Deformation refers to a change in the shape or size of an object caused by external forces acting upon it. When an object is subjected to stress or force, it may undergo a deformation that alters its original shape or dimensions. The amount and type of deformation depend on the nature of the forces applied and the properties of the object being deformed.

Deformation can be classified into two broad categories: elastic and plastic deformation. Elastic deformation is temporary and reversible, and the object returns to its original shape once the stress or force is removed. Plastic deformation, on the other hand, is permanent and irreversible, and the object retains its deformed shape even after the stress or force is removed.

Deformation occurs in a wide range of natural and human-made materials, including metals, plastics, rubber, wood, and even rocks. Understanding deformation is crucial in fields such as engineering, geology, and materials science, where it is essential to predict how materials will behave under different types and levels of stress or force.