

Elements & Compounds

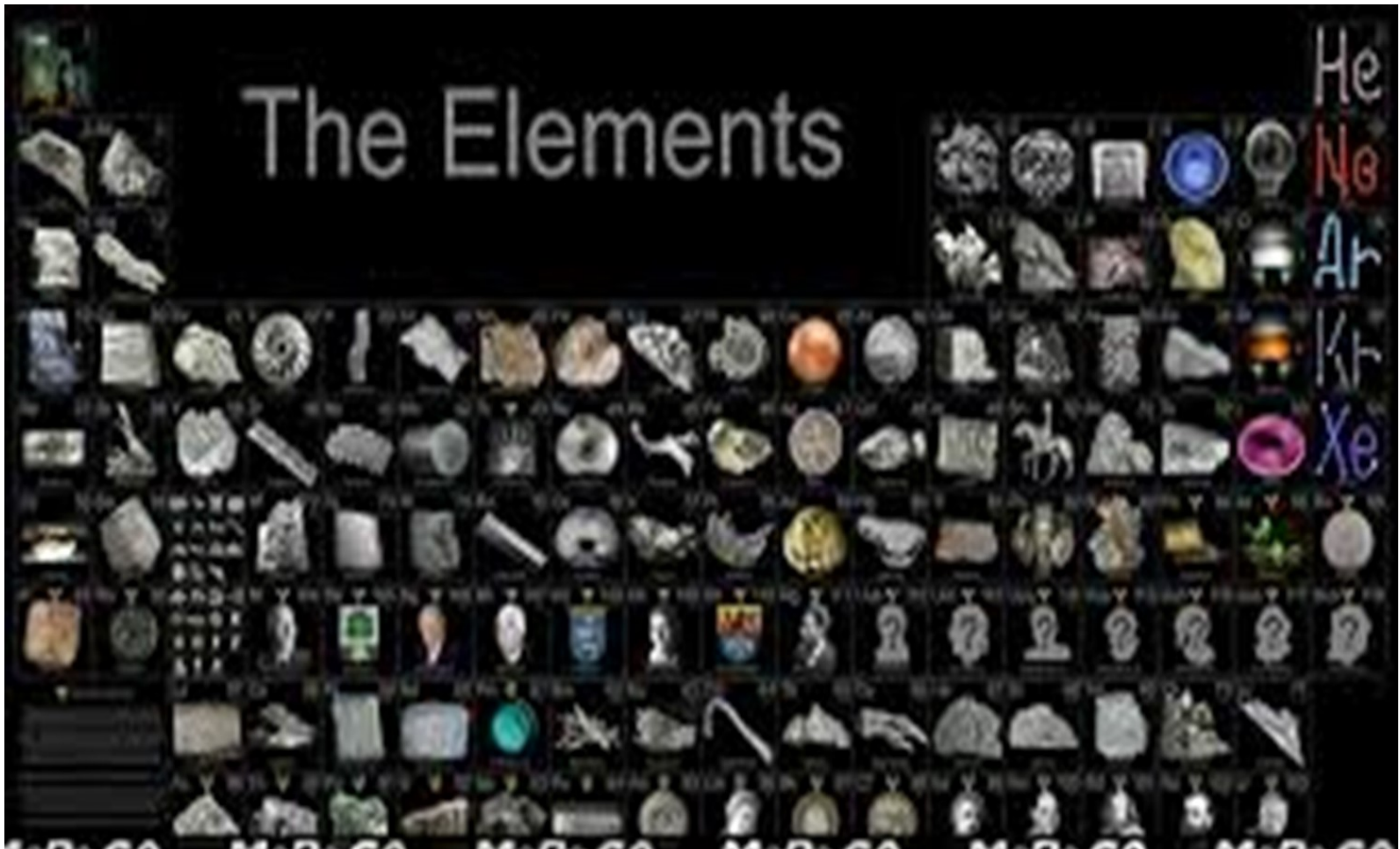
Mr. Skirbst

Pure Substances

Made of only one kind of material and has definite properties

Pure Substances

Elements –



Pure Substances

Elements –

simplest pure substance

Pure Substances

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simplest pure substance

Atoms – basic building block of all matter (simplest part of an element)

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Symbols – element shorthand

Pure Substances

Compounds –

- pure substance made of more than one element (chemically combined)

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- pure substance made of more than one element (chemically combined)
- can be chemically broken down

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Molecule – smallest part of a compound keeping characteristics

Chemical Formulas

Shorthand for chemical
substances

(ex. H_2O , NaCl , CO_2 , HCl)

