# Chapter 13

By: Kendall

# Mixture vs. Compound

Mixtures and compounds are different in some ways. A mixture is when two or more materials are physically combined. Like if you mix pretzels and chips. A compound is when two materials are chemically combined and form a new substance. One difference between them is a compound has different properties then the original materials but a mixture has the same. Another difference is in a mixture you can see what is a pretzel and what is a chip but you cant see what is what material in a compound.

# Homogeneous vs. Heterogeneous

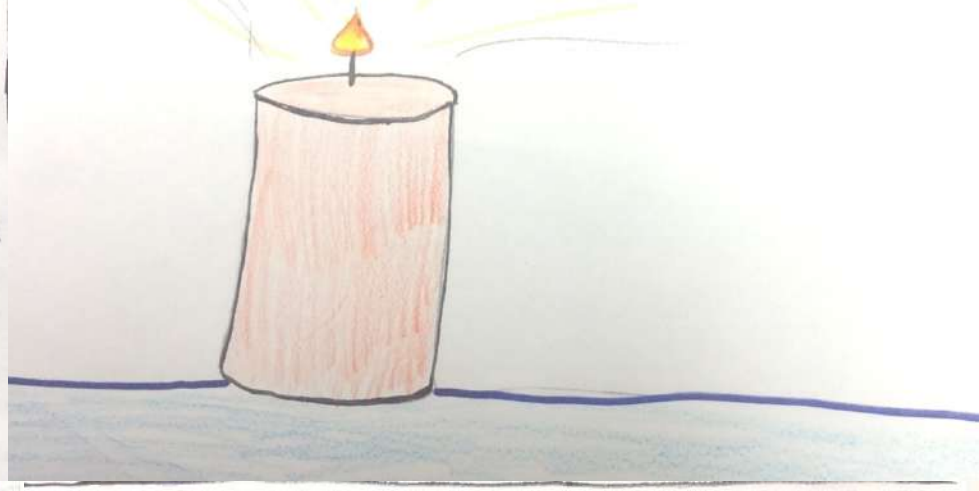
A homogeneous mixture is blended completely, and it looks the same everywhere. A heterogeneous mixture is partly blended or speckled. You can see the different parts of the heterogeneous mixture but not a homogeneous mixture. Another difference is that heterogeneous mixtures can settle into layers, but homogeneous mixtures don’t.

# Chemical vs. Physical Change

## Chemical Change

A chemical change is when atoms of an object link together in new ways. And they transform into a new substance. You can tell it is a chemical change if it gives off light or heat. Or it has a formation of gas and color change. That is what a chemical change is.

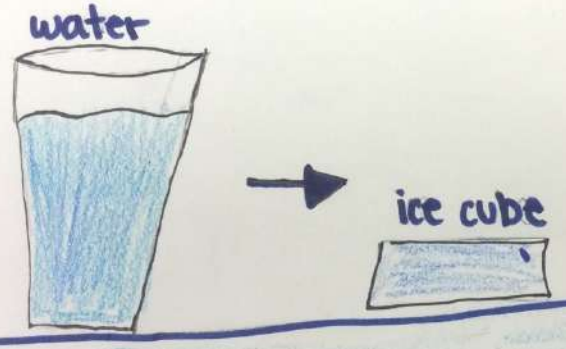
This is a chemical change because it gives of light, heat, and gas.



## Physical Change

A physical change is when matter changes size shape or state without changing it's identity. You can tell it is a physical change if it does NOT give off light or heat. And it doesn't have bubbles or color change. You can also easily return it to it's original state.

This is a physical change because it changes state and is still water.

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# Chemical Change Pic-Collage

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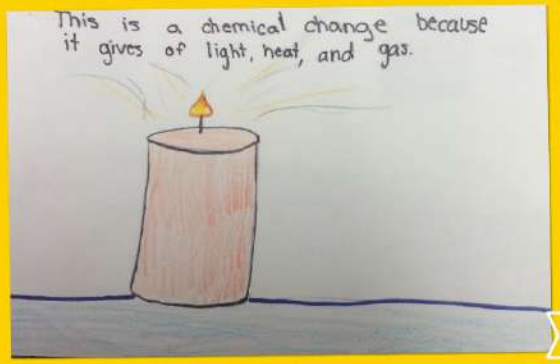

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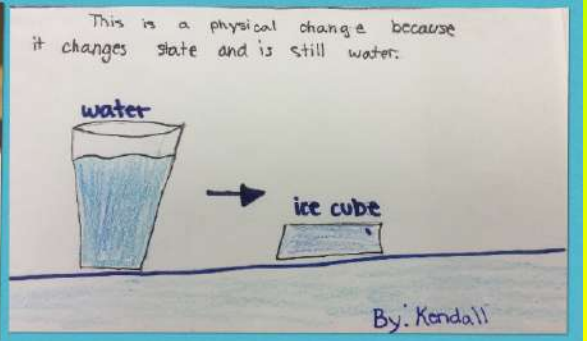


SUGAR WATER

PICCOLLAGE

# Why it matters?

All of this matters because it is in our everyday life. We see heterogeneous, and homogenous mixtures all the time. We eat trail mix we see mixed coins. Chemical and physical changes give us candles and ice cubes. If there were no mixtures we wouldn't have our favorite food combinations like pasta with sauce. And if we didn't have any of these things everything would be the same.

# References


- McGraw Hill Science Textbook