GRADE 8 RATIONALIZED INTEGRATED SCIENCE

LESSON NOTES COMPLETE

STRAND 1- MIXTURES, ELEMENTS AND COMPOUNDS.

ELEMENTS AND COMPUNDS

Meaning of Atoms, Elements, molecules and Compounds.

- Matter is anything that occupies space and has mass.
- Matter is composed of pure substances and mixtures.
- The pure substances are can be element and compounds while the mixtures can either be uniform or non-uniform.
- **An element** is a substance that cannot be decomposed into simpler substances by chemical or physical means.
- An element is a pure substance which cannot be made simpler using chemical means.
- Elements are the building blocks of matter. Everything around is made up of an element or elements.
- An element is made of atoms.
- Atoms of the same element are identical.
- **A compound** is pure substance that consists of atoms of two or more elements that are chemically joined together.
- Compounds are formed when atoms of different elements react.
- Compounds can be broken down into elements through chemical reactions.
- **Sodium** and **chlorine** are elements that combine chemically to form **sodium chloride** which is a compound.

Relating common elements to their symbols.

- Pure substances either elements or compounds has a unique name and symbol.
- A symbol is a sort -hand notation for the chemical name of an element.
- Chemical symbols are used instead of names by scientists because they are much easier, convenient and universally recognized.
- Compounds are represented by a chemical formula.
- A chemical symbol is usually derived from first letter of the English name of the element. ⋅ It is also derived from Latin name of the element.

For example,