

Students will be able to: Compare and contrast the different properties of matter. Calculate the density of a substance. Classify a mixture as heterogenous or homogenous.

Properties of Matter

There are many ways that matter can be classified the most common way is to look at certain properties of the matter and organize based on grouping those properties.

Matter- anything that has mass and takes up space.

States of matter:

Solid- Rigid, fixed shape and volume.

Liquid- Definite volume, takes shape of container.

Gas- No fixed volume, takes volume of container.

Extensive properties- Depend on the amount of matter.

Mass

Volume

Intensive properties- Do not depend on the amount of matter.

Chemical Properties

Density

Classifying Matter

Heterogeneous mixtures are not well mixed.

Homogeneous mixtures are well mixed.

Physical methods do not change the internal makeup of the material.

Chemical methods do change the internal makeup of the material.

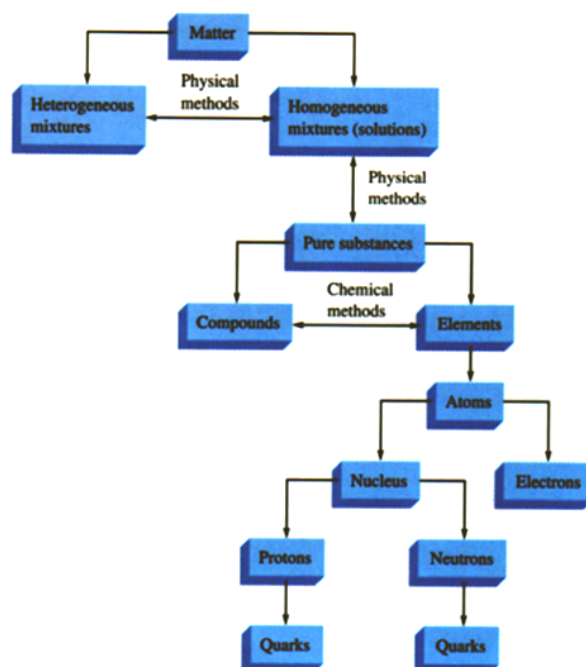


Figure 1.13  The organization of matter.