

Do Now

- Take out the homework.
- In your notes: write 4 indicators of a chemical change.

Today

- Determining physical and chemical changes.
- Lab investigation.
- Conservation of mass.

Tonight

- Watch the following video:
<https://www.youtube.com/watch?v=tphIt6G29pA&x-yt-ts=1422579428&x-yt-cl=85114404>
- Separating a mixture. Topsail science.
- Brief quiz at beginning of class tomorrow.


Video



Separating a mixture



topsailsience

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Physical Properties

- Color
- Melting point
- Boiling point

Application of Physical Properties

- Use the differences in physical properties of matter to separate them.
- How can I separate a mixture of sugar and marbles?
- How can I separate ball bearings from plastic beads?

Physical Change

A material's composition never changes.

- State change.
- Water to ice: still H₂O.

Chemical Properties

- The ability of a substance to undergo a specific chemical change.
- Gasoline burns easily.
- Iron rusts.

Chemical Change

- Composition of matter always changes.
- A new material is formed.
- Signs include: energy transfer, (irreversible) color change, production of a gas & the formation of a precipitate/

Conservation of Mass

- Matter is neither created nor destroyed.
- During a chemical reaction, matter may change form, but the overall amount of matter is constant.

Example

- Methane burns in oxygen to form water and carbon dioxide.
- The total mass of methane and oxygen is equal to the total mass of the water and carbon dioxide produced.

Chemical Change Lab

- You will be rotating amongst 7 stations.
- At each station there are directions as to what you need to do.
- Station 5: we will clean at the end.
- Standing lab with goggles.
- Take note of your first station.

Clean Up

- Look for directions for clean up after each station.
- We will clean everything up at the end and put everything away.
- Keep an eye on the timer so that you are not holding up your classmates.