PHYSICAL CHANGES

Physical changes are changes that occur in matter without changing its chemical composition. In other words, the atoms and molecules that make up the matter stay the same, but the appearance or properties change.

Some examples of physical changes include:

Crushing an aluminum can: The aluminum can is still made of the same atoms and molecules, but its size has changed.

Tearing paper: The paper is still made of the same atoms and molecules, but its size and shape have changed.

Freezing water: When water freezes, its appearance changes from a liquid to a solid, but its chemical composition remains the same.

Dissolving sugar in water: The sugar and water are still made of the same atoms and molecules, but their appearance has changed.

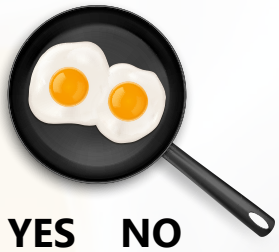
Physical changes are different from chemical changes, which occur when the chemical composition of matter changes. For example, when wood burns, it undergoes a chemical change and turns into ash, which is a different substance from the original wood.

Understanding physical changes is important for many fields, such as physics, engineering, and materials science, as it helps us understand how matter behaves and how to manipulate it.

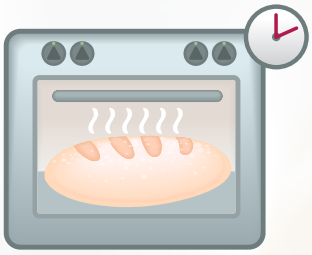
PHYSICAL CHANGES

Are these physical changes? Circle YES or NO.

YES NO



YES NO



YES NO

YES NO

YES NO

YES NO

YES NO

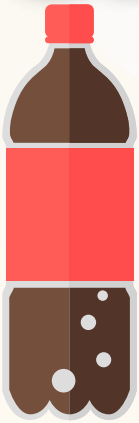
YES NO

PHYSICAL CHANGES CHALLENGE!

How many different things can you do to/with a piece of paper that would be considered a physical change?

PHYSICAL CHANGES EXPERIMENTS USING HOUSEHOLD ITEMS

PHYSICAL CHANGES



MENTOS GEYSER

This super fun experiment is a great example of a physical reaction!

DISSOLVING JELLY BEANS

Try this easy jelly bean experiment if you want to learn more about solvents and solutes.

MELTING CRAYONS

Make these fantastic DIY crayons from old crayons instead of throwing away all those bits and pieces.

POPCORN SCIENCE

Popcorn is a great example of physical changes in matter including irreversible change.

CRUSH THE CAN

This soda can experiment is a great way to get your kiddos excited about science!

EXPANDING SOAP

Explore what physical changes happen to ivory soap in the microwave!

