Worksheet: Classification of Matter **Name** *KEY*

I. Fill in the Blanks

A(n) *element* is a pure substance that is made of only one kind of atom. The symbol for a(n) *element* is always one or two letters. When the symbol contains two letters, the first letter is always *uppercase*, and the second letter is always *lowercase*.

A(n) *compound* is a pure substance containing two or more elements that are *chemically* combined. A(n) *compound* is represented by a chemical *formula*. The elements in a(n) *compound* always combine in *definite (or same)* proportions.

A(n) *mixture* is made of two or more substances that are *physically* combined. A(n) *mixture* that is uniformly mixed is called *homogeneous*. A special name for this is a(n) *solution*. A(n) *mixture* that is not uniformly mixed is called *heterogeneous*. A special type of mixture that is a solid *solution* of two or more metals is called a(n) *alloy*.

II. Classify each of the following as an element (E), compound (C), homogeneous mixture/solution (S), or heterogeneous mixture (HE).

chocolate chip cookie	*HE*
oxygen gas	*E*
salt water	*S*
taco	*HE*
gold	*E*
carbon dioxide	*C*
water	*C*
kool aid	*S*
table salt	*C*
muddy water	*HE*
potassium	*E*
brass	*S*
graphite	*E*
glass	*C*
air	*S*