

# Let's Get Physical and Chemical

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## Mixture vs. Compound

A MIXTURE IS WHEN TWO SUBSTANCES ARE PHYSICALLY COMBINED. A COMPOUND IS WHEN TWO SUBSTANCES ARE CHEMICALLY COMBINED AND MAKE A NEW SUBSTANCE. A COMPOUND FORMS A NEW SUBSTANCE WHILE A MIXTURE DOES NOT. A MIXTURE IS NOT COMPLETELY BLENDED WHILE A COMPOUND IS.



Cake batter is a mixture because you physically combine all of the ingredients. Cake is a chemical change because it is a new substance. The cake turned from batter into cake.



#### Courtesy of Google Images

#### Homogeneous vs. Heterogeneous

Homogenous mixtures are when the parts in a mixture are blended completely. Another name for homogenous mixtures are solutions. Heterogeneous mixtures are when the parts of a mixture is only partly blended one common example of this mixture is salad dressing. Heterogeneous mixtures are more common than homogenous mixtures. Heterogeneous mixtures unlike homogenous mixtures settle into layers.



Soda is a homogeneous mixture because it is blended completely and has an equal amount of ingredients in every part of it.

Salad dressing is a heterogeneous mixture because it settles into layers.



### **Chemical vs. Physical Change**

A CHEMICAL CHANGE IS A CHANGE IN MATTER THAT PRODUCES A NEW SUBSTANCE WITH DIFFERENT **PROPERTIES THAN THE ORIGINAL** SUBSTANCES. A PHYSICAL CHANGE IS A CHANGE THAT CHANGES IT'S SIZE, SHAPE AND STATE WITHOUT CHANGING **IDENTITY**.

### **Chemical Change Pic-Collage**

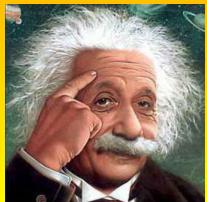


### **Physical Change Pic-Collage**



### Why does this matter?

ALL OF THIS SCIENCE THAT WE ARE LEARNING WILL BE USEFUL FOR NEW DISCOVERIES SO EVERY ONE KNOWS MORE ABOUT THE WORLD. IT IS IMPORTANT TO LEARN ABOUT CHEMICAL, PHYSICAL CHANGES, HOMOGENEOUS AND HETEROGENEOUS MIXTURES SO YOU CAN GET A JOB AND UNDERSTAND IT. SOME JOBS THAT HAVE TO DO WITH PHYSICAL, CHEMICAL CHANGES, HOMOGENEOUS AND HETEROGENEOUS MIXTURES ARE TECHNICIANS, SCIENTIST, CHEMISTS AND SOMETIMES INVENTORS.



Inventor of Penicillin



Scientist

# References

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