**Study Guide for Matter Test will be Wednesday, November, 28, 2012 Name\_\_\_\_\_KEY\_\_\_\_\_\_\_\_\_\_\_\_\_**

The weight of a **\_whole\_\_** object is equal to the sum of its \_**parts\_\_\_\_.** So if I know that

each part of a chair weighs a certain amount, I can \_\_ **add** \_ them all together to get the \_\_\_ **whole** \_\_\_\_ weight of the chair. If I have a glass of ice and I weigh the ice then weigh the glass and add them together will that sum be the same if I put the glass on the scale with the ice? EXPLAIN!!

**Yes they should weigh the same because the weight of a whole object or set of objects put together will equal the sum of all of the parts of the total object.**

**Physical Changes are when energy or states of matter of an object changes. The molecules are just moved in physical change. Write some examples of physical changes.**

\_ **answers may vary** \_\_\_\_\_\_\_ \_\_ **breaking a glass**\_\_\_\_ \_\_\_ **cutting your hair**\_\_ **ice melting water freezing cutting paper breaking a pencil in half, etc.**

**Chemical changes are when the matter is a different substance after the change. The molecules change in chemical change. Write some examples of chemical changes.**

**A nail rusts, cooking an egg, mixing chemicals and a reaction occurs, burning something,**

When a \_ **physical** change occurs the ending materials are the same even though they may look

\_\_\_ **different**\_.

A \_\_ **chemical**\_\_\_\_\_\_ change makes a substance that wasn’t there before.

**Complete the Tree Map on the 3 states of matter. Be sure to include some examples of each and describing characteristics.**

**States of Matter**

**solid liquid gas**

**has its own fixed volume takes the shape of the takes the shape and volume of**

**and shape container it is in container it is in**

**molecules are tightly packed molecules are less packed with no molecules are very spaced and**

**not much movement regular movement and move freely have a lot of space, move quick**

**examples may vary examples may vary examples may vary**

**wood, brick, ice, bones water, soda, blood, air, oxygen, methane**

**\_Temperature\_\_\_ change causes the change in states of matter.**