Chemical Formulas

Shorthand for chemical substances

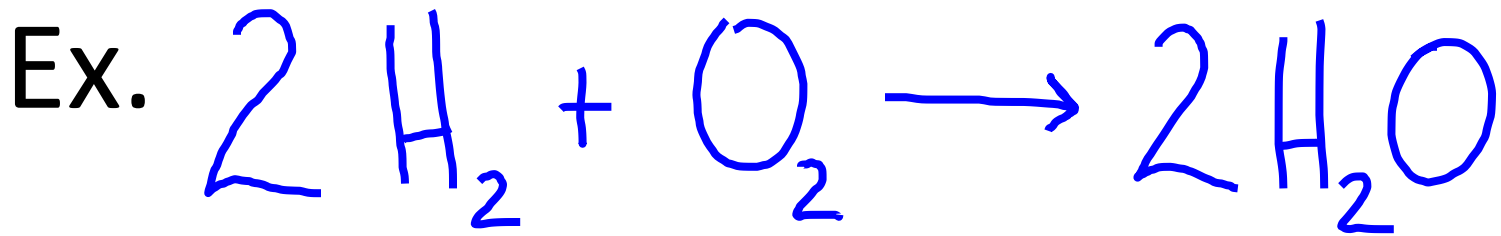
(ex. H_2O , NaCl , CO_2 , HCl)

Subscript - # of atoms



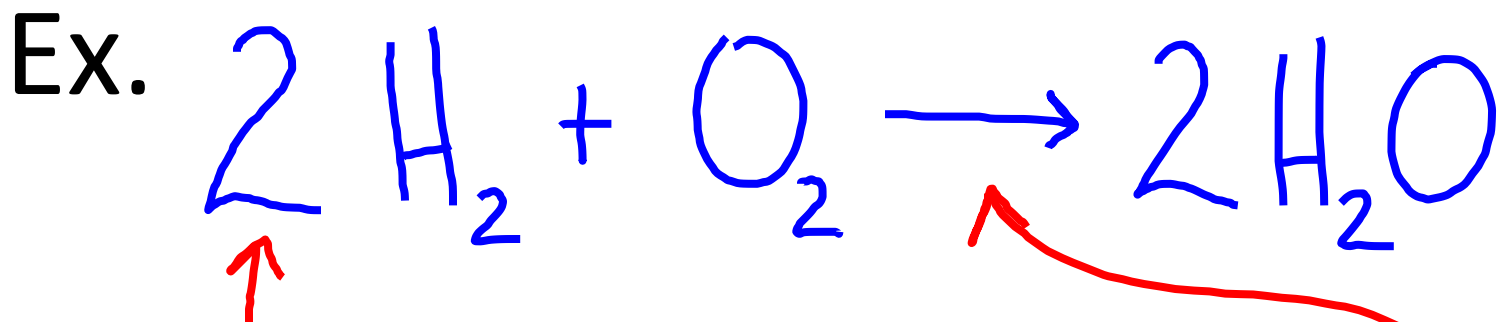
Chemical Equations

Shorthand for chemical reaction



Chemical Equations

Shorthand for chemical reaction



Coefficient - # of molecules

Yields – arrow indicating
direction of reaction

Chemical Equations



(reactants) (yields) (products)

substances
that
react

substances
that are
produced

Writing Formulas

Writing Formulas

In a compound:

- symbol for “metal” first

Writing Formulas

In a compound:

- symbol for “metal” first

(left side of periodic table)

Writing Formulas

In a compound:

- symbol for “metal” first

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- symbol for “non-metal” second

Writing Formulas

In a compound:

- symbol for “metal” first

(left side of periodic table)

- symbol for “non-metal” second

(right side of periodic table)

Writing Formulas

In a compound:

- symbol for “metal” first
(left side of periodic table)
- symbol for “non-metal” second
(right side of periodic table)
- metal ends in “-ide”

Writing Formulas

Examples:

sodium chloride

Writing Formulas

Examples:

sodium chloride

NaCl

Writing Formulas

Examples:

sodium chloride

NaCl

iron oxide

Writing Formulas

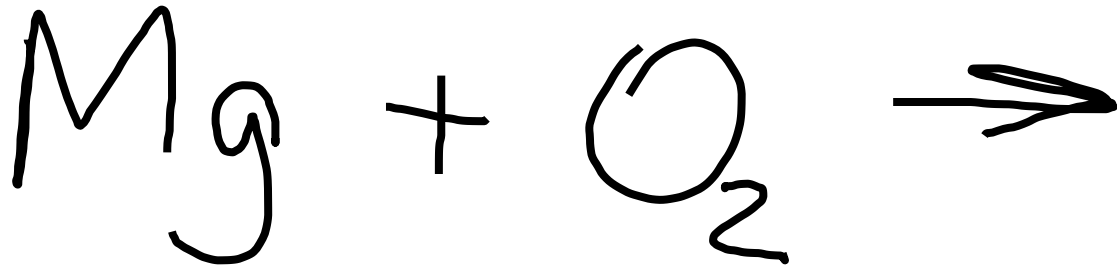
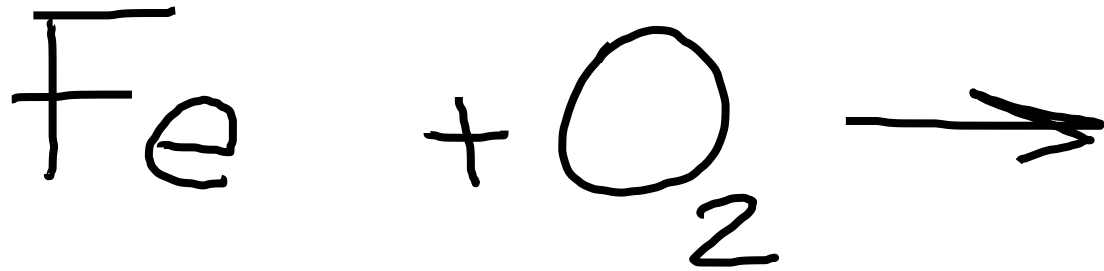
Examples:

