Some Characteristics of life

1. All organisms are assembled from the same raw materials, according to the same laws of energy, as nonliving things – but they sow more complex organization.

2. All organisms are part of webs of organizations in mature, in that they depend directly or indirectly on one another for materials and energy.

3. All organisms show metabolic activity; they have the capacity to acquire and use energy to stockpile, tear down, build, and eliminate materials in ways that promote their survival and reproduction.

4. All organisms use homeostatic controls to respond to environmental changes, in ways that maintain favorable operating conditions for the body.

5. All organisms have the capacity for growth, development, and reproduction.

6. In all organisms, DNA is the molecule of inheritance; its instructions for reproducing heritable traits are passed on from parents to offspring.

7. All organisms show adaptive potential: heritable variations in their form, functioning, and behavior may allow them to adjust to changes in their environment, both over the short term and through successive generations.

8. Organisms show variations in form, functioning, and behavior that have accumulated as a result of natural selection and other evolutionary forces. The diversity of life is the sum total of those variations.