Learn About Chemical and Physical Changes

By: Kareem Kharouf

Physical Change



Chemical Change



Mixture vs. Compound

There is a big difference between mixtures and compounds. These are the differences. A mixture is something something physically combined. It doesn't involve a chemical reaction. Mixtures would be able to be taken apart by hand. For example, trail mix. It is made up of many different ingredients that do not chemically combine to make a new substance. You could pick out the peanuts and raisins by hand. On the other hand, a compound is something combined that forms a new substance. It involves a chemical reaction to take apart. You couldn't take a compound apart by hand. For instance, table salt is made up of chlorine, which is poisonous, and sodium. The salt is safe to eat, considering the fact that it is made of chlorine. The two elements chemically combine to make a new substance. The new substance doesn't have the properties of it's original substances.





Homogeneous vs. Heterogeneous

There are many differences between homogeneous mixtures and heterogeneous mixtures. Here are the differences. A homogeneous mixture is a mixture that looks the same throughout. In other words, it is blended completely the same throughout. For example, a cup of iced tea. It has no chunks, and it is the same color throughout. Air we breathe is a perfect example of a homogeneous mixture. It is blended the same throughout. On the other hand, a heterogeneous is speckled and the opposite of a homogeneous mixture. Heterogeneous mixtures settle into layers. For example, salad dressing. It has chunks of vegetables and many more things. The oil and other liquids settle into layers. Another example of a heterogeous mixture is a rock. It is speckled and has many chunks.







Chemical vs. Physical Change

There are many differences between a chemical change and a physical change. A physical change is a change where something changes its size, shape, or state without changing identity. For example, when you melt ice, you change it from a solid to a liquid. You changed it to its original form, water. It doesn't change identity. You could refreeze ice after it melted. On the other hand, a chemical change is a change when atoms link together in different ways. For example, when you bake a cake, it involves many chemical changes. For example, heat turns the baking soda in the cake dough into carbonate, steam, and carbon dioxide gas. The steam helps the cake be moist. The bubbles of the carbon dioxide gas help the cake dough expand and the cake to be light and fluffy. These are differences between chemical and physical

changes.

Thussian Change Chamber 1 Elhavaka B t chemical change is A physical change is a change of when an aligned changes it's size. I dete of angle where where monorphis of changing identity. For instance you could workle adding. It descript NEW Jup Jagos of 9 chances Encitorend share a color projec, or permission of gree. For example, when you light a could curic Arth Fire ord spends the have a charal reaching the just is n promple: balang a cal peres example: The melting The mething to an example of a physical hance because it changes the disk and that had not anlike a complete the potent when he A cake baking involves may changed changes for motore, the real fun balling, sale in the cake daily he the it becomes it's onlying form gas and steam carborate, chorad Att multips we you an

Chemical Change Pic-Collage



Physical Change Pic-Collage





A physical change is a change when an abjud changes it's size, I take, a change without atoms company or changing identity. For instance, you could withick a shirt. It decent change It is just in a different state. Also, you could Mp 9 kepter. It does indive a chancel reaction. It just is in two perces. example: The melting

Jee melting is on example of a Physical change because it changes it's state and charter when ice the example, ice is water when ice melts it becomes it's onlying form. After melting ice you and refreeze ice.

OLLAGE

Why does this matter?

This matters because it is important to know how things work in science. It is important to know the differences between different changes and mixtures because it is important to classify different objects. You would have to know what a chemical reaction is and how you would be able to separate mixtures using a chemical reaction.



References

- Daniel, L., Hackett, J., Moyer, R., & Vasquez, J. (2006) *Science*. New
- York: Macmillan/McGraw-Hill