean currents is salinity. Differences in salinity can generate movement in the ocean because the amount of dissolved salt in ocean water is correlated with—

- A how quickly it evaporates.
- B its ability to conduct electricity.
- C the latitude where it is found.
- D the density of the water.

4 This map shows the average temperature of surface seawater across Earth.

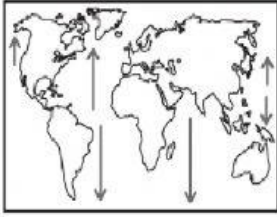


Warm water is less dense than cold water. Given this information and the information on the map, we can predict that, as a general trend, seawater will—

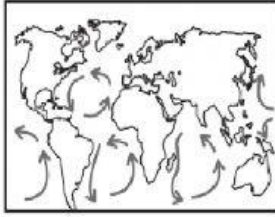
- A rise at the equator.
- B be less dense at the poles.
- C flow from west to east.
- D be warmer near the continents.

- 2 The energy of the Sun drives a general trend in ocean water movement from the equator outward toward the poles. The actual global pattern of ocean currents, however, is a more complicated series of rotating systems as shown in the map provided.

General Trend of Ocean Water Movement



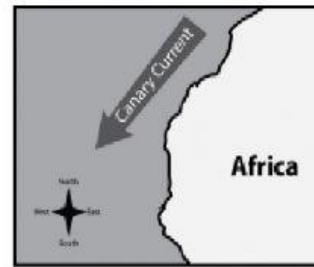
Actual Pattern of Ocean Currents



Which of the following describes the features that change the general trend of ocean water movement into the actual pattern we see?

- A Earth's rotation and arrangement of continents
- B Global patterns of fishing and sailing
- C Gravitational pull of the Sun and the Moon
- D Concentration of dissolved salt and minerals

- 5 The Canary Current moves in a southwesterly direction along the northwest edge of Africa.



From this information, we can predict that the winds above the ocean in this area blow mostly toward the—

- A northwest.
- B southwest.
- C southeast.
- D northeast.