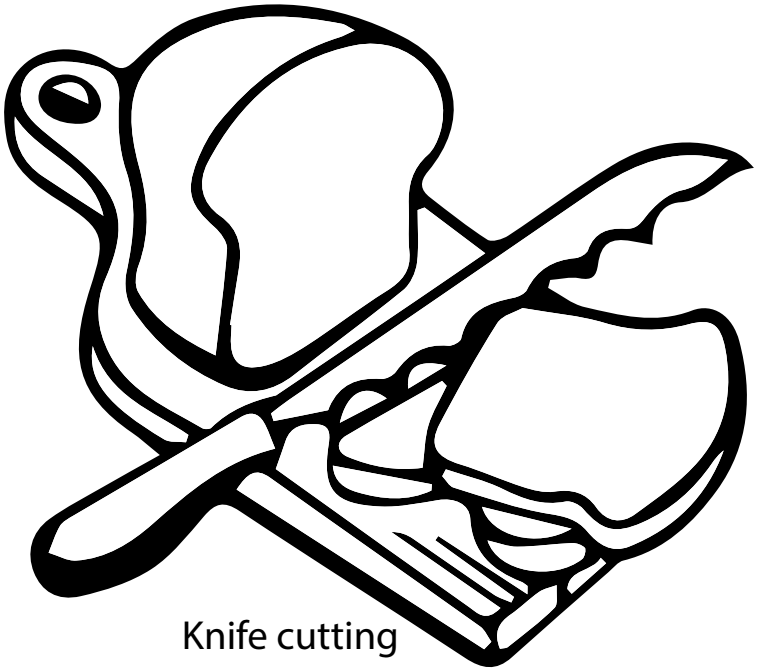
MELT THE ICE

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

PHYSICAL CHANGES

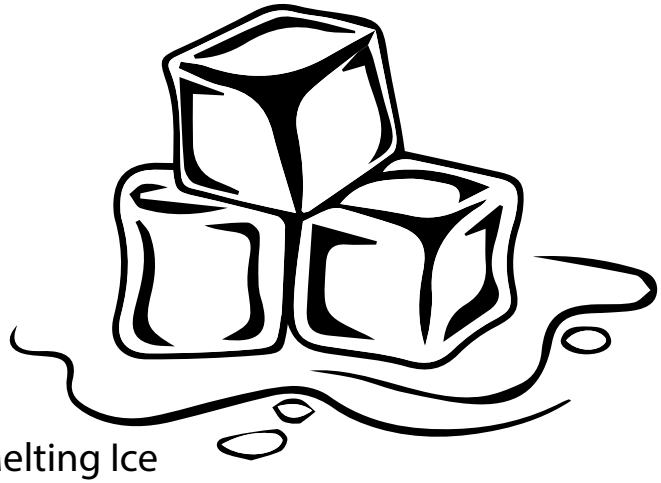
Chopping Wood

Crushed Can

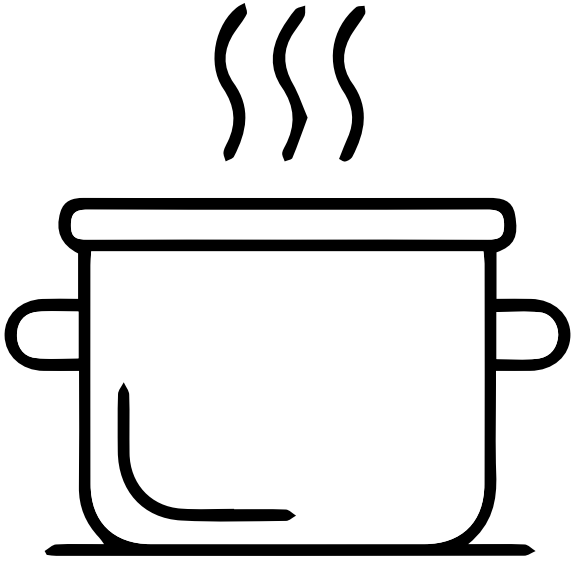


Knife cutting

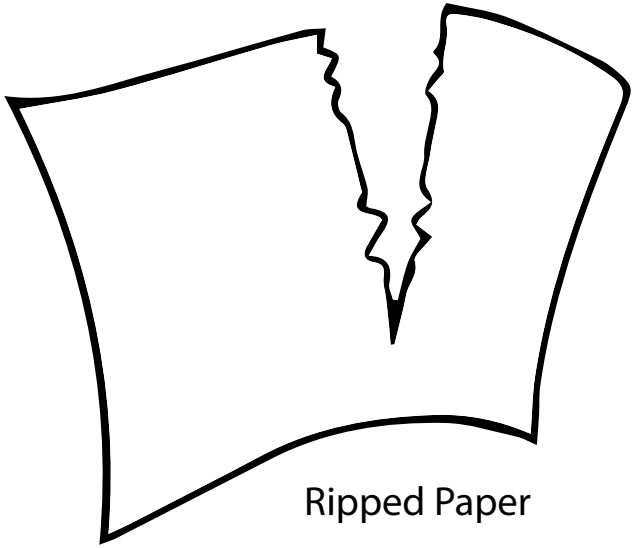
Dissolving Jelly Beans



Melting Ice



Boiling Water



Ripped Paper