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Author(s): Trisha Paul

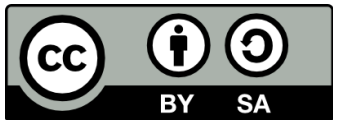

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Image by Joe Shlabotnik

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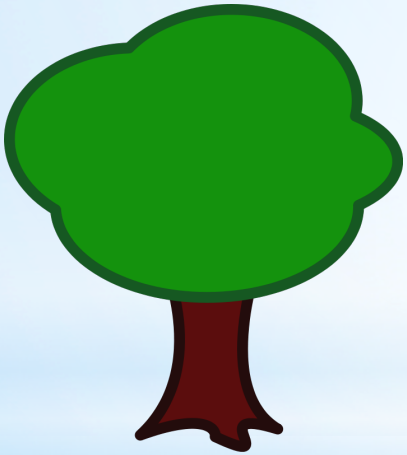
* Elephant's Toothpaste

By Trisha Paul

*Decomposition Reaction

* A more complex reagent breaks down into its more simple products



Tree

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Image by PeterM

Leaf

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+

Trunk

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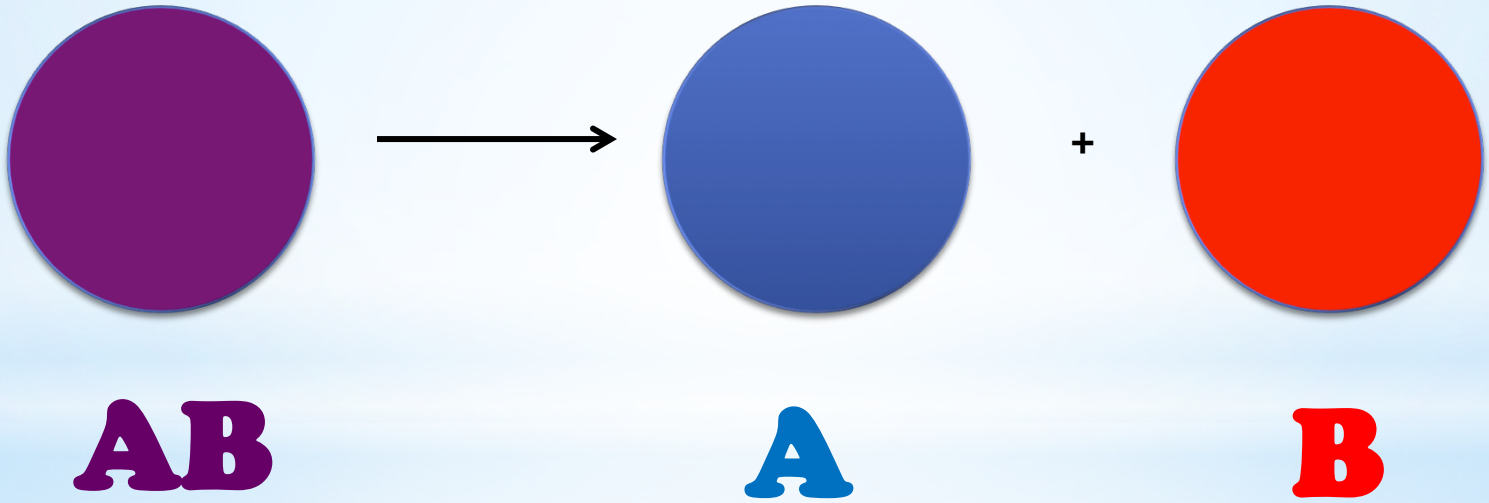
*Characteristics

* 1 Reagent -> 2 products



*Common Reactions

* **When mixed with baking soda and soap, hydrogen peroxide is used to remove skunk odor.**

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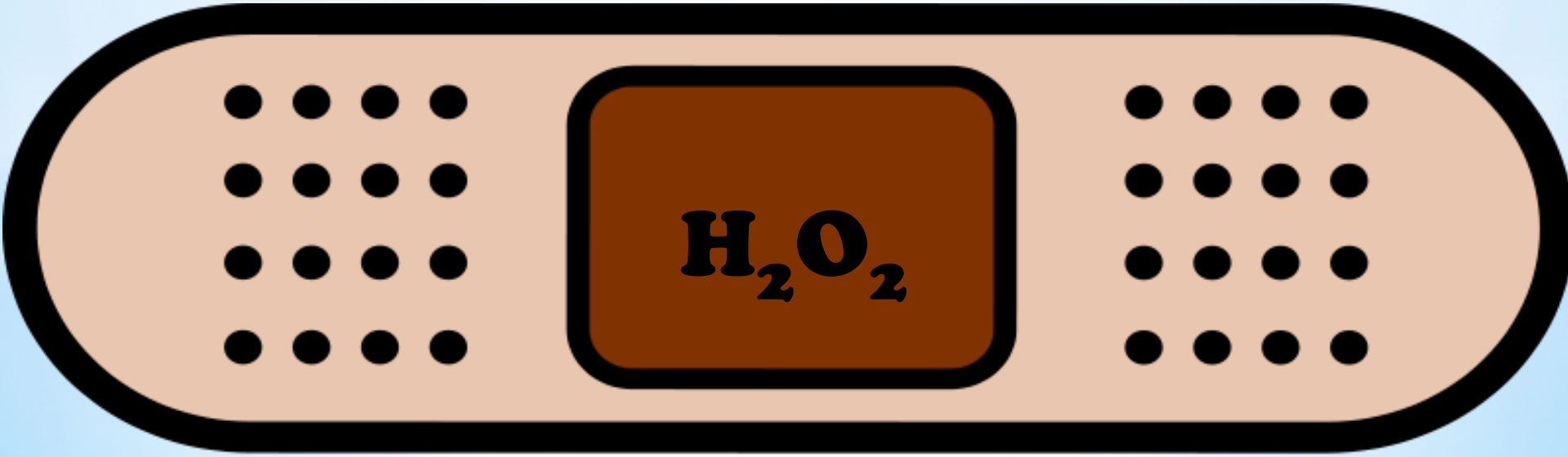
Image by Lesmode

