## Use rho in density

The density is represented by the symbol $\rho$ and is defined as mass divided by volume.

$$
\rho=\frac{m}{V}
$$

where:

- $\rho$ (rho) represents density of a substance,
- $m$ mass of substance,
- $V$ volume occupied by the substance.

$$
\begin{gathered}
\rho(\vec{r})=\frac{d m}{d v} \\
m=\int_{v} \rho(\vec{r}) d v \\
\rho(\rho, v)=\sum_{i} \frac{v_{i}}{v}
\end{gathered}
$$

## Use rho in resistivity

The formula for resistivity is:

$$
\rho=\frac{R \times A}{L}
$$

where:

- $\rho$ (rho) represents the resistivity of the material,
- $R$ is the resistance of a uniform conductor made from that material,
- $A$ is the cross-sectional area of the conductor,
- $L$ is the length of the conductor.

