

## SUBMARINES

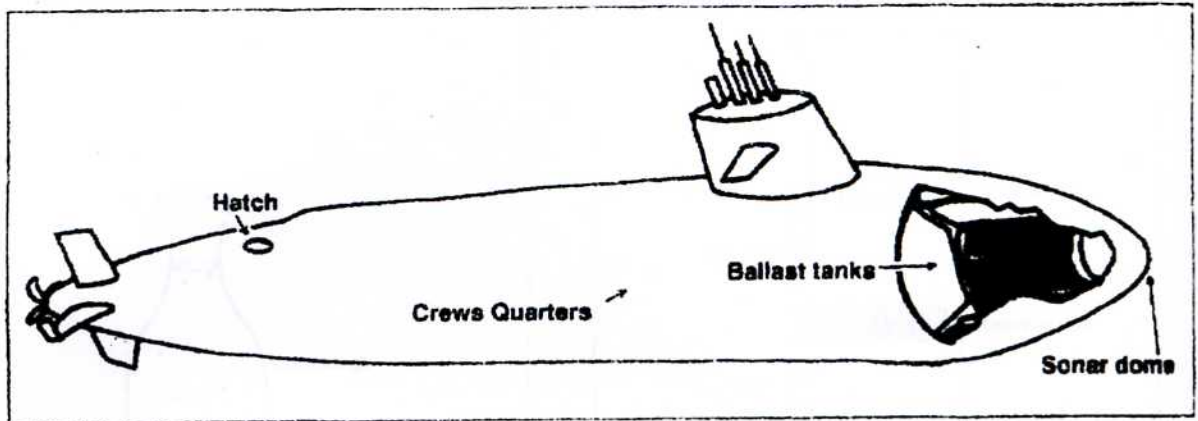


Figure H

A submarine has special tanks called ballast [BAL-ust] tanks. Ballast tanks are used to make the submarine heavier or lighter. When the ballast tanks are filled with seawater, the submarine submerges, or goes under water. When the water is forced out of the ballast tanks, the submarine rises and surfaces.

1. Adding ballast water makes a submarine \_\_\_\_\_ dense.  
more, less
2. Forcing ballast water out makes a submarine \_\_\_\_\_ dense.  
more, less
3. When a submarine is submerging its density is \_\_\_\_\_ than water.  
greater, less
4. When a submarine is surfacing its density is \_\_\_\_\_ than water.  
greater, less
5. When a submarine is submerging, its ballast tanks are \_\_\_\_\_.  
full, empty

## TRUE OR FALSE

In the space provided, write "true" if the sentence is true. Write "false" if the sentence is false.

- \_\_\_\_\_ 1. A bar of steel will float on water.
- \_\_\_\_\_ 2. The density of steel is greater than water.
- \_\_\_\_\_ 3. A steel ship will float on water.
- \_\_\_\_\_ 4. A steel ship is mostly metal.
- \_\_\_\_\_ 5. The density of a steel ship is greater than the density of water.
- \_\_\_\_\_ 6. Part of every floating object is below the water.
- \_\_\_\_\_ 7. Water pressure increases the deeper you go.
- \_\_\_\_\_ 8. An object will float in water if it is less dense than water.
- \_\_\_\_\_ 9. An object will sink in water if it is less dense than water.
- \_\_\_\_\_ 10. A submarine can change its density.