

9-12

Whatever happens within a system, such as parts exploding, decaying, or reorganizing, some features, such as the total amount of matter and energy, remain precisely the same.

If a system in equilibrium is disturbed, it may return to a very similar state of equilibrium, or it may undergo a radical change until the system achieves a new state of equilibrium with very different conditions, or it may fail to achieve

Even though a system may appear to be unchanging when viewed macroscopically, there is continual activity of the molecules in the system.

The amount of something in a system may stay the same because nothing is happening to it or because it is being transformed into something else at the same rate as something else is being transformed into it.

6-8

No matter how substances within a closed system interact with one another, or how they combine or break apart, the total mass of the system remains the same.

Many systems contain feedback mechanisms that serve to keep changes within certain limits.

A system may stay the same because nothing is influencing it or the influences on it are balanced.

The amount of something in a system may stay the same because nothing is entering or leaving the system or because something is being added to the system at the same rate as it is leaving the system.

3-5

No matter how parts of an object are assembled, the weight of the whole object is always the same as the sum of the parts; and when an object is broken into parts, the parts have the same total weight as the original object.

The number of objects in a group can stay the same even as some enter or leave, as long as each one that leaves is replaced by another one that is entering.

K-2

People can keep track of some things, seeing where they come from and where they go.

Objects change in some ways and stay the same in some ways.

