Atoms are the smallest things on Earth. Matter is composed of atoms that occupy space and have mass. Some atoms form molecules by joining other atoms. Atoms are divided into protons that are positively charged, electrons that are negatively charged, and neutrons that have no charge. In the middle of an atom is a nucleus, a small part of the atom, occupied by the protons and neutrons. The number of electrons and shells in an atom affects the way it reacts. When an atom’s shells are not full, reaction is more likely than for atoms having full shells. Reactive atoms are able to gain or lose electrons to bond with other atoms.

There are close to 100 different elements that can combine with each other to create all substances on Earth. Elements are grouped according to their chemical properties. States of matter [liquid, solid, or gas], can change but this is known as a physical change. A change that cannot reverse is a chemical change.

There are two types of compounds. Covalent compound have atoms with different elements that share electrons and ionic compounds have atoms that transfer charge to form ions which then form the compound.

Mixtures are elements or compounds that mix together without a chemical reaction.
taking place.
I believe this book is a great book for upper elementary students to read. The pictures are
great examples for the children to help understand what they are reading. Each page
contains at least one picture. The pictures are big, but not so many as to be overwhelming to
the reader. The end glossary covers words shown in the book in bold type to allow the
children to consult meaning for words unknown to them. The illustrations are awesome.
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