TASK 1. Fill the blank spaces with the words listed below.

We consider a liquid which is in static equilibrium in a container, the hydrostatic pressure p at any point of the liquid at a depth h under the free surface of the liquid, is given by the formula: _____ (this is the principle of Stevino), in which ρ is the _____ of the liquid, g is the acceleration and p_o is the atmospheric _____ acting on the free surface of the liquid. The product ρ g h is the _____ of a liquid column with the density ρ , the base of 1 cm^2 and the height h, and is numerically equivalent to the hydrostatic pressure, that depends only on the h under the free surface of the liquid and produces always forces (pressure forces) directed along the perpendicular to the surface that is considered.

The Archimedes principle states that a body immersed in a liquid or in a gas with the density ρ , is subjected to the _____ S , the so-called hydrostatic thrust, which is equal to the weight of the liquid V removed by the body.

If the body is partially immersed in the liquid,(if the body floats in the liquid), the hydrostatic thrust _____ the weight of the volume of the body part immersed in the liquid. The Archimedes thrust S = _____ is generated by the _____ of all the forces the fluid produces on the surface of the body by means of the hydrostatic or aerostatic pressure.

A body immersed in a liquid _____ if the Archimedes thrust overcomes its weight. In this case the resultant of the hydrostatic forces pushes the body toward the liquid free surface, till the thrust produced by the immersed part doesn't equate the weight of the body. Ships, submarine, hot-air balloons and dirigibles operate according to the principle.

• pressure • Archimedes• weight • density • depth• volume • resultant• force • gravity • floats • equates • the 2 equations are not given