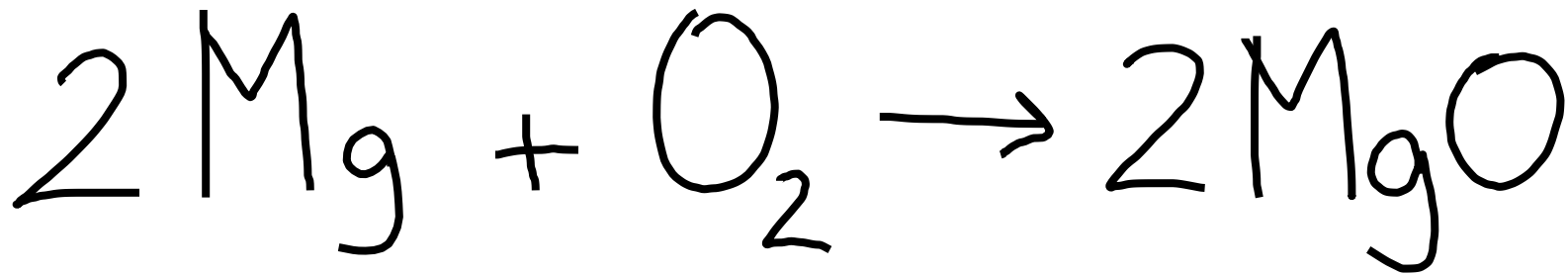
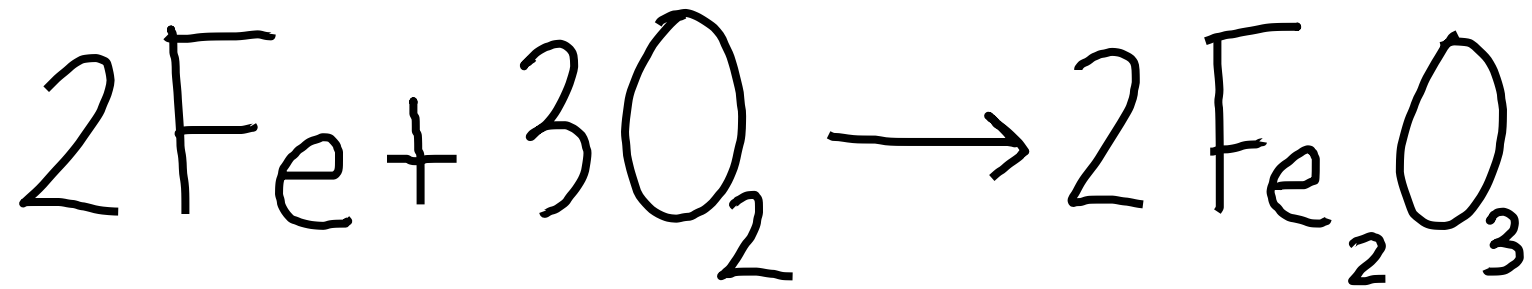
sodium chloride

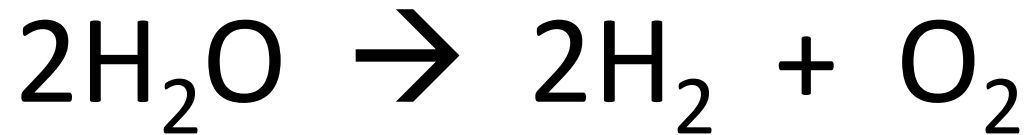
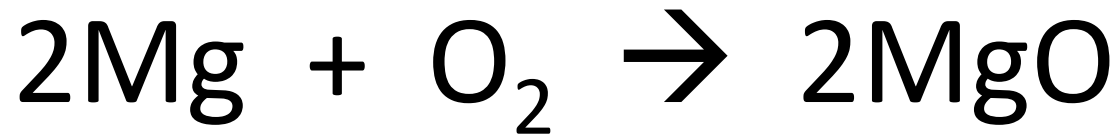
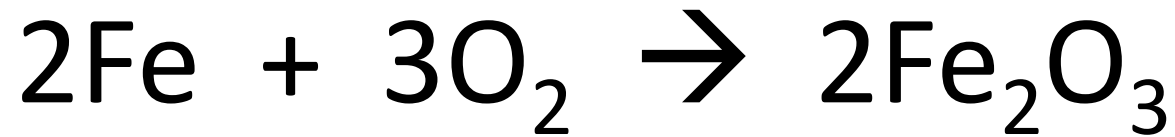
NaCl

iron oxide

FeO₂







Minecraft Explains

Element Square

Atomic Number

SYMBOL

Element Name

Atomic Mass