*Common Reactions

- *When put on a cut, hydrogen peroxide acts as a cleaner and also slows the bleeding.
- *It also causes additional damage to the tissue.



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*Common Reactions

*When reacted with some metals like silver, hydrogen peroxide produces a hot steam used to propel and launch certain rockets.

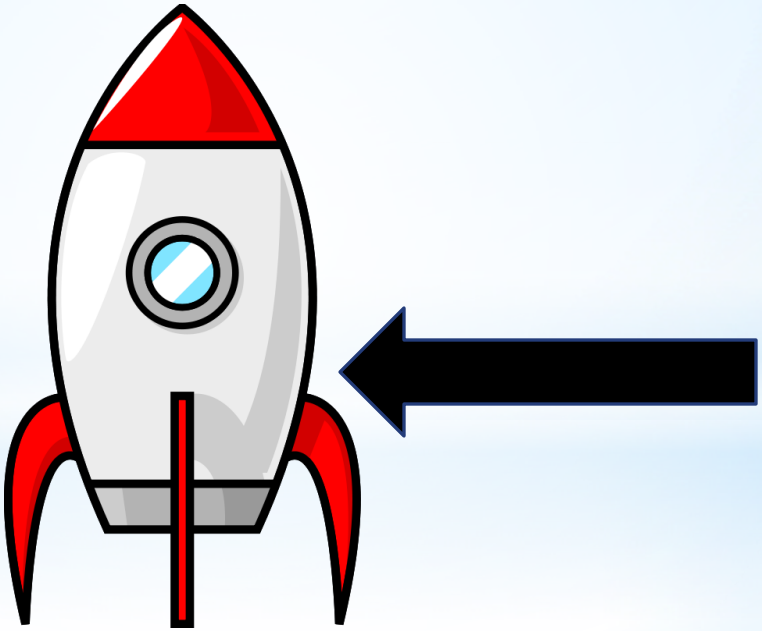
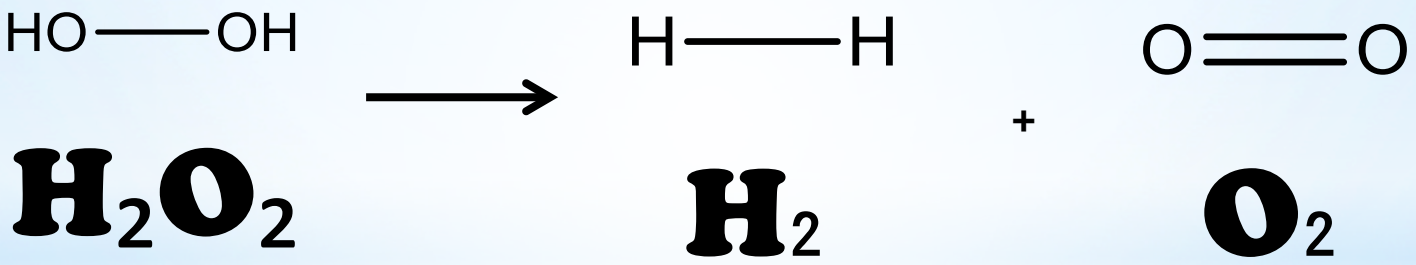


Image by purzen

*Decomposing H_2O_2

* **Predict the products of a decomposition reaction of H_2O_2.**



* Decomposing H_2O_2

* How can we make H_2O_2 decompose?
  * H_2O_2 is stable at room temperature.

*Decomposing H_2O_2

* What state of matter would the products be in? (solid, liquid, gas)

*Decomposing H_2O_2

* How could we make the products even more visible? (Hint: Think about bubbles.)

*Purpose

1) How can we decompose hydrogen peroxide?
2) What happens when hydrogen peroxide is decomposed?
3) How can we tell that hydrogen peroxide has been decomposed?

Materials

- Safety glasses
- Lab smock
- 1/2 cup 20-volume hydrogen peroxide (20-volume is 6% solution, purchased from a beauty supply store)
- Squirt of Dawn dish detergent
- 1 teaspoon yeast
- Approximately 2 tablespoons very warm water
- Empty plastic water bottle
- Foil cake pan

Safety

- Hydrogen peroxide is:
  - Corrosive- avoid skin contact
  - Do not ingest
  - Do not inhale

PD-SELF

Image by Rfc1394

Temporary bleaching effects of skin contact with H_2O_2

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Image by Olli Niemitalo

*The End!

Image by Joe Shlabotnik

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