

PHASE CHANGES

A phase change is a type of change that occurs when a substance changes from one state of matter to another, such as solid to liquid or gas to liquid. In science, phase changes are observed in many everyday processes such as melting ice, boiling water, and condensation.



During a phase change, the temperature of the substance remains constant even though heat is being added or removed. For example, when ice is heated, it will remain at the melting point of 0°C until it has melted completely into water. At this point, the temperature of the water will begin to rise as heat is added.

There are three main types of phase changes: melting, freezing, boiling, and condensation. Melting is changing from a solid to a liquid. Freezing is the reverse process, where a liquid changes into a solid. Boiling is when a liquid changes into a gas, and condensation is when a gas changes into a liquid.



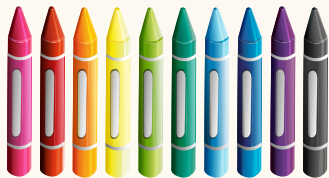
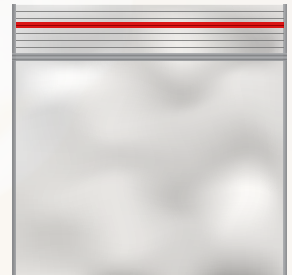
Phase changes play an important role in many aspects of our daily lives, such as air conditioning, refrigeration, and the water cycle. They are also important in many industries, such as energy production and food processing.

PHASE CHANGES

A phase change is when matter changes to from one state to another. Let's learn about the science involved!

WATER CYCLE BAG

Learn about the water cycle and learn what the role of the sun is and what evaporation and condensation are.



MELTING CRAYONS

Melting crayons, like melting ice is a great example of reversible change.

CRUSHED CAN

Learn about atmospheric pressure with this incredible can crusher experiment.



FROST ON A CAN

Learn about the phase change from water vapor to ice with this simple and fun experiment!

EXPANDING SOAP

Explore what happens to ivory soap in the microwave with this exciting phase change experiment!



WHAT MAKES ICE MELT?

What makes ice melt faster? Let's investigate with a simple ice melting experiment that kids of varying ages can enjoy.

SOLIDS, LIQUIDS, GASSES

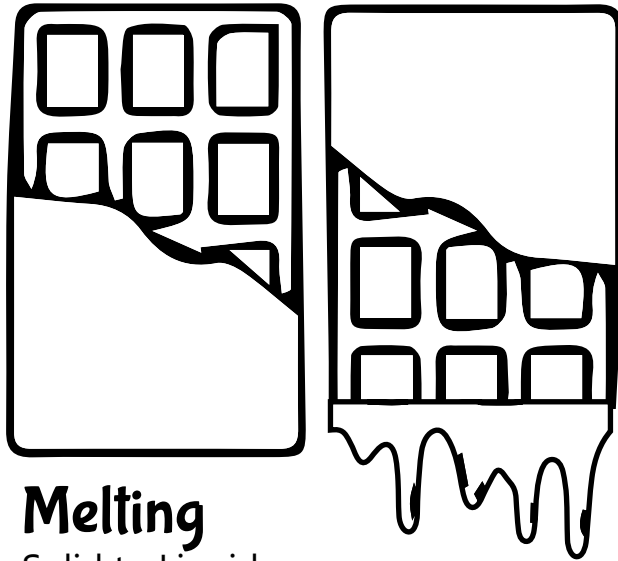
Another fun states of matter science experiment to explore! Learn the science behind solids, liquids, and gasses.



ICE CREAM IN A BAG

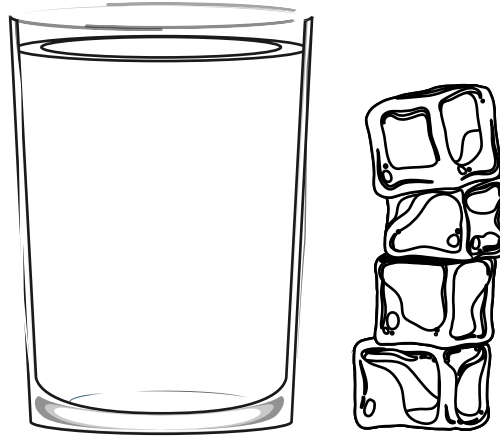
This homemade ice cream in a bag experiment is chilly chemistry for kids you can eat!

PHASE CHANGES



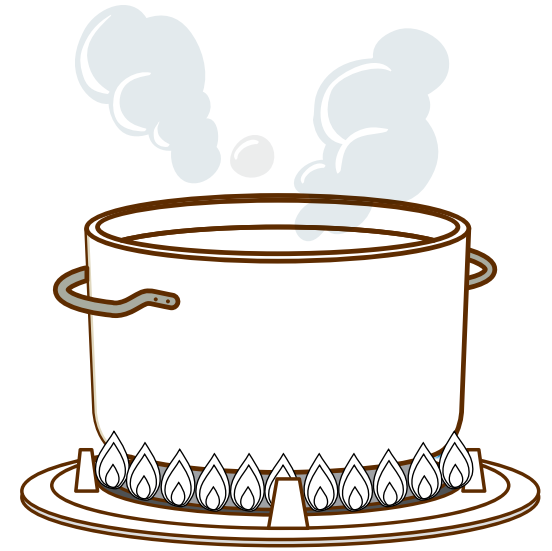
Melting

Solid to Liquid



Freezing

Liquid to Solid



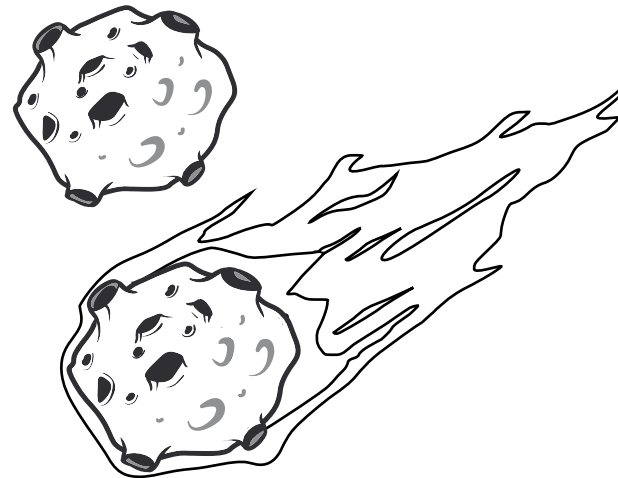
Vaporization

Liquid to Gas



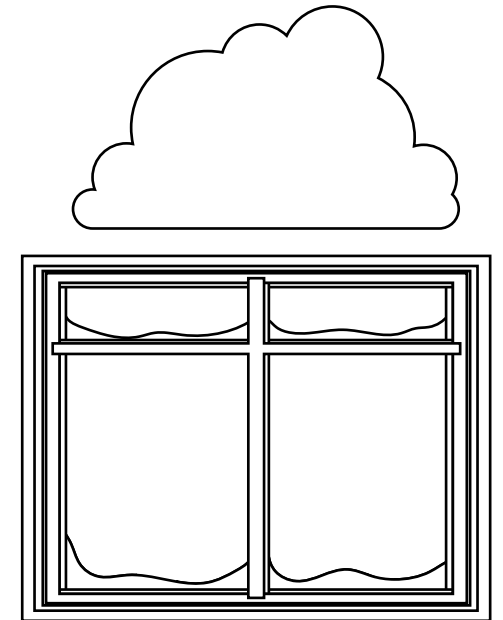
Condensation

Gas to Liquid



Sublimation

Solid to Gas



Deposition

Gas to Solid